HANDBOOKS PREPARED UNDER THE DIRECTION OF THE HISTORICAL SECTION OF THE FOREIGN OFFICE.—No. 121

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MOZAMBIQUE

LONDON:
PUBLISHED BY H.M. STATIONERY OFFICE.

1920

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EDITORIAL NOTE

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

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

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

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

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

G. W. PROTHERO,

General Editor and formerly
Director of the Historical Section.

January 1920.

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I. GEOGRAPHY PHYSICAL AND POLITICAL

(1) Position and Frontiers

The Province of Mozambique,[1] or Portuguese East Africa, of which Lourenço Marques on Delagoa Bay is the capital, extends along the coast of the Mozambique Channel from Oro Point (26° 52′ S.) in the south to a point (10° 40′ S.) near Cape Delgado in the north.

The total area of the territory is about 295,000 square miles (the Portuguese official returns give 765,000 square kilometres).[2] The principal political divisions are:

	Area, square miles.
Lourenço Marques district	6,700
Gaza	22,000
Inhambane district	21,000
Mozambique Company's territory	60,000
Tete district	39,600
Quelimane district (Zambezia)	39,700
Mozambique district	33,000
Nyassa[3] Company's territory	73,000

Reckoned from the figures given above, Portugal possesses, roughly, 122,700 square miles of territory

[1] The official designation of the Province of Mozambique, covering the whole territory, makes for confusion, inasmuch as the name is also used in the title of the Mozambique Company, whose territory is distinct from the administrative district of Mozambique, of which the town of Mozambique is the capital.

[2] These may be taken as minimum figures, a careful measurement on the map suggesting that the area is possibly as much as 301,000 square miles. Some considerably larger estimates will be found, but appear to be erroneous.

[3] This name is so spelt in the title of the Company.

south of the Zambezi, and 172,300 square miles north of it. For the sake of comparison, it may be added that Tanganyika (the territory formerly known as German East Africa) has an area estimated at 385,000 square miles.

Mozambique is bounded on the east by the sea, and on the landward sides by British territory, except in the north, where it marches with Tanganyika. On the south it marches with Natal; on the west successively with the Transvaal, Southern and Northern Rhodesia, and the Nyasaland Protectorate.

The territory coincides with no definite natural or ethnical division. Its frontiers are sometimes determined by physical features, or at least follow their general guidance; elsewhere, the lines are artificial.

The short southern frontier runs west from Oro Point to the junction of the Pongolo and Usuto rivers, thence following the latter for a few miles upward. From here the western frontier has a general direction north along the line of the Lebombo chain, across the Inkomati river, the Olifants river, and the Shingwedzi, to the junction of the Pafuri with the Limpopo. Crossing the Limpopo, it runs in a straight line north-east to the junction of the Sabi river with the Lunde.

From here the line runs northward through the broken, mountainous country on the edge of the high plateau of Southern Rhodesia, being deflected so as to leave Massikessi in the Portuguese sphere; at this point the Beira–Mashonaland railway now passes from Portuguese into British territory. The boundary then runs north to the point where the River Mazoe is intersected by the meridian of 33° east longitude.

Here the frontier turns west-north-west, in a succession of straight lines, across the Luia (Ruia) river to the Mkumvura, which it follows down nearly to its confluence with the Msangezi. It then follows another

tributary of that river as far as the 16th parallel, along which it runs west to the Angwa river, and then turns due north to the Zambezi opposite the confluence of the Aruangwa or Loangwa.

North of the Zambezi, the frontier follows the Aruangwa as far as the parallel of 15° south latitude. Here it turns east-north-east, and runs in a straight line up to 14° south, where it meets the frontier between Northern Rhodesia and the Nyasaland Protectorate. It then runs successively south-east, east by north, south, and again south-east, following the watershed between tributaries of the Zambezi, affluents of Lake Nyasa, and tributaries of the Shire to within 25 miles of the Zambezi above Sena. Then the line turns east to the Shire, which it follows northward to the confluence of the Ruo. That river and its tributary the Malosa are followed to about 16° south latitude, after which the line runs directly northward to the south-eastern corner of Lake Shirwa. The boundary follows the eastern shores both of this lake and of Lake Shiuta (Chiuta) to the north, and then turns north-west to the eastern shore of Lake Nyasa at 13° 30′ south latitude, the lake forming the boundary as far as the mouth of the Kivindi stream (11° 34′ S.).

The northern frontier runs up the Kivindi for a short distance, then due east in an almost straight line to the Kipingi and Msinje rivers, which it follows down to the junction of the latter with the Rovuma river. The Rovuma then forms the boundary to within a short distance of its mouth; the numerous islands in it are now in British territory down to 38° 8′ east longitude, and those south of that point in Portuguese. From about 10° 43′ south latitude on the lower Rovuma the frontier runs parallel to the right bank of the river, leaving a narrow strip in British territory as high up the river as the lowest ford, thence bearing towards the coast

at Ras Lipuu, a little north of Cape Delgado, so that the territory on both sides of the Rovuma mouth, formerly German, is now British.

(2) Surface, Coast, and River System

Surface

The surface is broadly divisible between (1) the coastal lowland, (2) the shelf or middle plateau, and (3) the high plateaux and mountains.

(1) The low coast is backed by a lowland, of gentle slope and no great depth inland except in the south and along the lower courses of large rivers. The extreme altitude is 500–600 ft., but most of it lies much lower.

(2) The shelf, of plateau form and moderate elevation (800–2,000 ft.), has a gently undulating surface frequently broken by the 'island-hills', or 'island-mountains' which in Mozambique belong mainly, though not exclusively, to this particular natural division. These hills occur in immense numbers and in a variety of forms and sizes, from the single *kopje* a few hundred feet in height to the lofty mountain mass. 'The most striking feature of these detached groups of hills lies in the abruptness of their discontinuity with the plateau.'

(3) The high plateaux of South and East Africa, which have a mean elevation of about 3,500 ft., are rimmed in part by a rampart of mountains such as are found along the western frontier of the Mozambique Company's territory, and again, farther north, to the west of the great rift or line of depression which is occupied by the River Shire and Lake Nyasa.

The surface features of the various political divisions of the Province may be briefly described.

Lourenço Marques, Gaza, Inhambane.—The coastal plain behind Delagoa Bay, in the district of Lourenço

Marques, is for the most part level or gently undulating. Locally it is marshy or sandy, but as a whole it is fertile. Farther north, in Gaza and Inhambane, the surface of the plain is only in part well watered.

The Lebombo Mountains, along the frontier, rise somewhat abruptly from the plain to a general elevation of 1,800–2,000 ft.

Mozambique Company's Territory (Manika, Sofāla, &c.).—The lowlands of this territory cover half its total area. The lowland of the Sabi, in the south, is rather dry, and extends inland to the frontier. About the latitude of Beira the lowland is much narrower, and farther north it is broken by the Sheringoma plateau, about 1,000 ft. high. Between this plateau on the east and the edge of the upland on the west in the Gorongoza country is the Urema depression, where the divide between the Pungwe and Zambezi basins is lost in the marshes, and in the rainy season a continuous water-connexion is formed between the two rivers.

The shelf or middle plateau in the Mozambique Company's territory covers an area of nearly 20,000 square miles. It is for the most part well watered by numerous swift-flowing perennial streams. The elevation lies mostly between 1,000 and 2,000 ft., and the surface is broken by the deep valleys of the streams towards its eastern edge, and by the characteristic 'island-mountains'. The Gorongoza Mountains, west of the Urema depression, reach an extreme height of 6,500 ft.

Along the frontier north of the lowland of the Sabi are the highlands fringing the interior plateau of Rhodesia. Heights of 5,000–8,000 ft. occur, though the greatest heights lie outside Portuguese territory.

Tete.—Most of this district belongs to the middle and higher plateau regions. The surface in the south is generally rolling, with isolated hills and ridges. To the north of the Zambezi valley there is a general slope

upward and northward to the southern edge of the Central African plateau in the Maravia country. The heights of the eastern frontier, on the watershed between the Nyasa and Zambezi basins, reach 6,000–7,000 ft. Great parts of the district are fertile, but there is a liability to drought in the dry season.

Quelimane, Mozambique District, Nyassa Company's Territory.—The coastal lowland gradually narrows northward from the delta of the Zambezi, an extensive, well-watered lowland, in parts richly fertile. North of the region of Maganja da Costa (eastern Quelimane) and the Mozambique district the coastal lowland widens to an average of some 30 miles. The shelf or middle plateau zone, on the other hand, has a considerably greater width than farther south; it is a rolling forested surface broken by abrupt eminences and important mountain masses, among which Namuli reaches a height of 8,050 ft.

The valley of the Lujenda river cuts athwart the Nyassa Company's territory from south-west to north, and to the west of it the plateau rises gradually from an elevation of 1,100–1,400 ft. to 3,500–6,500 ft. in the continuous mountain chain east of Lake Nyasa. A great part of the country consists of high-lying plains or rolling uplands intersected by numerous streams and small rivers. The coast of the lake, lying as it does 2,000–4,000 ft. lower than the bordering highlands, has its own characteristics of climate and vegetation.

Coast

The coast has a length of 1,430 miles, and forms two great outcurves, one between Delagoa Bay and Beira, and another between Beira and the Rovuma river. It consists frequently of mangrove swamps, alternating with sandy beaches. There is a marked difference in the coast respectively south and north of a point

near Mozambique town. South of this point the coast is generally very low, and along much of this stretch, especially between the northern extremity of Delagoa Bay and Inhambane, lagoons lie close behind the shore-line; elsewhere there are often marshes. From Mozambique northward the coast becomes more broken, rocky at intervals, and in some parts bolder.

Along the coast there are a large number of estuaries and creeks. There is plenty of shelter in these for the small amount of coastwise shipping which is carried on by dhows, &c., and some have become the sites of important ports, such as Delagoa Bay (Lourenço Marques), Inhambane, Beira, Chinde, Quelimane, and others. These estuaries have generally more or less difficult bars, which may be liable to change, and the entrances to the Zambezi in particular are never alike for two seasons. The bolder coast from Mozambique town northward has several fine natural harbours, though little use is made of them. Port Mokambo (Kivolani Bay), Mossuril (Mosoril) Bay, with Mozambique Harbour, Fernão Veloso Bay, Memba Bay, and Pemba (Pomba) Bay, are all extensive and well sheltered.

There are three principal chains of islands off the coast—the Bazaruto group (about lat. 22° S.), the Primeira and Angoche (Angosh) groups (about 17° S.), and the Kerimba chain in the north (off the Nyassa Company's coast). They afford sheltered anchorages on the landward side, as also do the coral reefs which intermittently fringe the northern part of the coast.

The low-lying coast, in some parts imperfectly surveyed, the changing character of bars, and the somewhat uncertain nature of the currents in the Mozambique Channel, owing to the seasonal changes of the monsoons and the influence of the tides, make for difficulties of navigation.

River System

A distinction should be drawn between the longer rivers which rise in the highlands of the interior and have a perennial flow, and those shorter rivers which water only the coastal slopes, and are often intermittent in flow. Such rivers as those of the Delagoa basin, the Limpopo, Sabi, Zambezi, Lujenda, Rovuma, and others, are perennial rivers, although, as a result of the division of the year into wet and dry seasons, their flow varies greatly according to season. The Zambezi floods normally twice a year: (1) in late December and early January, under the influence of local rains; (2) in February–March, under the influence of the rise of headstreams in the distant interior. The first rise is normally some 15 ft. above low-water level, the second 20 ft. or more. As for the other large rivers, the Limpopo in its upper course through the territory shrinks in the dry season to a chain of deep pools connected by shallow streams. The Lurio at the same season is fordable on foot near its mouth. The Rovuma, below its confluence with the Lujenda, is estimated to rise some 18 ft. in flood.

The lowland tracks of most of the rivers have certain features in common, such as wide sandy beds, in which the channels change position and vary in depth from time to time; in many rivers, again, islands are numerous, and are sometimes fertile and populous, notably in the Lujenda and Rovuma. Rivers with such characteristics must be more or less difficult to cross, to bridge, or to navigate, and the fluctuation of flow between the seasons militates against their utility as sources of power. On the other hand, the estuarine courses of the rivers are in several cases more or less important for navigation, and in this connexion reference may be made to (1) the chain of lagoons south-

west of Inhambane towards the Limpopo, and (2) the ramification of estuaries and creeks in the low coastal plains north-east of Quelimane, on which inland navigation might be developed.

The highlands are generally well watered, and some of the larger rivers, in their upper courses, should readily afford power.

The Zambezi, by far the most important waterway in the province, is broad and open from Zumbo on the western frontier down to Shikoa. Below this it narrows between hills to a minimum of 40–60 yds. at low water, forming the unnavigable Kabroabasa rapids for some 60 miles. Below these, down to and beyond Tete, the river is of regular depth and free of serious obstruction: the width is generally about half a mile. Below Sungo is the Lupata (Luapata) gorge, which is 10 miles long, and at times not over 600 yds. wide. The river is here deep and fairly navigable. Below the gorge it widens suddenly: the bed is sandy and mobile, the banks are low, soft, and unstable; channels, shoals, and banks shift and change, and navigation is never easy. The normal breadth of the river below Sena is from one-half to three miles, but in high water the floods may spread widely over the lowland. The delta begins some 80 miles above the mouth, and the river reaches the sea through seven principal branches, of which the Chinde, with the port of that name, is the deepest and economically the most important, though one of the narrowest and most tortuous.

None of the tributaries of the Zambezi is of any great importance to communications except the Shire, which enters Portuguese territory from the British Nyasaland Protectorate. It flows from Lake Nyasa. Of late years, for some reason unknown, the greatest rise of Lake Nyasa seldom adds more than 2 ft. to the dry-season height of the river. This change has attracted

much attention in view of its prejudicial effect on the navigation of the Shire, the importance of which, however, is diminished by the completion of the railway from Nyasaland to the Zambezi at Chindio (Shindio).

The name of the Delagoa drainage area may be applied collectively to the basins of those rivers which enter Delagoa Bay—the Maputo or Usuto in the south, the Tembe, Umbeluzi, and Matolla in the centre, the Inkomati in the north, and their numerous tributaries. The outlet—Delagoa Bay, with the port of Lourenço Marques — and about one-third of this area are Portuguese.

The next river to the north is the Limpopo, one of the first order of South African rivers. Portugal possesses the lowland of the Limpopo, as of the Delagoa drainage area.

The Sabi receives no considerable tributary in Portuguese territory, where its lower valley is a narrow, shallow trough striking west and east from the frontier to the sea.

North of the Sabi, in the Sofāla country, there are a few short independent rivers; then follows the more important basin of the Buzi (with its tributary the Revwe) and the Pungwe. These rivers lie almost wholly in Portuguese territory.

The country north of the Zambezi basin has four principal drainage areas, namely, those of the Likungo, Ligonya, Lurio, and Rovuma rivers. These have their head-streams in the highlands of the interior, but only the Rovuma basin extends beyond Portuguese territory, the main river rising in the Tanganyika territory, and its tributary, the Lujenda, collecting head-waters from the parts of the Nyasaland Protectorate south-east of Lake Nyasa. The parts of the shelf and lowland towards and along the coast intervening between the lower courses of these rivers are drained by

shorter and relatively unimportant streams. Towards the Nyasaland frontier Portuguese territory includes part of the small inland drainage area of Lake Shirwa.

(3) Climate

Seasons.—The year falls into two main divisions: (*a*) a hot rainy season from November to March or April, (*b*) a cool dry season for the rest of the year. In the northern half of the coast lands the seasons are distinguished as those of the northern and southern monsoons, but the winds do not blow there with the same regularity as farther north, and to the south they gradually lose the monsoon character.

Temperature.—The temperature is generally highest in November, December, or January, according to locality. The greatest heat is met with along the coast and up the Zambezi; thus, some mean temperatures for the hottest months are: Lourenço Marques, January, 79° F. (26° C.); Beira, December, 81° F. (27° C.); Tete, November, 84° F. (29° C.); Mozambique, December, 83° F. (28·5° C.); Ibo, January, 82° F. (28° C.). The coolest months are July or June, thus: Lourenço Marques, June, 65° F. (18·5° C.); Beira, July, 69° F. (20·5° C.); Tete, July, 73° F. (22·5° C.); Mozambique, July, 73° F. (23° C.); Ibo, July, 74° F. (23·5° C.). The mean temperature for the year is higher in the north than in the south; the range of temperature is greater in the south than in the north. The figures quoted, however, are all for low-lying places—there are no corresponding figures for the higher parts of the country. But even in the north, on the middle plateau of the Nyassa Company's territory, it is said that the evenings and mornings are cool and pleasant during eight months of the year, and in the mountainous country east of Lake Nyasa an absolute

maximum of 90° F. (32° C.) and an absolute minimum of 38° F. (3·5° C.) have been recorded. Both absolute maxima and minima are very much higher than this at the low-lying stations, maxima well over 100° F. (38° C.) occurring at all of them.

Rainfall.—In the coastal districts both the date of the beginning of the rainy season and the total rainfall vary considerably from one year to another. Generally, the annual rainfall along the coast ranges from 28 to 40 in. (710 to 1000 mm.), being, on the whole, heavier in the north than in the south ; but it is considerably higher at certain points, e. g. at Beira, where it approaches 60 in. (1520 mm.), and in the Quelimane district. As a rule the rains begin earlier in the south than in the north. At Lourenço Marques some 3½ in. (90 mm.) fall in November on an average, rather more in December, and sometimes twice as much in January. At Mozambique the November fall is very little, in December about 5 in. (130 mm.), and in January and February 7–8 in. (180–200 mm.). In general, the rainfall is low for the latitude, especially in districts behind those parts of the coast which lie south-west and north-east. Thus there are definitely dry areas in the interior of Gaza, in Barue and Tete districts, and in northern Quelimane and Mozambique districts. For example, the mean annual rainfall at Broma, north-west of Tete, is about 22 in. (560 mm.). But the rainfall increases greatly in the highlands, especially east of the Shire and of Lake Nyasa.

Winds.—The northern monsoon sets in between mid-September and mid-October, and the southern monsoon between mid-March and mid-April. The former season is, as a rule, that of least wind and smoothest water on this coast; on the other hand, such gales as occur in the Mozambique Channel are most usually at this season or at the turn of the monsoon. Indian Ocean cyclones occa-

sionally reach the northern part of the channel and do heavy damage. South of Beira the northern monsoon ceases and the winds become variable; at Beira itself south-easterly winds are by far the most prevalent, followed by south-west, east, and south; at Lourenço Marques the range is from south to east, south-west winds being rare. In the interior generally, the prevalence of winds from a southerly or easterly quarter is still more marked than on the coast, and the systematic change of wind with the coming of the rainy season is less noticeable.

(4) Sanitary Conditions

The whole coastal belt bears a reputation for unhealthiness, but, as elsewhere in tropical and sub-tropical lands, the conditions have been to a considerable degree improved during recent years. While there is a marked contrast between conditions at the coast and on the middle plateau and highlands, over a large proportion of the territory the moist heat of the summer months is trying and weakening, and predisposes the European towards disease.

The two serious sources of danger to the health of Europeans are malaria and dysentery, but the second is not common. Epidemics of small-pox, cholera, &c., have occurred among the natives, who also suffer fairly commonly from skin diseases, rheumatism, and other illnesses which rarely attack Europeans in the province. Blackwater fever is rare. Venereal diseases attack many persons among the immigrant population in larger centres and among returned native labourers, but it is said that some success has attended regulations recently made in this connexion.

Conditions at Lourenço Marques have been much improved of recent years, and white children appear

to flourish there now. Inhambane has the reputation of being the healthiest station on the coast. Beira, notwithstanding its low-lying situation near marshes, is said to be practically free of malaria. While in the delta and valley of the Zambezi fever is common, Chinde and Quelimane towns are conspicuously free of it. Mozambique town, on the other hand, in spite of its insular situation, is very unhealthy.

(5) Race and Language

White Population

The number of white inhabitants is not large. One of the best Portuguese colonial authorities has complained that the type of his countrymen who go to the province is not good, that they lack both ability and capital, and aim only at making sufficient money to return with a competence to the mother country. Few settle on the land, though there has been of recent years some increase in the number doing so, principally in Lourenço Marques and southern Inhambane districts, and on the uplands along the railway from Beira.

There are no systematic figures distinguishing the white population according to nationality, but from various computations during a few years before 1914 it appears that there were the following foreign elements in the principal ports named :

	Lourenço Marques.	*Beira.*	*Chinde.*
British . .	668	268	31
German . .	106	45	24
Italians . .	80	47	—
Greeks . .	149	123	—

Other European elements (excluding Portuguese) were insignificant. The number of Portuguese at

Lourenço Marques appears to have been about 4,500, at Beira 700, at Chinde 150.

Asiatics and Half-castes

The other elements in the population of the colony besides the natives and the Europeans are as follow :

1. The *Arabs* were the leading influence along the coast before the coming of the Portuguese, and their authority became re-established when Portuguese power waned. The Sultans of Zanzibar had much power. The propaganda of Islam spread ; the Makwas along the coast were largely Mohammedan, and the Yaos, who imitated the Arabs in many ways, brought the cult inland. The great occupation of the Arabs was the slave-trade. Their language is Swahili, a Bantu dialect with a large infusion of Arab words, which forms a *lingua franca* over much of East Africa. There is one special denomination of Arabs along the coast, known as Mujojos, who are principally sailors.

2. The natives who have become blended with the Asiatic Moslems are called *Monhes*, and are numerous on the coast. Judging from their type of countenance, they seem to have but a slight infusion of Arab blood. The term, however, is very variously used, some books speaking of all foreign Moslems as Monhes, others confining the word to Indian Mussulmans, while others even use the word as synonymous with Banyans.

3. The *Banyans* are the non-Christian Hindus ; they were originally introduced into East Africa at the end of the seventeenth century. The Banyans are small traders ; they have grasped the mentality of a native better than a European can, they can easily acquire foreign tongues, are unaffected by the climate, and the cost of living to them is almost nothing. They add nothing to the strength of the country, as they are unfit to bear arms, and they add nothing to its

revenue, though they carry a great deal out. They do not bring their womenfolk with them, and invariably retire to India when they have made enough money.

4. The *Goanese* have come from the Portuguese possessions of India. They are Roman Catholics, and are largely clerks, employed at the ports in the custom and other Government services. They are liable to disease, especially malaria.

5. In 1912 there were some 300 Chinese in Lourenço Marques, and they are also found in other eastern ports.

Native Peoples

The native tribal divisions are confusing. Hardly any tribe has one name only ; moreover, in European literature there is no community of practice in transcribing tribal names. Again, the tribes, especially in and south of the Zambezi districts, have become greatly mixed. Tribes have taken the names and copied the customs of their conquerors ; enslaved populations have amalgamated with their enslavers ; freed slaves have become in their turn leaders of the population among whom they have settled. The most important event in determining the position and relations of the tribes in the south of the Province was the movement of Zulus from the south at the beginning of the nineteenth century. So far as concerns Mozambique Province, this invasion has affected the country in two directions : (1) south of the Zambezi the Vatwas, a proud, warlike, and commanding people, are the predominant, though not the largest, element in the population of Lourenço Marques, Gaza, and Inhambane ; (2) the Angonis, also a warlike people, moved to the region of Lake Nyasa, but they are more numerous in British than in Portuguese territory, and have kept their stock much less pure than the

was.

The southern tribes which have come under the influence of the Vatwas are known generally as Tongas (Amatongas, Barongas). The name Landin is applied specifically to them by the Portuguese, though it is also used loosely of all tribes which are of Zulu origin or have come under Zulu influence. In most cases it represents a very small racial element that is Zulu, but a great deal of Zulu influence in ways of life and in military organization. The Tonga tribes exhibit two types, much intermingled: (*a*) the typical negro, and (*b*) people with narrow faces, thin lips, and pointed noses, suggesting Arabic influence.

The conditions along the Zambezi differ materially from those found farther north. Instead of large and important tribes like the Yaos, Makwas, &c., there is little of the tribal system. In this locality long acquaintance with European civilization has modified many native customs and habits of mind. European dress and a knowledge of Portuguese are not uncommon. An Arab type is spread all along the Zambezi valley.

North of the Zambezi, as has been indicated, the tribes are as a rule larger and more distinct, and the principal are the following:

1. The Makwas, who occupy the country between 17° and 11° south latitude, and between Lake Nyasa and the Indian Ocean. The Makwas are as a rule quiet, sedentary, and industrious. An unusually well-developed system of judicial administration exists among them.

2. The Mavias, who inhabit the plateau south of the Rovuma and east of the Lujenda.

3. The Mavitis, who are raiders from the north, principally in the same locality.

4. The Yaos, who inhabit the region between Lake Nyasa and the Rovuma and Lujenda rivers, and have extended south-west to the Shire region. They are an unusually fine race, tall and strong, originally aggres-

sive, but now quieter; they take naturally to trade and show many signs of Arab influence.

5. The Nyasas (Anyanjas), occupying much of the same region as the Yaos, who have long terrorized them. They are quiet, timid, and essentially an industrial people.

6. The Magwangaras, who are raiders and fighters, and live along the east side of Lake Nyasa, mostly north of Portuguese territory.

Languages

The native peoples that inhabit the Province of Mozambique are members of the Bantu stock. This name is applied to all those peoples, south of the Nilotic lands and north of those of the Hottentot and Bushman, who spread south of the Equator to the Cape Province and speak languages which have sufficient in common to be grouped as Bantu speech. The principal varieties of Bantu spoken in Mozambique are Tonga, the language of the peoples of Lourenço Marques, Gaza, and Inhambane, and farther north Nyasa (Anyanja), with a variety of dialects, the most important of which is Ki-senga, spoken along the Zambezi valley; Makwa, with four distinct dialects, and Yao. Two other Bantu tongues have come into the land: Zulu-Kafir, which has been brought by raiders from Zululand across the whole country, so that the Magwangaras of Lake Nyasa have Zulu words; and Swahili, the Arabized Bantu speech of the Zanzibar coast, which is spoken to some extent in the north-east, while the Makondes speak a tongue closely allied to it.

(6) Population

The Province of Mozambique is not densely populated as a whole; the average density is possibly 9 or 10 per square mile, as compared with 27 in Natal and 12 in

Transvaal. Little can be said as to density in different parts. It is controlled to a considerable extent, however, by the conditions of moisture. Thus, in the southern districts the most densely populated parts lie along the coast lands of Lourenço Marques, Gaza, and Inhambane, while the drier northern parts of the two last are more sparsely populated. In the Zambezi valley, similarly, the parts above the Lupata gorge are less densely inhabited than those below it.

There is no systematic census. The figures given below are collected from a number of the latest available sources:

	Year.	*Whites.*	*Asiatics.*	*Half-castes.*	*Natives.*	*Total.*
Lourenço Marques district	*1908*	650	701	105	99,698	101,154
Lourenço Marques city and suburbs . . .	*1912*	5,560	3,174		17,345	26,079
Gaza	*1908*	393	—	370	147,995	148,758
Inhambane district . .	?	?	?	?	500,000?	500,000?
Mozambique Co.'s territory	*1915*	1,912	1,025	1,576	290,124	294,637
Tete district . . .	*1908*	185	74	—	160,000	160,259
Quelimane district . .	*1908*	1,091	2,391		527,000	530,482
Mozambique district .	*1914?*	559	733	—	537,865	539,157
Nyassa Co.'s territory .	*1915*	184	272	336	520,343	521,135

Some of these figures are obviously of little value. Together they suggest totals of about 10,500 whites, a rather larger number of Asiatics and half-castes, and about 2,800,000 natives, for the whole province, and other estimates approximate to this, but the number of natives in areas not under direct control cannot be taken into account.

The chief towns, in addition to Lourenço Marques (given above), had the following populations in the years stated:

Inhambane (1908), 206 whites; 539 Asiatics; 540 natives: total, 1,285.

Beira (1914), 1,197 whites; 571 Asiatics; 327 half-castes; 7,324 natives: total, 9,419.

Chinde (Shinde, 1908), 218 whites; 107 Asiatics; 1,365 natives: total, 1,690.

Quelimane (Kiliman, 1911), 165 whites; 397 Asiatics; 2,182 natives: total, 2,744.

Mozambique (Moçambique, 1914), 296 whites; 312 Asiatics; 4,634 natives: total, 5,242.

II. POLITICAL HISTORY

Chronological Summary

1498. January 11. Vasco da Gama arrives in Delagoa Bay.
1498. January 25. Vasco da Gama reaches mouth of Zambezi.
1498. March 2. Arrival of Vasco da Gama at Mozambique.
1498. April 7. Arrival of Vasco da Gama at Mombasa.
1498. April 24. Vasco da Gama sails from Malindi for Calicut.
1505. D'Almeida takes Kilwa and Mombasa.
1505. Fort erected at Sofāla.
1506. Discovery of Madagascar.
1506. Barāwa taken by Tristão da Cunha.
1507. Sokotra occupied by da Cunha and A. d'Albuquerque.
1507. Fort erected at Mozambique, which becomes the capital.
1545. Exploration by Lourenço Marques of the bay so called.
1569. Francisco Barreto appointed Captain-General.
1569. Failure of the Monomotapa Expedition.
1584–9. Turkish attacks on Mombasa and Zanzibar coast.
1609. Mozambique raised to a Governorship.
1623. Abandonment of search for gold.
1651. Dutch settlement at Cape Town.
1651–2. Loss of Muscat.
1655. French settlement in Madagascar.
1686. First introduction of Indian traders.
1698. Muscat Seyyids conquer Zanzibar coast.
1725. Final loss of Mombasa.
1730. Abandonment of Lourenço Marques.
1752. Separation of Mozambique from Goa. Lourenço Marques the most southerly point named.
1776. Austrian settlement at Lourenço Marques.
1798. Expedition of Lacerda to Lake Mweru.
1818. Fort of Mossuril, on mainland near Mozambique, restored.
1824. Captain Owen occupies south shore of Delagoa Bay.
1831. Expedition of Monteiro and Gamitto to Lunda.
1856. Livingstone's journey down the Zambezi.

1866. Livingstone's journey to Lake Nyasa.
1875. Delagoa Bay arbitration.
1877–8. Serpa Pinto's journey.
1886. German-Portuguese Treaty.
1887–8. Portuguese claims to territory from East to West Africa.
1889. Formation of British Protectorates.
1891. Treaty with United Kingdom.

(1) Discovery and Early Settlement

The colony of Mozambique has been a Portuguese possession, so far as the greater portion of its coast-line is concerned, for a longer period than any other part of the continent of Africa; for, although Guinea and Angola were discovered earlier, there was no permanent occupation of those districts until after the first settlements had been made on the shores of the Indian Ocean. As is manifest from the early history of Angola, all attempts to colonize the west coast were suspended after the rounding of the Cape of Good Hope and the discovery of Brazil, as all the resources of Portugal were required to enable her to prosecute her ambitious schemes in the Indian Ocean and South America. The first settlements began from Sofāla (for Lourenço Marques was settled later), and in a few years there was a chain of fortified posts extending thence northwards along the coasts not only of Mozambique but of what are now Tanganyika, Kenya, and Italian Somaliland. The object which the explorers had in view was to obtain control of the eastern trade which passed through the Red Sea and the Persian Gulf, and to divert it forcibly to a route which would be under their own command, thus escaping the heavy toll levied on all European trade by the Mohammedan Powers, and especially the Turks, through whose hands it passed.

With this aim before them, they paid little attention to the temperate regions of South Africa, then inhabited almost entirely by Hottentots and Bushmen, and pushed on until they had rounded Cape Correntes (Cabo das Correntes, the 'Cape of Currents'), and arrived at the regions frequented by the Arab traders.

Sofāla was the farthest point south reached by the Arabs. It was governed by a sheikh who was subordinate to the powerful ruler of Quiloa or Kilwa (Kilwa Kissiwani). Here the Arabs could carry on a profitable trade in gold-dust brought down from the great inland kingdom known (from the title of its ruler) as Benametapa or Monomotapa. After Vasco da Gama's first and second voyages and Cabral's voyage, information had accumulated which determined the King, Dom Manuel, to take possession of important points on this coast; and Sofāla and Kilwa were chosen for the erection of the first forts. In 1505 the Sofāla fort was begun by Pero d'Anhaya. It was an unfortunate choice, for the site was low and unhealthy, and the Portuguese suffered severely. Nevertheless, the fort was built, and has continued in Portuguese hands till the present day.

The delta of the Zambezi and a town on an island in the principal mouth were visited by Vasco da Gama on his first voyage. He called it 'the river of good signs', as it was there that he first met signs of Arab civilization, for he had not touched at Sofāla.

Vasco da Gama and his immediate followers did not touch at Angoya; and their next port on their northward voyages was Moçambique (Mozambique), an Arab town on an island at the narrowest point of the Mozambique Channel, which afterwards widens out northwards. Here an Arab sheikh ruled as representative of the Sultan of Kilwa. The Portuguese found a good roadstead, with abundance of wood and pro-

visions; and, though the island was without fresh water, supplies were easily obtained from the mainland. Finding it a convenient rendezvous for ships on their way to and from India, Duarte de Mello in 1507 built a fort there. A residency, a hospital, a church, and other necessary buildings were afterwards erected; and Mozambique was henceforward equipped as a centre of administration.

No opposition seems to have been offered to the occupation of Mozambique. In fact, the town of Kilwa, which was the capital of its suzerain, was by this time under Portuguese influence. The Sultan had been compelled by Vasco da Gama on his second voyage to promise to pay tribute; and d'Almeida, on his voyage to India in 1505, established Portuguese supremacy and erected a fort. Apparently the great trade of the place was ruined by Portuguese interference; for it fell off rapidly, and the fort was soon dismantled and abandoned. It is possible that the establishment of the strong post at Mozambique was considered to provide sufficiently for the security of the Portuguese fleets; and Kilwa, as after-events showed, was open to attack, not only from Arabs of the coast, but from powerful tribes of the interior.

(2) The Mozambique Province

The Mozambique Province from this time forward, although often threatened, continued under Portuguese rule through all vicissitudes. In 1569 the Portuguese King, Dom Sebastião, established a separate Captain-Generalship of the 'Mines of Monomotapa'. It was raised to a Governorship in 1609, but still remained under the Viceroy at Goa until 1752, when a separate Governor-General was appointed and all connexion with Goa was broken off. The first Captain-General, Francisco Barreto, resolved to extend

Portuguese power up the Zambezi and to the region of Monomotapa, where he expected to find valuable gold-mines. He organized a powerful expedition, and landing at Quelimane made his way through the delta region to the main stream of the Zambezi. His expedition ended in failure. There was already a trading settlement of Portuguese at Sena; but the expedition was regarded with suspicion by the Arab traders; the beasts of burden died from the attacks of the tsetse fly; the Portuguese were attacked by unfriendly natives, and few of the troops survived; Barreto died, and an attempt to reach Monomotapa by the more promising Sofāla route also failed. Other expeditions took place in search of gold and silver mines, which were, as one of the Portuguese writers has said, 'like a fleeing shadow', always retiring as it is approached. Such as were discovered did not pay their expenses. After the year 1623 the search was suspended, although exploring expeditions continued to be sent into the interior for some time, and a province was gradually formed on the Zambezi.

The system of government was bad; offices were sold to speculators, whose rights were allowed to pass to their heirs, and often came into the hands of women. Attempts were made to limit the succession to persons of unmixed European blood, but they broke down in practice. The lower Zambezi was unsuited to European colonization and none of the healthy uplands in this part of Africa were occupied by the Portuguese.

The forcible acquisition by Philip II of the crown of Portugal in 1580 led to the decline of Portuguese sea-power and the paralysis of all enterprise by exposing the Portuguese colonies to the attacks of the Dutch and English, who seized the opportunity to establish trading ports in the East Indies. In 1641

Portugal successfully threw off the Spanish yoke; and the example of the mother country was followed by that of all her colonies, including Mozambique. But the period of the disastrous Spanish regime had destroyed the Portuguese supremacy in the Indian Ocean beyond power of recovery. Struggles with the native tribes of the interior were frequent. The Makwas of the Mozambique coast, still half-independent, gave great trouble.

(3) Troubles of the Seventeenth Century

Throughout the seventeenth century troubles came thickly on the east-coast settlements. The Dutch continued their attacks, and in 1649 the English began to encroach on the trade monopoly of Portugal. The Dutch settlement at the Cape in 1651 was a threat both to East and West Africa; and the French establishment of a factory in Madagascar in 1655 was another sign that the Portuguese were no longer to have East Africa to themselves.

(4) Trade Conditions

In these circumstances trade inevitably languished. Attempts were made to revive it by various expedients. In 1671 it was freed from all restrictions and opened to all persons of Portuguese race, but in 1690 the old monopolies were restored. A more important step was the introduction of the Hindu traders or Banyans from Diu, known to the Portuguese as 'Baneanes'. Various privileges were given to them in Mozambique in 1686. These continued till 1777, when they were withdrawn; and in 1783 these traders were restricted to the Isle of Mozambique. By this time, however, they had obtained such a hold on the trade that they required no privileges; and the Banyans have ever since been the principal trading class in East Africa.

(5) The Eighteenth and Early Nineteenth Centuries

The boundaries of the Mozambique Province were much restricted by the external and internal wars which crippled the Portuguese, and these conditions lasted through the eighteenth and the first part of the nineteenth centuries. The more energetic or powerful European nations began to grasp at the trade and intrude into the ports on the north and south in places where Portuguese rule had frequently either absolutely disappeared or become a mere tradition. The French had trading stations at Kilwa and in Madagascar, and raided Lourenço Marques and Inhambane.

Delagoa Bay.—From early days the Portuguese settlements had all been north of Cape Correntes, and little was known of Delagoa Bay. As this district has become so important in recent times, its history may be conveniently summed up at this point. The coast of Delagoa Bay, or at least the northern part of it, was visited by Vasco da Gama on his first voyage on January 11, 1498, when he landed at the mouth of a river to obtain water. This river, which he called the Rio do Cobre, or Copper River, is marked in Canerio's map of 1502, and in several other early maps, as Rio da Lagoa. The river was, no doubt, the Umbeluzi and its estuary, now known as the English River, which receives also two other rivers. Although its existence was known, it does not seem to have been visited again till Lourenço Marques and Antonio Caldeira were sent by the Captain of Sofāla to search for it.

João de Barros, writing in 1553, speaks of this discovery or rediscovery by Lourenço Marques of the 'Rio da Lagoa, formerly so called, but now the Rio do Espirito Sancto, the name given it by Lourenço

Marques, who discovered it in the year '45'. The name given by the discoverer, however, did not last long, and this inner bay has ever since been known by his own name. It is a more secure haven inside the wide expanse of Delagoa Bay. There is no record of any Portuguese settlement there; and in 1585, when Paulo de Lima and his companions were wrecked in this bay, the 'Cafres', or Bantu tribes, were in complete possession. The historian Couto, writing shortly afterwards, describes the sufferings of the survivors and the trouble with which they made their way to Sofāla, the nearest Portuguese settlement. There was not any settlement of a permanent nature during the seventeenth century. In 1623 certain persons who had been wrecked farther south made their way to Lourenço Marques, and found it had not been visited by any traders for two years, and a similar visit was made by another shipwrecked crew in 1647.[1]

Meanwhile the ships of other nations were beginning to trade with this coast. Visits of English traders are recorded in 1682, 1686, and 1687; and in 1688 the Dutch ship *Noord* found a Portuguese and an English ship in the bay. The Portuguese had put up wooden sheds and the English a tent with a view to trading with the natives. About the opening of the eighteenth century the Portuguese seem to have abandoned the struggle; and in 1721 the Dutch sent the *Zeelandia* from Cape Town to establish a dependency here. A fort called 'Lydzaamheid' was built. This venture met with no great success; buccaneers attacked it, and the settlers suffered from the climate; it was abandoned in 1730. The Portuguese made a temporary occupation again in 1755; but in 1757 the Dutch returned, and remained more than a year, finding no Portuguese there. In 1776 the Empress Maria Theresa sent out a number of

[1] Theal, *History, &c., of South Africa* (1907), i. 74, 499.

settlers from the Adriatic. The Portuguese Government protested; but the matter was settled without any decision as to rights by the death of most of the colonists and the abandonment of the settlement.

In the proclamation of April 20, 1752, by which Mozambique was freed from its dependence upon Goa, and erected into a separate Governor-Generalship, Lourenço Marques was mentioned as the most southerly point, and it is evident that this settlement on the northern shores of this wide bay did not include the southern shore. In 1787 a small fort was built on the site of the old Dutch fort, but it was destroyed by the French in 1796. Although the Portuguese rebuilt it, it was soon again abandoned; and the bay became a resort for British and American whalers. The southern shore of the bay was occupied by the English, under Captain Owen, in 1824; and the disputes began which were revived at intervals until decided by the arbitration of Marshal MacMahon in 1875. The arbitrator assigned Delagoa Bay to Portugal; but by the Anglo-Portuguese Treaty of 1891 the right of pre-emption was secured to Great Britain. Portuguese power had been swept away from the bay by invasions of the Zulus, or Vatwas, as they were called, in 1833; and Lourenço Marques and Inhambane were both abandoned.

On the Zambezi, too, Portuguese power had shrunk; and the expulsion of the Jesuits, who, whatever their faults, had done something to maintain civilization around their stations, contributed to its decay. Many of the stations were abandoned, including Zumbo, the most advanced post westwards, where a *feira*, or market for trade, had till then been maintained. Zumbo was not reoccupied till modern times.

(6) Mozambique in the Nineteenth Century

Towards the end of the eighteenth century, however, there was a revival of the ancient Portuguese spirit of adventure and discovery in the person of Dr. F. J. M. Lacerda, a man of science, who became Governor of the Zambezi province. He made a very remarkable journey, following the Zambezi to Tete, and thence striking northwards to the Luapula river and Lake Mweru, where he died on October 18, 1798. He first made known the Central African kingdom of Lunda (the Cazembe country), which was visited again by Monteiro and Gamitto in 1831. Meanwhile two Portuguese half-castes had made their way from Angola to the upper Zambezi and Tete; and an English naval officer, Captain Owen (who had made the settlement above alluded to on Delagoa Bay), was the first to open up the navigation of the great river as far as Sena, all previous journeys having been made by land.

In spite of these journeys, the fortunes of the Portuguese province were at a very low ebb in the early part of the nineteenth century. The powerful tribes on the coast almost blocked all access from Mozambique; and the fort at Msasiri, on the mainland opposite Mozambique Island, was abandoned. This fort (called by the Portuguese San João de Mossuril) was restored in 1818, and about the same time attempts were made, without much success, to revive the abandoned *feiras* at Zumbo and Manika. The station at Bandire was reopened in 1831; but Zumbo was still a deserted ruin when visited by Livingstone on his return down the Zambezi from his journey to Angola in 1856. In this journey, which opened a new epoch in the history of South African exploration, Livingstone travelled down the Zambezi to Quelimane. In further journeys between 1858 and 1864 he explored the Shire river

and Lake Nyasa; and in 1866 he penetrated from the Rovuma river through what is now the northern part of the Mozambique territory to the south of Lake Nyasa.

All these explorations roused the Portuguese to efforts to establish the continuity of their dominions between the east and west coasts of Africa. Two important expeditions started, both from Angola, with the object of opening up this country; the first under Major Serpa Pinto in 1877–8, and the second under two officers of the Portuguese Navy, Roberto Ivens (the son of an English resident in Lisbon) and Brito Capello, in 1884–5.

From these journeys sprang the Portuguese claims in the regions of the upper Zambezi and the Congo–Zambezi watershed, which, though to a large extent barred by British remonstrance and action, were partially recognized in the Treaty of 1891 and the arbitration of 1905 regarding the Barotseland boundary. These Portuguese claims had been admitted by France and Germany in the Franco-Portuguese and Germano-Portuguese Treaties of 1886 [1] (with a reservation of rights already acquired by other Powers), and were illustrated in a Portuguese map published in 1887–8.[2] However, British settlement had already begun within their scope. Mission stations had been formed in the Shire highlands [3] and other parts of Nyasaland from 1875 onwards; a consulate for Lake Nyasa was established in 1883; and in 1889 a Protectorate was formed, extending up to Lake Tanganyika and the boundaries of the newly formed Congo State. On the upper Zambezi a Protectorate of Barotseland had been established.

[1] See Hertslet's *Map of Africa by Treaty*, ii. 675, 704.

[2] Reproduced ibid. 706.

[3] See *Nyasaland*, No. 95 of this series.

The divergent claims of Great Britain and Portugal to these interior regions were not easy to harmonize. Ultimately, however, a settlement was reached; and the Treaty of June 11, 1891, defined in general terms the boundaries between British and Portuguese Africa, both east and west. The German Treaty of 1886 had already established the boundaries between the Portuguese and German territories, alike in East and West Africa. Thus the Province of Mozambique was definitely constituted with settled limits; and Portugal exchanged her shadowy claims over vast territories which she had never occupied, for a well-defined and fully recognized dominion over a very extensive territory with great potentialities.

III. SOCIAL AND POLITICAL CONDITIONS

(1) Religious

The great mass of the population consists of negroes, mainly of the Bantu stock, the great majority of whom are still attached to their primitive animistic beliefs. Along the coast, however, as far as the Arabs penetrated, there is a Mohammedan fringe. In the neighbourhood of Angoche (or Angoche Bay) there is a large population (belonging to the Monte tribe) who are Mohammedans—at any rate in name. They have adopted the Swahili language, and use the Arabic letters in writing. Among the Yaos also, on the Rovuma, the Lujenda, and farther south towards Lake Nyasa, Islam has made progress. Foreign missionary enterprise has been carried on mainly by British, American, and Swiss establishments. The American mission stations are mostly in Inhambane, and the Swiss are in Lourenço Marques. The largest part of the work generally has been done in the south of the province; there are not many missions in the north. There are a considerable number of Portuguese missions, but as religious missions from Portugal were abolished in 1913, the position of those in existence has been weakened of recent years. Secular missions (*missões civilizadoras*), however, are encouraged. The political relations between foreign missions and the Portuguese authorities have not always been happy, and though some Portuguese writers admit the value of missionary work if it connotes teaching the native to labour and

curing the more prevalent vices, their admission is usually qualified. On the other hand, a recent writer (1915) praises the work of mission schools in Lourenço Marques district, both for their general civilizing influence and for their teaching, and the secularization of some of the more important Portuguese Roman Catholic schools has been attacked on both educational and political grounds.

(2) Political

The Province of Mozambique is ruled by a Governor-General, assisted by a Government Council and a Provincial Council. The capital is at Lourenço Marques. The Province is divided into five districts—Lourenço Marques, Inhambane, Quelimane, Tete, and Mozambique, for each of which there is a Governor and a District Council.

In addition to the Province itself, there are two considerable areas administered by companies. The Companhia de Moçambique has an area of 59,840 square miles, which includes Manika and Sofāla ; and the Companhia do Nyassa an area of 73,292 square miles, which includes the region bounded on the west by Lake Nyasa, on the north by the Rovuma river, and on the south by the Lurio river.

(3) Public Education

A number of schools have been established under State, municipal, or other supervision.[1] There are also many schools maintained by various missions. Many teachers are natives. North of the Sabi, Mohammedan schools, where Swahili is taught, are fairly numerous.

[1] A list of the schools existing in 1914 (not of the numbers of scholars) is given on pp. 396–412 of the *Anuario Colonial*, Lisbon, 1916.

GENERAL OBSERVATIONS

The Portuguese Province of Mozambique has vast possibilities of development. In the north the Nyasa Chartered Company controls most of the trade, and proposes to construct a railway from the harbour of Pemba Bay to the shores of Lake Nyasa. Similarly in the country south of the Zambezi the Mozambique Company has control, and its territory is traversed by the Beira–Salisbury Railway. The region along the coast between Mozambique and the Quelimane river, known as the district of Quelimane, is to a great extent still under the power of Moslem chiefs. The southern territory is more directly under Portuguese control, the capital having been moved from Mozambique to the flourishing port of Lourenço Marques.

IV. ECONOMIC CONDITIONS

(A) MEANS OF COMMUNICATION

THE Province of Mozambique is only fairly well supplied with means of communication, but is fortunate in the possession of numerous navigable waterways and several excellent harbours.

(1) INTERNAL

(*a*) *Roads*

Caravan routes from the coast regions and seaports to the far interior have existed for some hundreds of years, and have been in constant use by Arab traders ever since the days when Sofāla was a principal centre of Arab commerce.

Of recent years, good roads have been made in most of the districts. For instance, in the Shimoyo (Chimoio) region, in the territory administered by the Mozambique Chartered Company, some 80 miles of roadway have been constructed since 1914, bridges of stone and cement have been built over the rivers Munene, Inyamendoi, and Inyaminboi, the ravines have been filled and pipes laid to carry off surplus water. The native paths through the forests in this locality are well kept as a rule, and are sufficient for the transport by native bearers of considerable quantities of merchandise of all sorts, and also for the passage of the *machila* (or hammock slung on a bamboo pole), in which the European usually travels, borne by four or eight natives. In the dry region between the towns of Quelimane and Mozambique and towards the

borders of British Nyasaland, hard roads of easy gradient are being made to carry traffic to the coast. Through the forests new tracks are cut by the natives of each district, under the direction and supervision of their headman. Such tracks are laid out in accordance with a definite scheme, and divide the forest into sections. Farther south, the sandy surface, which prevails over the greater part of Inhambane, is a serious obstacle to road-making, and consequently to the development of this district.

Under modern conditions the old caravan and Arab trade routes tend to disappear, and, as the country develops, to be replaced by railways or motor roads. In many parts of the province, where there is no prospect of sufficient commerce and traffic to warrant the cost of laying out railway lines, the construction and maintenance of forest roads capable of bearing motor transport can be undertaken at comparatively low cost.

Speaking generally, however, the existing roads of Portuguese East Africa leave much to be desired. Lack of public funds and the distribution among chartered companies of territory and of the functions of government have together prevented the inception of a complete and considered scheme of road communications for the whole Province. The roads hitherto constructed have too frequently a haphazard character, serving limited local needs with various degrees of efficiency.

(*b*) *Rivers and Lakes*

Rivers.—Five principal rivers converge upon Delagoa Bay, and all of these are navigable for considerable distances by small craft and motor launches. The Maputo (Usuto) is navigable for 200 miles, the Tembe for nearly 90, the Umbeluzi for 24, the Matolla for 15,

and the Inkomati, which rises in the heart of the Transvaal, for 60 miles. The usual river-craft are sailing barges, dhows of the Arab type, and, near the towns and chief agricultural estates, small gasolene motor launches.

Between Lourenço Marques and the Zambezi lie the basins of the Limpopo, Sabi, Buzi, and Pungwe, all navigable rivers, besides many smaller streams. The Zambezi, the principal waterway of East Africa, runs through the province for between five and six hundred miles, and eventually finds its way to the coast through a large number of estuaries, including the navigable Chinde passage. The other main channels, varying in their lower course from 500 to 1,300 yds. in width, are rendered unnavigable for 50 miles from the sea by shallows and shifting sandbanks. Above the delta the Zambezi appears to be gradually silting up, and the small steamers which form the means of communication between Chinde and the lower Shire district of British Nyasaland find difficulty for some eight months of the year in navigating the main river and its tributary, the Shire. From a point 50 miles above Tete navigation is made impossible over a distance of 60 miles by the Kabroabasa rapids, but from Shikoa the river is again navigable up to and for some distance beyond the border at Zumbo.

The Likungo, Makuze, Moma, and many other rivers entering the Mozambique Channel between the Zambezi and the Rovuma are navigable for small craft and for river launches capable of carrying 150 or 200 tons of cargo. The possibilities of navigation on a number of these rivers, such as the Ligonya and Lurio, have not yet been fully ascertained.

Lakes.—For about 150 miles Lake Nyasa forms the western boundary of the Province, and being navigable over its whole length of 360 miles offers ample oppor-

tunities for traffic. Mtangula, the only good harbour in Portuguese territory, would probably become an important collecting and forwarding station if the railway from Port Amelia were carried through to this point on the lake; hitherto its trade has been insignificant. Lake Shirwa, on the border farther south, is shallow, and navigable only by small boats and canoes. The lakes along the lower course of the River Inyarrime, south of Inhambane, carry a quantity of local traffic. The other lakes of the province are of no importance for navigation.

In its slow-moving rivers, flowing lazily in their lower courses through valleys built up of their own alluvial deposits, the Province is fortunate to possess a number of natural waterways, which lend themselves to cheap and easy transport between the coast and the most fertile agricultural districts. Of these waterways the fullest advantage can only be taken when the bars which block the outlets of many of the rivers are removed or deepened by dredging. The harbours of Lourenço Marques and Beira are kept open only by the annual outlay of large sums of money upon the dredging of the channels and entrances. While it seems doubtful whether the expenditure requisite for similar operations in the case of estuaries elsewhere would bring in an adequate return, except perhaps at Quelimane, it is clear that the provision of cheap and convenient water-transport facilities, especially for bulky products such as sugar and cotton, is a necessary condition for the development of plantations situated at a distance from the coast.

(c) *Railways*

(i) *The System in General.*—The two completed railways of the Province seem to have been designed less for internal traffic than for transit or external trade

with the Transvaal and Rhodesia. Traversing the narrower portions of Portuguese East Africa they follow the shortest possible routes from Lourenço Marques and Beira to Pretoria and Salisbury respectively. The projected lines which are planned to run from Port Amelia to Lake Nyasa, from Mossuril opposite Mozambique Island to Lake Shirwa, and from Quelimane and Beira to the Central Africa Railway terminus at Chindio, while they would open up large tracts of the Portuguese Province, have a similar appearance of catering for the through trade of another British possession, Nyasaland. Purely domestic purposes, however, would be served by the proposed lines which are intended to connect Inhambane with Lourenço Marques and to run northwards from Quelimane.

The line from Delagoa Bay to the Transvaal has a length of 57 miles in Portuguese territory, and from Komatipoort on the border continues for 290 miles to Pretoria, making connexion with the railway system of the Union of South Africa. This is the most important railway line in the Province, with a heavy and growing traffic, especially in Transvaal coal. Excellent terminal accommodation is provided at Lourenço Marques.

A new line, starting from Lourenço Marques and intended to traverse Swaziland and link up with the Transvaal system, is being constructed, and has already been pushed on to Goba, about 7 miles from the Swaziland frontier. It is expected that when this line is completed express trains will make the journey from Johannesburg to Lourenço Marques in twelve hours. The line seems certain to add considerably to the oversea trade through Delagoa Bay.

A district railway, which will eventually connect Lourenço Marques with Inhambane, branches off in a north-easterly direction from Moamba on the Delagoa

Bay–Transvaal line. A section of 55 miles, from Moamba to Shinavane, is now completed; the following section, 70 miles in length, from Shinavane *via* Shissane to Shaishai, is not yet begun; from Shaishai the line is laid for some 50 miles through Manzhakaze to Shikomo; there is a further gap of 50 miles between Shikomo and Inyarrime; then (between Inyarrime and Inhambane) there follow a section of 40 miles of track already laid and a final stretch of 15 miles now in process of construction.

Second in importance to the Lourenço Marques–Pretoria Railway is that which runs from Beira to Salisbury, a distance of 374 miles, and crosses the frontier at a point, between Massikessi and Umtali, 200 miles from Beira. This line is owned and administered by a British company. Although a moderate amount of ore from Rhodesia is conveyed to Beira for shipment to smelters in the United States, the total volume of traffic is not great; the districts traversed are only moderately rich in agricultural and mineral resources, and inducements have hitherto been lacking for the outlay of much capital expenditure upon the railway.

The long-projected connexion between British Nyasaland and Beira might have been effected ere now, had the war not hindered construction. From a point on the Zambezi opposite Chindio, the southern terminus of the Central Africa Railway, the line is planned to run southwards for 170 miles to join the Beira Railway in the neighbourhood of Fontesvilla. Even after the completion of this railroad, goods in passage between Nyasaland and Beira will be subject to trans-shipment by ferry across the Zambezi until a bridge is built over the river. The concession for the construction of this bridge has been granted to the Central Africa Railway.

An alternative route from Nyasaland *via* Chindio to

the sea is contemplated by the projected line westward from Quelimane, which would not have to cross the Zambezi, and would, therefore, provide an uninterrupted passage from the coast. At Chindio it would join the Central Africa Railway line, which runs 62 miles north to Port Herald and there connects with the Shire Highlands Railway, whose terminus, 113½ miles distant, is Blantyre.

On the Quelimane line construction was begun some time ago, and it was anticipated that one hundred kilometres would be completed before the end of 1917. For a narrow-gauge branch railroad, running out *via* Inyamakura to Mkuba, the surveys have been completed and material supplied for 50 miles of line; it was hoped that the whole line would be open for traffic before the end of 1918. A light railway runs north-east from Quelimane to Makival.

Mossuril, on the mainland opposite Mozambique Island, is the starting-point of a railway planned to run westward for 280 miles in the district of Mozambique and 62 miles in the territory of the Companhia do Nyassa to a point on Lake Shirwa. About 13 miles of this line had been laid and the material for a further 19 miles had been ordered from Germany before the outbreak of war.

The preliminary surveys have been made for a railway from Port Amelia *via* Mtarika to Lake Nyasa, but efforts to form a construction company, though in 1914 they promised to meet with success, have been frustrated, or at least suspended, owing to conditions arising from the war. The distance from Port Amelia to Mtarika is 322½ miles, and to Lipuchi on the lake, 520½ miles. An alternative route, proposed in earlier surveys, had its terminus at Mtengula. The shortest and easiest route, however, would lead to a point on the British shore south of Lipuchi.

The construction of a light railway alongside the Kabroabasa rapids was suggested about fifteen years ago, and is revived from time to time. The purpose of the line would be to bridge the 60-mile gap between the two navigable reaches of the Zambezi in Portuguese territory and so to facilitate trade with the Tete and Zumbo region.

The total mileage of lines already laid in Portuguese East Africa is about 600, while the projected lines amount to an aggregate of some 1,200 miles.

(ii) *Ownership and Control.*—The most important line in the Province, that which runs from the capital, Lourenço Marques, to the Transvaal frontier, is owned by the Portuguese Government. It is well equipped with rolling stock and with terminal and goods accommodation, and by virtue of a reciprocal arrangement enjoys partial running powers for the conveyance of passengers and goods over the railway system of the Union of South Africa.

The second line of importance, from Beira to the Rhodesian border at Umtali, is owned and managed by a British company, and under a similar agreement has running powers over the Beira–Mashonaland Railway and the Rhodesia railway system.

The other railways, which are as yet mainly of local interest, are either State-owned or managed for a defined number of years by concessionaires, who have undertaken to build, equip, and maintain them, on the understanding that they will ultimately revert to the State. No subventions or kilometric guarantees have been granted by the Government, and every projected railway is expected to earn enough from its own net traffic receipts not only to pay the cost of annual maintenance and equipment charges, but also to furnish an adequate interest return upon the capital invested.

(iii) *Adequacy to Economic Needs; Possibilities of Expansion.*—The Portuguese Colonial Administration is quite alive to the fact that cheap and satisfactory means of communication are essential to the profitable development of the agricultural and mineral resources of the Province. In no instance has any properly formulated and adequately supported request for a concession for railway construction been refused a sympathetic hearing either by the local authorities at Lourenço Marques or by the Colonial Administration in Lisbon. The financial resources of the Province are slender, and the amount available for even the most urgent of public works is limited, but the authorities realize that capital prudently invested in developing the means of communication will earn not only the immediate profits due to improved facilities of transport and the growing volume of traffic, but also indirect returns in the form of increased agricultural production, more exports and imports, and greater revenue from duties and from other kinds of taxation. Accordingly, though unable themselves to initiate schemes of railway extension on a large scale, they are always ready to grant concessions for railways to groups of foreign capitalists who can prove their ability to carry out their undertakings. In combination with existing river-transport facilities, the railway schemes already sanctioned by the Government appear to be not only equal to the present requirements of the Province, but sufficient to provide for, if not to produce, a considerable expansion in agricultural and mineral output.

(*d*) *Posts and Telegraphs*

There is an adequate postal service throughout the colony. The number of post offices open in the districts administered by the State was 142 at the end of 1914. The Province is a member of the Postal Union, and

postal charges are on the usual scale. Lourenço Marques, which is a member of the South African Postal and Telegraph Unions, has the privilege of the internal postal rates for South Africa.

The telegraph system in 1915 included 3,397 miles of line and linked up the chief towns and stations of the Province. Lines running inland from Palma along the Rovuma river and from Port Amelia to Mtarika were laid more recently by the Portuguese expeditionary force.

Wireless telegraphy has recently been employed for military purposes in field stations in Portuguese Nyasaland. The experience thus gained may enable the authorities to determine the advantages of this as an alternative means of telegraphic communication throughout the Province in peace time.

(2) External

(*a*) *Ports*

Delagoa Bay.—The principal harbour of the Province is Delagoa Bay, on the shores of which is situated the capital, Lourenço Marques.

The bay is 22 miles broad and 26 miles long. Like all harbours on the coast of East Africa it has a series of sandbanks at the entrance; unlike most, it has wide and deep channels. Cockburn and Hope Channels have depths of 25 and 29 ft. respectively at low-water spring tides, Polana Channel a minimum of 21 ft. The tidal rise in the channels varies between 4 and 7 ft. at neap tides, and between 9 and 11 ft. at springs; it is 6 ft. at neaps and 10 ft. at springs in the joint estuary of the rivers Tembe, Umbeluzi, and Matolla. It is intended to redredge the Polana Channel in order to secure a minimum depth of 25 ft. at low-water springs.

The anchorage inside the Polana Bar is of considerable extent and depth. It has two further advantages: it is comparatively free from shifting sandbanks, and it is well protected from south-easterly winds by the peninsula and the island of Inyak.

The harbour is fitted with up-to-date equipment, and in loading and discharging facilities compares favourably even with Cape Town, Port Elizabeth, or Durban. The new ferro-concrete wharf is just under a mile in length, and is capable of accommodating twelve large steamers simultaneously along its deep-water front. There are ten sheds, each measuring about 200 feet by 100, for the reception of inward and outward cargoes, and, in addition, a transit shed and a national warehouse; all sheds and wharves are lighted by electricity. The electric cranes erected for the handling of cargo are fifteen in number, including two of 10 tons capacity, one of 20, and one of 60. This last was described in 1914 as the largest travelling jib crane in the world. There are also nineteen steam cranes, one of which is of 30 tons capacity. Eight more electric cranes were on order in 1915.

The coaling and bunker trade in Transvaal coal at Delagoa Bay is yearly gaining in importance. The following statistics for five and a half years show, of course, the disturbing influence of war conditions:

TRANSVAAL COAL TRAFFIC THROUGH DELAGOA BAY

	1911.	1912.	1913.	1914.	1915.	Half-year 1916.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Local Consumption	20,810	23,766	30,791	24,844	30,557	9,328
Export and Bunker	114,131	364,597	662,292	575,680	495,172	311,760
Total	134,941	388,363	693,083	600,524	525,729	321,088

Coal storage bins were erected a few years ago, but

since the provision of more rolling stock they have not been in general use. In 1915 a most efficient and up-to-date coaling plant, a McMyler hoist, was placed at the western end of the wharf. This hoist, the installation of which cost £25,000 exclusive of foundations, has a loading capacity of 500 tons per hour. Up to October 31, 1916, it had loaded 252 vessels in all with 910,000 tons of coal.

The coal traffic through and from Delagoa Bay is likely to increase in the near future, the railway authorities anticipating a traffic of nearly 100,000 tons of coal monthly (46,000 tons for export and 54,000 for bunkers).

The port is well equipped with powerful tugs, and it is intended to purchase more of these. In his report for 1914 H.B.M. Consul-General McDonell stated that dredging operations throughout that year were handicapped by the loss of one of the port dredgers, the *Teredo*, but that arrangements had been made to procure a large new dredger of the *Frühling* type.

The harbour of Delagoa Bay is quite adequate to the economic needs, present and prospective, of the southern portion of the Province. The position it occupies as the natural gateway for the export and import trade of the Transvaal, and the excellent accommodation and the cheap and convenient coaling facilities it offers to steamers trading with the East, completely assure its commercial prosperity and hold out the promise of further extensive and progressive development.

Inhambane and Bartholomeu Dias.—Between Delagoa Bay and Beira are two small harbours, Inhambane and Bartholomeu Dias. The local produce exported is small in amount and consists for the most part of sugar and copra.

Beira.—After Delagoa Bay the most important

harbour in the Province is Beira, the principal port for the external trade of southern and of a large part of northern Rhodesia, and head-quarters of the administration of the Mozambique Chartered Company.

Beira Harbour lacks shelter from north-east gales and the other natural advantages enjoyed by Delagoa Bay, and its entrance channel requires constant and careful dredging. Various schemes for its improvement have been considered from time to time, but the construction of a deep-water quay, undertaken in 1911, was finally abandoned in 1915, on account of physical difficulties arising from the strong currents and heavy spring gales. Nor has a practical solution been found for the problem of deepening the bar, which at dead neap tides prevents the entry of vessels drawing over 23 ft. of water. The loading and discharging of cargo is, therefore, still subject to the expenses and delays incident to the employment of steam-tugs, lighters, and pontoons, and the harbour can scarcely be said to be wholly adequate to present-day requirements. Nevertheless, the trade which passes through the port is not inconsiderable. Imports of an annual value of about half a million sterling include agricultural machinery and bags, cement, railway and building material, provisions, wine, tea, and tobacco. Of exports from the Mozambique Company's territory the chief are sugar, maize, and mangrove bark; the shipments of sugar amount to 25,000 tons per annum, of maize and mangrove bark to about 10,000 tons each. A quantity of ore is shipped in transit from Rhodesia and the Belgian Congo to the United States.

Chinde (*Shinde*).—North of Beira, on the delta of the Zambezi river, lies the harbour of Chinde, which has served since 1892 as the outlet from British Nyasaland

and the rich agricultural district of upper Zambezia. Chinde has no wharves or accommodation for shipping; the whole of its export and import traffic has to be conducted by means of lighters, and steamers even of light draught and small capacity are forced to lie at a distance of several miles from the shore. The completion of one of the projected railways from Beira or Quelimane to the Zambezi at Chindio (Shindio) would inaugurate a more convenient route, and would seal the doom of Chinde.

Quelimane (*Kiliman*).—The next harbour of importance is that of Quelimane, which, with Mozambique and Sofāla, has a history as a trading port dating back to the first Portuguese settlement nearly four hundred years ago. The port and town of Quelimane are situated some miles from the sea up the river. The entrance presents several navigation difficulties for steamers of moderate draught. The bar is shallow and shifting, and the main navigation channel is subject to strong currents and flanked by treacherous shallows and sandbanks. The channel is, however, well-buoyed, and the entrance to the harbour could be much improved by dredging. The port is not equipped with modern loading or discharging appliances, but steamers of two or three thousand tons can lie off the town mole at a distance of fifty to a hundred yards, and loading is effected by barges and lighters towed to and from the shore by gasolene launches. The commercial development of the back-country of Quelimane, which is the richest agricultural section of the Province, is dependent on the improvement of harbour facilities, the construction of good roads through lower and upper Zambezia, and the completion of the Quelimane–Shire Railway or the Mutu Canal to the Zambezi.

The existing export trade, which in 1916 had a value exceeding £130,000, consists principally of ground-nuts,

coffee, sugar, and copra, and is capable of great development if proper shipping facilities could be provided. In the meantime all produce has to be conveyed in small coasting steamers to Mozambique or Beira, and there trans-shipped into ocean-going steamers. The commercial possibilities of Quelimane have in the past been neglected by all except the Germans, who, before the war, were gradually acquiring a monopoly of the local trade and shipping.

In view of the gradual extension of sisal and coco-nut plantations and the increasing quantities of fibre and copra shipped by the Companhia da Zambezia and the Companhia de Boror, the improvement of Quelimane Harbour will become a matter of urgency within a short time.

Parapat (*Angoche, Angosh*).—About 180 miles north of Quelimane and some 60 miles south of Mozambique Island, there is the small harbour of Parapat or Angoche. It lies on a difficult channel, and navigation is dangerous on account of constantly shifting sandbanks. Only steamers of small capacity and light draught can navigate the channel from the open sea, and even the local pilots frequently find themselves at fault on account of the rapidity with which new sandbanks form. The trade of Angoche is of no great extent, the principal articles of export being ground-nuts, mangrove bark, copra, and native produce. The economic and commercial possibilities of the country behind Angoche are not such as to warrant the expenditure of much capital in improving its harbour or providing better shipping facilities.

Mozambique Island.—The island of Mozambique, the former seat of government of the Province, lies at a distance of about 8 or 9 miles from the mainland, and has a good deep-water anchorage ; but the harbour possesses only a primitive mole, and all cargo has to

be loaded or discharged by barges and lighters. The importance of Mozambique lies in its serving as a collecting station for the coastal trade of the district. The projected railway, starting from close to Mossuril on the mainland and crossing the back-country to British Nyasaland, will undoubtedly develop the agricultural resources of this part of the Province, but the railway traffic will always be handicapped by the remoteness of the anchorage on Mozambique Island, and cargoes will always be subject to the expense of transhipment by lighters.

Port Amelia.—Some way north of Mozambique Island, at Port Amelia, in the territory administered by the Companhia do Nyassa, lies one of the finest natural harbours on the whole coast of East Africa.

Pemba Bay has an entrance over a mile wide and expands within to a basin some 9 miles long and 5 miles broad. There is shelter from all winds, and deep water extends almost to the shore, so that large vessels can anchor close in.

The town of Port Amelia, surrounded by woods and fertile plain, is singularly free from mosquitoes, and consequently almost immune from malaria. It has unfortunately been visited from time to time by severe cyclones, such as that which in 1914 destroyed the greater part of the buildings and Government offices.

Various projects have been considered by the Companhia do Nyassa for developing the harbour and making wharves and roads, but up to now lack of the necessary funds has prevented the carrying out of any large scheme. When the railway to Lake Nyasa is constructed and the agricultural resources of the company's territory are turned to account, Port Amelia will doubtless attain a position of considerable importance.

Ibo.—North of Pemba Bay is the old trading port

of Ibo, which is losing in importance owing to its proximity to Port Amelia. It is also too shallow for modern needs and is suitable only for trading dhows.

Other Harbours.—In addition to the harbours already mentioned the Province contains a number of ports whose natural advantages make them capable of development for purposes of coastal trade. Between Delagoa Bay and Beira are Bazaruto Bay, Shilwan Island, Boene Harbour, and Sofāla Bay. From Quelimane northward about a dozen natural harbours occur; mention may be made of Moma river, with deeper anchorage than Angoche; Mossuril Bay, opposite Mozambique Island; Conducia Bay, with protected anchorage in 5 to 9 fathoms within the river; Memba Bay, containing Bocage (Bokazh) Harbour and Port Duarte Pedroso; Sangone Bay, roomy and secure; Lurio Bay, with depths of 5 to 15 fathoms, but insufficient shelter from prevalent winds; Arimba, a sheltered harbour for small vessels; Mazimbwa (Mocimboa) Bay, capacious and well sheltered; and Tunghi Bay, with depths of 4 to 10 fathoms. Mokambo Bay, adjoining Mossuril Bay, and Fernão Veloso Bay, some distance north, have abundant accommodation even for ocean-going vessels. The former is a better harbour than Mossuril Bay or Mozambique; it has a broad and deep entrance, and spacious anchorage in 10 to 15 fathoms. Fernão Veloso Bay is a specially good harbour, well sheltered from southerly winds and with anchorage in depths of 8 to 12 fathoms.

(*b*) *Shipping Lines*

Of the three administrative units of Portuguese East Africa, it is to the Nyassa Company's territory that the smallest volume of maritime trade falls. Its chief harbour, Port Amelia, was visited in 1914 by 88 vessels,

of which 53, of 64,121 tons, were Portuguese, 19, of 161,641 tons, British, and 16, of 99,204 tons, German.

The volume of shipping trade with the Mozambique Company's territory is indicated in the figures for Beira, shown in Table IV of the Appendix.

The territory administered by the State possesses the chief harbour of Portuguese East Africa—Delagoa Bay (with the capital, Lourenço Marques)—through which passes a volume of trade second indeed in value of exports to that of Beira, but far surpassing the import trade of other harbours and completely dwarfing the transit trade of Chinde and even of Beira. Table III in the Appendix shows the number of vessels entering Delagoa Bay in recent years, with the tonnage of cargo discharged and shipped. The shipping totals for the State-administered territories are given in Table V. The value of the trade passing through each of the chief harbours of the Province is shown in Table II.

The volume of shipping visiting Portuguese East Africa may best be gauged by the Lourenço Marques returns. In the five years, 1912–16, the numbers of ships visiting Delagoa Bay were 696, 784, 680, 542, and 729 respectively. Great Britain's share of the shipping was 403 vessels in 1913, 422 in 1916; in the same years Portugal supplied 246 and 224 respectively. The service of Scandinavian ships was well maintained after the outbreak of war. Dutch and Japanese vessels increased in number from 1 and 3 respectively in 1915 to 21 and 22 in 1916. The regular service of passenger and cargo steamers from Japan to East and South African ports aims at taking advantage of special commercial opportunities, but in general the increase in 1916 in the number of vessels calling was due less to extension of trade than to the diversion of steamers to the Cape route in

consequence of enemy submarine activities in the Mediterranean.

The principal British lines serving Lourenço Marques in 1913 were the Union-Castle, Aberdeen, Clan-Ellerman-Harrison, Natal, Bucknall, Houston, and Prince Lines. The Union-Castle vessels maintained a service from Southampton to Delagoa Bay and Beira by both east-coast and west-coast routes. Regular visits were made to both ports by the vessels of the Clan-Ellerman-Harrison joint service sailing from Glasgow and Liverpool, and by those of the Natal (Direct) and Aberdeen lines from London.

Trade with India was carried on by the Natal (Direct) Line as well as by the British India service to Bombay and the Indian-African service to Rangoon and Calcutta. With America connexion was made by the Bucknall, Houston, and Prince steamers, all calling at New York. Messrs. Crosby & Co., Currie & Co., and Howard Smith & Co., supplied the requirements of Australian trade.

The Portuguese National Shipping Company has the mail contract between Portugal and the Portuguese colonies in south-west and south-east Africa, and maintains a regular service of passenger steamers, which run from Lisbon *via* Madeira and the ports of Angola, to Cape Town, Lourenço Marques, Beira, Mozambique, Port Amelia, and Cabo Delgado. This company, the Empreza Nacional de Navegação, also maintains a service of small coasting steamers which ply regularly between Lourenço Marques and all the small harbours of the Province.

The foreign lines which served Portuguese East Africa before the war were the Hansa, Woermann, and German East Africa, the Scandinavian-South Africa, and the Swedish-South Africa Lines. To these were more lately added the Nippon Yusen Kaisha and the

Scandinavian-East Africa Line, while the vessels of the Netherlands and Rotterdam Lloyd Lines were temporarily diverted from their regular route *via* the Suez Canal, and called at Lourenço Marques.

(c) *Telegraphic and Wireless Communications*

Wireless.—There are wireless installations at Delagoa Bay, Inhambane, and Mozambique Island. A proposal to develop the wireless communications, internal and external, of the Portuguese possessions on the west and east African coasts, and to connect Angola with Mozambique, is now receiving consideration. The communicating stations between the two provinces would be Kakengi and Zumbo, posts on the Zambezi on the western and eastern frontiers of Rhodesia.

Submarine Cable.—The Eastern Telegraph Company maintains a submarine cable service up the east coast of Africa, and by its agreement with the Portuguese Government has stations at Lourenço Marques, Beira, Quelimane, and Mozambique Island. From Delagoa Bay the cable runs south to Durban, and from Mozambique northwards to Zanzibar. From Zanzibar cables connect with northern Africa, Europe, and America, India and China, Australia and New Zealand; from Durban land lines intersect all South Africa, and from Cape Town cable communication is carried on with the west coast of Africa and with Europe.

Continental Telegraph System.—The Government telegraph service not only links up the head-quarters and principal stations of the various local governments, but, by the lines which follow the railroads from Lourenço Marques and Beira, connects the Province with the Union of South Africa and with Rhodesia and the Congo. The African Trans-continental Telegraph system runs from Chinde to Blantyre, Lake

Nyasa, Fife, Abercorn, and Lake Tanganyika, with offshoots to Fort Jameson, to Tete, and from Tete to Zumbo and to Umtali.

(B) INDUSTRY

(1) Labour

(a) *Supply of Labour ; Emigration and Immigration*

The industries of the Province are not yet so organized and developed as to require a great volume of labour, and consequently the native population, estimated at 2,800,000, is sufficient for present needs, labour, generally speaking, being cheap and plentiful. The employer, however, is not exempt from vexations and difficulties, for the plantation labourer, even when, after earning the amount of his hut-tax, he has overcome his constitutional reluctance to do any further work, has a habit of choosing the months when the main ploughing and cultivation for the year are in progress to absent himself and hoe his own garden.

An artificial scarcity is met with in districts where labour is recruited for other territories. In pre-war years there were on the average 100,000 natives of Portuguese East Africa employed on the Rand mines and in Rhodesia. The withdrawal of such a large amount of labour may to some extent have impeded internal development, but as the country itself failed to supply enterprises on which the labour could be usefully employed, the temporary absence of the natives was less than usually open to objection. Some disturbance of family life and weakening of tribal custom and authority probably took place, and there may have been some contamination from the undesirable elements of the Rand and other communities, but

the general impression is that the natives came back with a wider outlook, and were morally none the worse for their year (or more) of regular work and discipline. The opportunity of earning high wages and saving sufficient to establish them on their return in a position of affluence in their villages was eagerly embraced by four-fifths of the young men; plantation work was disparaged and the stay-at-homes were somewhat despised for lack of enterprise. The natives were well fed, well looked after, and eventually repatriated by the Witwatersrand Native Labour Association. They sent remittances approximating to £20,000 per annum from Johannesburg, and on their return brought very substantial sums of money into the Province.

Recruiting for the Rand mines was at no time permitted in the territory of the Mozambique Company or in the *prazos*[1]; but under the Mozambique Treaty, concluded in 1909 between the Portuguese and Transvaal Governments, and ratified and continued by the Union of South Africa in later years, sanction was given for the recruiting of natives from all other parts of the Province. The high death-rate among natives from the northern regions led in 1913 to the restriction of recruiting to the districts south of lat. 22°. The Mozambique Government is paid an emigration fee of 13*s*. for each native recruited for the Rand; a repatriation fee of 10*s*. for each year of absence is payable by every returning native.

Meanwhile the natives of the northern territories have received a form of compensation for the loss of their opportunities on the Rand, for the Portuguese authorities have latterly canvassed these districts for labour for the sugar plantations farther south and for the cacao plantations in the island of San Thomé.

[1] See *infra*, pp. 74–5.

Within the Province the interests of native labourers, both domestic and recruited, are cared for by native commissioners, who investigate and adjudicate upon grievances brought to their notice. Protected by such safeguards, the natives accept service readily, and, when treated with firmness and sympathy, work sufficiently well to earn their wages. The chief labour areas are the Mozambique Company's territory, the neighbourhood of Quelimane, and the Zambezi valley. A scarcity of labour used to be experienced on the Zambezi sugar plantations, where 15,000 natives were required, but this shortage, if not already removed by the restriction of recruiting, could probably be remedied by action on the part of the *prazo* companies, which administer districts containing a population of half a million.

The emigration of the natives of the Province, conducted under the conditions described above, is now practically balanced by repatriation at the conclusion of contracts, so that there is no marked loss of population nor, in the absence of specially attractive opportunities, is there any appreciable influx of immigrants, white or coloured.

(*b*) *Labour Conditions*

The rates of pay on plantations vary greatly throughout the Province. On the *prazos* in the Quelimane district the average wages before the war were 8*s.* 6*d.* per month for men, 4*s.* 6*d.* for women, and 3*s.* 3*d.* for children. The highest wages were paid in the neighbourhood of the towns, such as Lourenço Marques and Beira, where municipal rates, taxes, and licences raise the cost of living for natives as well as Europeans. At Inhambane, for instance, the wages were only half those in Lourenço Marques, while in the north, from Angoche to the Rovuma river, the wages paid were still lower, averaging in some localities 1*s.* 3*d.* to 1*s.* 6*d.*

per week for men, and 10*d.* to 1*s.* for women, who provided their own food. Plantation owners generally complained that in districts where the recruiting of natives for the Rand was still permitted the effect of the high rates of pay offered for work on the mines was to keep plantation wages at too high a level.

(2) Agriculture

(*a*) *Products of Commercial Value*

General.—In Portuguese East Africa, as in all tropical and sub-tropical countries, there is an essential, if obvious, distinction to be drawn between native and European agriculture. It is a distinction in point of quantity, of methods, and of products. The investment of relatively vast capital compels the European to work on a larger scale and employ numbers of labourers, usually men, but sometimes women and children; if he has European assistants he uses them as overseers for sections of his labour force or supervisors of the more technical processes. As a capitalist he is able to import and employ the agricultural machinery manufactured in Europe or America for tilling the ground and for treating plantation produce, knowing that thereby he will save labour and obtain better results. The products to which he devotes his attention are only such as have recognized value on the European markets, and are usually other than those which the native cultivates for the satisfaction of his few wants and primitive tastes. The native prepares his little garden by cutting down and burning the vegetation which occupied the site, cultivates it with the hoe, plants small crops of millet, maize, pumpkins, and gourds, varieties of beans and peas, sweet potatoes and manioc, and grows sufficient quantities for the needs of his household. Incentives to a further measure

of agricultural industry are supplied by the pressure of the yearly hut-tax, payable wholly or partly in the form of agricultural produce, and by the attractions of the Indian merchant's store, where millet, maize, oil-seeds, and bees-wax may be bartered for cloth or beads or wire. Even at their maximum the efforts of the native who works for his own hand have little significance beyond the maintenance of his family and the payment of his tax. This contribution to the common good, though by no means negligible, ranks low beside that of the plantation labourer, who, in producing his quota of, for instance, three or four tons of sugar per annum, equally well maintains his family, cultivates more thoroughly a much greater portion of the land, enriches his country through the trade and the returning capital created by his labour, and increases the world supply of necessary food-stuffs or raw material for industries. The economic value to the country of the European cultivator is still greater, varying in proportion to the amount of capital prudently invested, the number of labourers usefully employed, the value of the resultant products, the investment of profits in further enterprise, and finally the influence of an example of energy and of successful experiments in new cultures or new methods.

The Portuguese authorities have not hitherto attempted on any considerable scale to stimulate native agriculture by a system which has elsewhere produced good results without unduly depleting the labour supply. The Government of the Uganda Protectorate encourages the natives to grow cotton on their own plots, issues seed every season, and employs skilled instructors to inculcate correct methods of cultivation. The most eminent example of the success of such a system is found on the Gold Coast, where the efforts of native growers produce an annual crop of

70,000 tons of cacao beans. And in territory not very distant from Portuguese East Africa certain tribes of the Upper Congo districts were able recently to supply General Northey's column with a surplus of 18,000 tons of rice grown at the special request of the Government. The conditions for the successful use of free native labour on these lines are that the crops grown present no special difficulties of cultivation, and command a certain sale at a reasonable minimum price, under a Government guarantee if possible. The second of these conditions seems to imply the restriction of choice to foods such as maize, rice, and oil-seeds, or to the raw materials like cotton or flax, which are required for great industries and for which the demand is constant and not likely to be oversupplied.

In their East African territories the Portuguese possess a great tract, nearly 300,000 square miles in area, of very high potential value. The range of agricultural possibilities includes almost all varieties of tropical and sub-tropical products. There is a large supply of native labour, and a fairly heavy rainfall in most districts; there are also numerous perennial rivers, and large stretches of fertile loamy soil and of upland pastures. The richest portions are the lower valley of the Zambezi and the district west and north-west of Quelimane, but farther south the more temperate climate, especially in the higher inland districts, has attracted a larger number of settlers, interested in the growing of maize, sugar-cane, and sisal. The present export of agricultural products amounts to less than £1,000,000 in value, but this figure is likely to be largely exceeded in the future.

Sugar.—The principal agricultural product is sugar, which accounts for more than half of the total value of exports from the Province. The greater part of the sugar produced comes from the territory administered

by the Mozambique Company, and is shipped through Beira. In 1913, 23,948 tons were exported from Beira, as against 4,563 tons from Lourenço Marques. In 1916 Beira contributed 21,830 tons out of a total of 28,280 tons from the Province.

In recent years, and more particularly since the outbreak of the European War, the substantial profits earned by the planters have led to a large increase in the acreage under sugar-cane. In 1911 there were only seven sugar factories in the whole Province—three on the Zambezi, two on the Buzi river, one at Inhambane, and one at Inyamakura, near Quelimane. Since then the number of factories has more than doubled; the acreage devoted to sugar-growing has been nearly trebled, and the annual output is now calculated at 35,000 tons, of which 25,000 tons is produced by the Sena Sugar Company.

Sugar cultivation is practised on a small scale by natives, who chew the cane. The European companies, which grow the cane and manufacture sugar, employ powerful steam ploughs during the dry season to turn over and prepare the hardened ground for planting. The usual practice is to ridge the ground in ploughing and lay the plants flat in the furrow under two inches of soil, afterwards earthing them up in course of weeding. The alternative method, followed when the ground is not ploughed, is to insert the plants upright in the ground or at a slight slope; the eyes, it is claimed, are thus placed beyond the reach of the borer insect. The growing plants are kept free of weeds by manual labour, and are irrigated as may be necessary; the water on some plantations is pumped from the river near by and led into the planted rows by a system of channels, which serve also to lead off flood water after the occasional heavy rains. The operations of cutting and crushing the cane and manu-

facturing the sugar present no exceptional features. Spirit is distilled from the molasses by one or two of the companies.

A question of the first importance to sugar-planters and one which has given rise to much debate is the choice of the best variety of sugar-cane to cultivate. In Natal the favourite variety, best suited to the local conditions of soil, temperature, rainfall, and water-supply, is the Yuba cane, which there, as in Portuguese East Africa, has a prolific growth and a prolonged ratooning life, and is eminently suitable for free and open soils or unirrigated land. The cane, however, is hard and of small diameter, and therefore requires more powerful crushing machinery, and the juice extracted contains a relatively high percentage of impurities, though after special treatment it yields a very fine white sugar. The more luscious canes, moreover, give better crops than Yuba on the heavy alluvium common in Mozambique, especially where irrigation is practicable. Of some forty varieties now being cultivated, the most popular, after Yuba, are Green Natal, Lusier, and several Mauritius and Tanna species.

In seeking to increase output, sugar-planters have in the past aimed almost exclusively at extending the area under cultivation. The method involves additional labour and transport, and the results it gives might in many cases be more easily and economically obtained by the irrigation and more thorough cultivation of a smaller area. An instructive experiment conducted with Yuba cane at Inyanguvo on the Buzi river showed that, as a result of merely cultivating between the rows in two fields, production increased from an average (for the rest of the estate) of 38·6 tons of cane and 2·83 tons of sugar per acre to 60·9 and 70·8 tons of cane, yielding respectively 4·46 and 5·1 tons of sugar.

Maize.—The cultivation of maize has made notable progress in recent years, especially in the territory of the Mozambique Chartered Company. A large tract of country between Massikessi and the coast plain has proved suitable for maize-growing, and settlers are readily taking up farms for this purpose. The advance in production is shown by the returns of maize exported from Beira; the figures were 2,325 tons in 1912, 6,673 in 1913, 9,745 in 1914, and 9,100 in 1916. Cultivation has been stimulated in the last few years by the action of the Portuguese Government in commandeering the whole export for European consumption, and by the satisfactory system of grading and testing instituted at Beira in 1914 by the maize expert of the Mozambique Company.

The maize exports from Lourenço Marques show unexplained fluctuations from 1,133 tons in 1910 to 1,101, 6,400, and 338 tons in the following years. In 1916, 868 tons were exported from Lourenço Marques, and 4,932 from Mozambique.

Maize is freely cultivated by natives in various localities all over the Province, but in the Inkomati valleys the native maize plots are specially extensive, and in some cases continuous over areas of several hundred acres.

Coco-nut Palms.—The chief copra-producing district of the Province is the coast near Quelimane, from which an annual export of about 4,000 tons has been recorded in the last few years. Coco-nut palms are found also along the bay at Mozambique, at Angoche, and in the Matadane Concession. Coco-nut palms will not grow at a distance of more than 10 kilometres from the sea, and of the coast-belt of the Province the southern portion, with the possible exception of parts of Inhambane, is not warm enough, so that it is only in and north of the Zambezi delta that the palms really

flourish. Even there, however, the yield of the trees appears to be comparatively low, both in number and in size of nuts, and the opinion has been expressed that Portuguese East Africa is not a really favourable field for coco-nut growing.

Many of the trees in Quelimane, originally owned by natives and subsequently purchased by the *prazo* companies, were found to have been planted in land which is liable to be water-logged, and therefore apt to prevent or limit production. Attempts to remedy this fault by draining have been made in the old plantations at Quelimane, and care is now taken by the Madal, Zambezia, and Boror Companies to select drier soils in laying out their new plantations. Considerable damage is wrought by the cyclones which occur from time to time on the east coast, for, even when it does no permanent injury to the trees, a cyclone may cause the loss of the crop and growth of a season.

The methods followed in the Province for propagating, planting, and cultivating coco-nut palms present no remarkable features. For the germination of the nuts the usual practice is to prepare nurseries with trenches eight or nine inches deep, in which the nut is placed with a covering of some two inches of soil. After a period of eighteen to twenty-four months the young plants are removed to their permanent places in the plantation and set out at spaces of eight or nine metres. The surface round and between trees is cultivated in circles widening with the growth of each, until the whole plantation area is clear of weeds and bush. During the earlier years of growth the palms are shielded from the excessive heat of the sun on the north by their low-hanging fronds, and the practice of cutting these away for convenience of cultivation is therefore to be deprecated.

Sisal Hemp.—The most important agricultural in-

dustry after sugar-cane and coco-nuts is sisal, which was introduced from German East Africa about 1910, and was planted experimentally by the Zambezia and Boror Companies. The experiments have proved thoroughly satisfactory, and there are now over 11,000,000 plants in cultivation in the Quelimane and Zambezi regions. In 1916 there was an export of 2,200 tons of fibre, almost all of it shipped from Quelimane.

Sisal requires a light but good soil, not exhausted by previous crop cultivation. For the proper preparation of the fibre for export it is necessary to have a plentiful supply of water (preferably running water) on the plantation in close proximity to the decorticating factory.

The usual method of planting in Portuguese East Africa is to prepare nurseries and plant them thickly with bulbils. The bulbils are found in great numbers round the flowering stems, known as poles, which the sisal plants throw up in their last year of growth. The East African sisal plant grown from bulbils poles in its seventh, eighth, or ninth year, and perishes immediately after poling. After twelve or eighteen months in the nursery the young plants, selected so as to be as nearly as possible of equal size and habit of growth, are moved into their permanent quarters in the plantation proper. The spacing varies on different plantations. The standard most commonly adopted in the Province is 2 metres by 1·75, as compared with a spacing of 2·30 by 1·50 usually practised in Tanganyika. The wider spacing is probably preferable, as more light and air are thus admitted to the plant and weeds are more easily kept in check.

The Portuguese planters and agricultural experts prefer to plant from bulbils, whereas before the war planters in both German and British East Africa had

taken to planting out the suckers which form during growth at the base of every developed sisal plant. The advantages claimed for propagation from suckers are that labour and expense are saved by this method of replenishing the plantation, that the young plants are more certainly true to the type of the parent, and that they take a year less to mature their growth and reach the cutting stage. Suckers, however, have the disadvantage of growing irregularly, and they frequently pole immediately after the first cutting of leaves and simultaneously with the parent plant. In this case the planters lose the whole of the customary yield over three years at least, and their experience has convinced them that the longer and more expensive process of growing from bulbils is likely to give the more reliable results and the larger profits in the end.

When the young plants have once been set out in suitable soil, the upkeep of a sisal plantation is inexpensive. All that is necessary is to see that it is kept free from weeds, and that new fields are prepared and cultivated, in order to replace exhausted sections and to maintain the supply of leaves for the mills.

Before the war nearly all the machinery for decorticating and preparing sisal was produced either in Germany or in the United States of America, but several British firms have recently been manufacturing machines which appear to mark an improvement, both in economy and in efficiency, on the American and German decorticators. The initial cost of installation of a thoroughly efficient scutching and cleaning mill may be calculated at rather more than one-third of the total cost of laying out a sisal property. A convenient unit for the calculation of expenses is an estate of 2,000,000 plants, such as has been laid out on the Matadane Concession, near Angoche. This will be

equipped with either Robey's or Bridges' decorticating machines, and the total cost up to the producing stage, including a Decauville light railroad throughout the plantation, is estimated to be £26,000.

The total cost of production of a ton of dressed fibre in Portuguese East Africa before the war averaged £14 per ton, and the average f.o.b. selling price was £23 per ton. During the years of war very much higher prices have been offered, first grade fibre selling in 1917 at £84 per ton in London. Shipping difficulties have prevented planters from reaping the full benefit of this advance.

The other fibre-producing plants—*Mauritius hemp*, *ramie*, and *sansevieria*—have been shown by experience to be less suitable for cultivation, and have been practically abandoned in favour of sisal. *Kapok*, however, seems likely to reward the efforts of the enterprising planters who have grown it experimentally in the northern parts of the Province.

Cotton.—The cultivation of cotton in Portuguese East Africa can scarcely be said to have advanced beyond the experimental stage, although in Zambezia the year's output had increased from 678,720 lb. in 1913 to 1,536,640 lb. in 1916.

The Colonial Administration at Lourenço Marques and the Mozambique Company at Beira have conducted experiments in recent years to discover which variety of cotton is best suited to local conditions. West African and Egyptian varieties have been rejected, apparently because the harvest season is insufficiently hot and dry to ripen the seed. On the Shire river the long-staple Nyasaland Upland cotton has proved successful in the plantations of the Zambezia Company. The dry belt of the Mozambique district is said to offer conditions favourable for cotton, but transport is difficult and the country wholly undeveloped, and to

these handicaps is added the risk of heavy loss through blight and insect pests.

Tobacco.—The export of tobacco from British Nyasaland has in the last four or five years averaged 3,250,000 pounds in weight and about £90,000 in value. This output is roughly twenty times greater than the export from Portuguese East Africa, which contains vastly greater areas apparently well adapted to the culture of standard varieties. The best tobacco in the Province is grown in Upper Zambezia, in the Inhambane district and in the Umbeluzi valley; considerable quantities are produced in the Tete district and Quelimane. Small plots are cultivated by the natives in many districts, especially along the Zambezi, but the *prazo*-holders seem hitherto to have somewhat neglected the opportunities offered by this culture. Flue-curing instead of air-curing is essential for the preparation of tobacco intended for sale in European markets, and it may be that the difficulties and expense of the process are sufficient to discourage enterprise. In pre-war days the tobacco exported from the Province was consigned to Portuguese possessions and to the Union of South Africa; it had apparently no market in Europe.

Rubber.—The forest areas of the Province contain large quantities of different varieties of rubber-yielding Landolphia vines. At the time when rubber was fetching high prices in the European and American markets, these rubber forests were exploited, the vine stems and roots being collected by natives and afterwards treated by machinery. The extracted product was sold in England and America as third or fourth class rubber, and yielded a small profit over cost.

In consequence of the extensive production and present low costs of the high quality plantation rubber cultivated in Ceylon, Java, and the Malay States, and the lower prices ruling in both Europe and the United

States, the collection of wild rubber from vines has become unprofitable and has practically been abandoned.

Experimental plantations of Pará rubber (*Hevea brasiliensis*) have not proved successful in Portuguese East Africa, for while the trees grew fairly well the yield of latex was so unsatisfactory that cultivation was carried on at a loss.

Ceará rubber (*Manihot glaziovii*) grows well in the district of Mozambique, but the rainfall is too small to produce a profitable yield. The long dry season reduces to six months or less the period during which tapping can be carried on, and even during this period the rubber beads out and will not flow properly. The rubber from Ceará trees is always inferior in quality to Pará rubber, and, in view of the uncertainties and difficulties of cultivation, the growing of plantation rubber is not likely ever to be a profitable industry in the Province of Mozambique.

Oil-seeds.—Of the different varieties of oil-seeds, which are cultivated by natives exclusively, groundnuts receive most attention in all parts of the Province; an export of 7,362 tons was recorded for 1916. Near Inhambane the *Trichilia emetica*, called *mafureira* by the natives, grows profusely, but only a small fraction of the whole crop is actually gathered and exported, the natives selling it to the Inhambane merchants for 30 reis per kg., a price nearly equal to three farthings per pound. The principal obstacle to the development of this branch of agriculture is the difficulty of transport over the sandy roads of the district.

Other varieties of oil-seeds are castor oil, coco-nut, sesame, and cotton seeds, all of which contribute to the export trade of the Province. Two other species, the cashew nut and the *jikungu* or *mkweme* (*Telfairia pedata*), are now beginning to be systematically culti-

vated. The seeds of these nuts are worth £7 or £8 per ton at Inhambane, but as they are protected by particularly tough hard shells, they present special difficulties of treatment, which have only recently been overcome by the invention of a simple and effective decorticator. Telfairia yields an oil suitable for soap-making; the cashew-tree is said to be potentially useful, not only for its oil, but, among other derivatives, for a spirit which can be distilled from its fruit, and would be suitable for internal combustion engines.

Mangrove Bark.—Large quantities of bark for tanning are obtained from the red mangrove trees growing in the creeks along the coast. Mozambique, Beira, and Quelimane in 1916 exported close on 17,000 tons. Black wattle has not yet been cultivated on a commercial scale.

Fruit.—A large range of tropical and sub-tropical fruits is found in all parts of the Province, including bananas, mangoes, guavas, custard-apples, avocado pears, pine-apples, persimmons, peaches, loquats, oranges, naartjes, lemons, and water-melons. These, as well as the grapes grown in the Lourenço Marques district, supply local markets, but there is no recorded export.

Live-stock.—The prevalence of tsetse-fly over large portions of the colony and the ravages of rinderpest and of East Coast fever make stock-raising a precarious investment. Angoni cattle are numerous near Lake Nyasa, while European breeds (chiefly Hereford, Friesland, and Shorthorn) have been introduced in the lower Zambezi country, in the higher levels of Manikaland, and in the Lourenço Marques district, where a number of promising herds have been established for dairy and slaughter purposes. No part of the Province has been found suitable for horses. Mules and donkeys are useful for transport, and are much hardier than

horses here, as elsewhere in hot climates. Draught animals, however, are far from numerous, and their scarcity is a serious handicap to agriculture. Sheep and goats of the native breeds are generally plentiful, and pigs are kept in most localities. Fowls and pigeons are found everywhere, and turkeys and guinea-fowl are common.

Game.—The big game of the Province includes elephant, lion, leopard, hippopotamus, rhinoceros, giraffe, buffalo, gnu, zebra, and many varieties of antelope. The authorities have taken the usual measures for preserving game by enforcing game licences and close seasons and marking off game reserves.

(*b*) *Irrigation*

Water is pumped from the Zambezi on to the large sugar plantations along the river-side. Apart from this, irrigation seems nowhere to be utilized on any large scale, even for the cultivation of rice. As the difficulties of navigating the Zambezi are increasing, and the construction of the Mutu Canal from the river above Mopeia to Quelimane is now under discussion, a subject deserving consideration is the possibility of a more extensive use for irrigation purposes of the water of the lower river. It is said that irrigation might be usefully employed in the valleys of the Inkomati, Sabi, Olifants, Limpopo, and other southern rivers.

(*c*) *Forestry*

A large proportion of the surface of the Province is wooded. The scrub, thorn-bush, and low forest of the drier regions are of little economic value, but the forests which clothe the river valleys and the uplands of Quelimane and Mozambique districts contain large and serviceable trees. Among the most useful varieties

are 'African rosewood' or camwood (*Pterocarpus erinaceus*) and *pau ferro* or ironwood (*Brachystegia spicaeformis*), both widely distributed. In the Zambezi forests there are a score of good timber trees, including 'African mahogany' (*Khaya senegalensis*), the *mwangele* (*Adina microcephala*), teak (*Oldfieldia africana*), and the parinariums.

Unfortunately, the larger timber trees seldom grow close together or near to navigable waterways, so that there is small chance of developing a lumber industry, and the forests are valuable, in the opinion of Mr. Lyne, chiefly as a means of providing planters with timber and fuel for domestic use and natives with building material, fuel, cordage, and bark cloth. A variety of heavy black wood (*Dalbergia melanoxylon*), called *pinki* by the natives, who bring it in for sale to local merchants, was exported before the war to Marseilles and Hamburg. The selling prices of this wood were subject to the operations of a ring of exporters and buyers, who thereby contrived to control the market and stifle competition.

(*d*) *Land Tenure*

(i) *State Ownership.*—The Portuguese Colonial Land Law regards as State property all land not as yet owned by individuals or by collective bodies, and expressly reserves for the State not only mineral and forestry rights, but all land required for the public services, all islands, islets, and mud-banks on the sea-coast and in the greater rivers, all necessary roads and certain strips of land along sea-coast, river banks, and railways.

(ii) *Native Occupation.*—The Portuguese Government and the Governor-General of the Province may reserve for natives exclusively certain areas of land, with rights of occupation, but not of ownership; outside such

reserves native occupation is only provisional, but any native may obtain title of occupation for a cultivated and demarcated plot containing his hut or situated near it, and in extent not exceeding two hectares for each adult member of his family. Titled occupancy for twenty consecutive years gives the holder (or his heirs) the right to claim ownership of the ground. The local authorities are empowered for special reasons to make special grants of available land.

(iii) *European Occupation.*—Europeans are permitted to occupy land either on lease, or quit-rent, or freehold. The leaseholder may occupy up to 10,000 hectares in the Lourenço Marques district, or 50,000 hectares in other districts, at a rental fixed in the case of a first lease by the local authority, and in the case of every subsequent lease by the public sale of the lease. Quit-rent annual payments are fixed at 40 reis (2*d.*) per hectare for land in the Lourenço Marques district, and 20 reis (1*d.*) per hectare elsewhere, while the further initial payment is determined by the public auction of the land in question. Either leasehold or quit-rent occupation may be subsequently converted to freehold; or, again, land may in the first instance be purchased by auction sale, the minimum price being 1,500 reis (6*s.* 9*d.*) per hectare. Free grants of land may be made to administrative corporations, missions, and benevolent societies of Portuguese nationality.

(iv) *Company Holdings.*—Companies in general enjoy the same privileges as individuals. A special form of land tenure occurs in the case of the *prazos*, held occasionally by individuals, but more usually by associations, who lease not merely extensive plantation lands, but whole districts. Within these districts the *prazo*-holders undertake a certain amount of agricultural development and have the right of farming the ordinary native taxes, paying half of the estimated

yield to Government and exacting labour or agricultural produce in lieu of the other half. There are over fifty Crown *prazos* in the territory of the Zambezia Company alone. The other great companies of the Province are the Mozambique and Nyassa Companies, both of them chartered and entrusted with the whole administration of their extensive territories.

The *prazo* system has been severely criticized. It is alleged on the one hand that the companies have paid little heed to agriculture, have in fact locked up some of the richest lands in the Province, curtailed the labour supply, and attended almost wholly to the profitable business of tax-collecting; on the other hand, it is pleaded that they have done much to educate the native and promote industries of all kinds, whereas in the neighbouring Government reserves no progress whatsoever has been made. The *prazo* question is one of land tenure, in so far as the conditions of tenure permit these methods of administration and of exploiting the country's resources.

(3) Fisheries

In the lakes and rivers of the Province there are numbers of fresh-water fish. The Zambezi is frequented by bream, barbel, and tiger-fish—the latter noted for the sport it gives the angler—but has not proved congenial to the imported trout, which thrive in the highland streams of British Nyasaland. The Zambezi natives fish with lines, with bamboo rods, with nets dragged by canoes or with traps set in reed fences at the mouths of tributary streams.

There is said to be an abundance of sea-fish of many varieties off the coast. Fishing is practised on a small scale for the supply of local markets, but no attempt has yet been made to can or preserve the fish, as in South Africa.

It was probably the success of a Durban venture in 1908 that induced a Norwegian company in 1911 to start whale-fishing from a station at Inhambane. In 1912 five companies were established, one at Lourenço Marques, two at Inhambane, one at Quelimane, and one at Angoche, and the total catch of whales was 1,307, valued at about £100,000. The following year the catch had fallen to 653 whales, and in 1914 the sole surviving company landed only 412 whales.

Pearls, seldom of any considerable value, are found in the oysters collected by natives in shallow waters along the coast and near the Bazaruto and other islands. An attempt at pearl-fishing, made near Mozambique in 1912, was a complete failure, owing to lack of proper apparatus and other causes.

(4) Minerals

Geological surveys of the Province are very far from complete. Partial investigations of mineral prospects have been made, chiefly in the Mozambique Company's territory (where a survey has been begun under the direction of the Imperial Institute), in Tete, in the Mozambique district by British investigators on behalf of the Memba Minerals, Ltd., and in Portuguese Nyasaland by British or other servants of the Nyassa Company and allied companies.

Two principal mineral areas appear to exist, so far as present knowledge extends. One of these has its centre at Massikessi, in the Mozambique Company's territory. Here there are numerous veins of auriferous quartz, and the alluvium of the rivers is auriferous. Copper also occurs, and coal may possibly exist in the Mossurize country, where graphite of good quality has also been found. The second area is in Tete, on both sides, but principally north, of the Zambezi. Gold is

found in the valleys of several tributaries, and copper occurs in some localities; other minerals met with are magnetite, wolfram, galena, tin, mica, and graphite. Reported discoveries of diamonds and petroleum are of unconfirmed value. Coal is found over a large extent of country, chiefly in the north of the district.

The territories of the Nyassa Company are said to contain coal and magnetic iron ore to the west of Pemba Bay and near Litule on the Lujenda river; gold in the Rariko and other rivers; important deposits of graphite near Mwalia and Mazimbwa (Mocimboa); malachite yielding a high percentage of copper near Cape Delgado; and zinc, nickel, slate, and marble at different points. Mining in this district has not as yet been attempted and can scarcely be carried on with success until better means of communication exist.

In the Lourenço Marques district coal is reported to occur on the Lebombo Hills and in Inyak Island; gold, tin, and other metals in various places. None of these have proved to be of economic value. Prospecting for oil was carried on in the Inhangela Lake region of Inhambane in 1905–11, but was discontinued for lack of funds, though prospects were considered promising.

Alluvial mining for gold is practised on a small scale in the Tete area, and more extensively in the neighbourhood of Massikessi. Reef-mining in the former region is handicapped by difficulties of transport and has been attempted in only a few spots near Shifumbazi and Missale, towards the north-west frontier; but in the Manika area, along the valleys of the upper Revwe river and its tributaries the Muza and Shimezi, it has made some progress, with the aid of the Beira Railway and a good road system. From this region the output of alluvial and reef gold together rose between 1906 and 1914 from 2,284 to 15,263 ounces of fine gold: two-thirds of the total in 1914 was obtained by dredging

in the Revwe valley. The output in 1915 and 1916 was 22,245 and 21,217 ounces respectively. On some of the reefs in the same district silver is extracted as a by-product, but the value of the annual output was only £353 in 1913, and had diminished to £123 in 1916. A copper mine near the border west of Massikessi had in 1909 an output valued at £22,000, but was closed down for a number of years and has only recently been reopened.

The ascertained mineral resources of Portuguese East Africa are thus of no very great value, and the present mineral output is inconsiderable. The construction of roads and railways and the opening up of large territories as yet insufficiently prospected may lead to the working of known and the discovery of new deposits, but there is no assurance of any remarkable development of mining enterprise.

(5) Manufactures

Manufactures in Portuguese East Africa are unimportant. The native tribes for their own use construct and thatch their huts and make dug-out and bark canoes, baskets and mats, fish-traps and nets, knives, spears, bows and rude arrows, hoes and axes, platters and wooden spoons, drums and other primitive musical instruments, brass-wire ornaments, and the various earthenware utensils which they employ for cooking food or storing liquids. They also make bark-cloth for use as clothing and as sacking, express vegetable oils, ferment and distil various kinds of beer and wine, dry and sell fish, and extract salt in saltpans near the coast. On the Zambezi there are a few goldsmiths, trained originally by the industrial Catholic brotherhoods of Upper Zambezia, who manufacture fragile but finely-finished articles of gold and silver. The plaiting of grasses into tobacco- and cigarette-cases has

naturally followed the manufacture of pipe-tobacco, cigars, and cigarettes.

An oil and soap factory was established in Lourenço Marques in 1914; it is said to be able to produce one ton of oil per day and a thousand boxes of soap. Brickmaking is an important industry in Lourenço Marques. Allusion has been made, in connexion with agriculture, to the processes of decorticating sisal, ginning cotton, and making sugar, the last being the most important manufacture of the Province. Potteries have been started recently in Kumbana and Panda, in the Inhambane district.

(C) COMMERCE

(1) Domestic

(*a*) *Principal Branches of Trade*

In Lourenço Marques and the other coast towns, before the war, the domestic trade was fairly equally divided between Portuguese, English, and German houses. The better-class trade was in British and Portuguese hands, whereas the German firms supplied and financed the Indian traders who carried on the 'Kaffir truck' retail trade throughout the province. The extent and value of this trade may be gauged from the statistics of imports of cloth (cotton and unspecified), which in 1913 amounted at Lourenço Marques alone to 1,525,758 lb., of a value of £134,244.

The Indian traders were accustomed to buy their supplies from the German merchants on long credits, and, as the Indian trade with the natives is a barter trade, in which the Banyan gives the native wearing apparel and manufactured goods on credit against the native's undertaking to hand him over produce from his crops when they reach maturity, the Indian trader,

as well as the German wholesale merchant, made a double profit, first on the goods supplied to the natives and again on the produce eventually received in exchange. The principal items of barter by which the natives pay the Banyan traders for their cloth and other goods are ground-nuts and *feijão* (Kaffir beans). Ground-nuts are cultivated by natives almost exclusively, and before the war the trade in this product, amounting to some two thousand tons per annum, was practically a monopoly of the German house of W. Philippi & Co. The industry is of great importance to the natives, providing them with a saleable commodity which enables them to do business with the traders, and in most cases is the means by which they pay their hut-tax to the Government.

The expenses of the Banyan traders are insignificant: they live for next to nothing, and contrive to prosper on a seemingly inadequate turnover. In spite of the length of credits given by the wholesalers to the retail shops, and the apparent lack of security for the goods advanced, bad debts are seldom incurred and few failures are recorded. The trading community has good sources of information about its members, and any commercial dishonesty or immorality would soon be penalized by the withholding of credit.

(*b*) *Towns, Markets, and Fairs*

In every town in the Province there is a native market under municipal control, and subject to local taxation, which is not onerous. The municipal market at Lourenço Marques is a large and important glazed structure, where much chaffering goes on in the mornings. The Beira market is small and insignificant; and in the other coast towns, Quelimane, Angoche, Mozambique, and the rest, the markets are merely railed-off enclosures.

(c) *Organizations to promote Trade and Commerce*

Chambers of Commerce have been established in the principal seaports for the purpose of fostering and promoting trade.

(d) *Foreign Interests*

British interests are represented by many leading merchants in Lourenço Marques, and the coaling and forwarding trade there is almost entirely in British hands. In Beira three-fifths of the merchants are British, and the Beira Railway is owned and managed by a British company. The Mozambique Chartered Company, though constituted under Portuguese law and having its registered head office in Lisbon, is largely under English direction, and a very large proportion of its principal employees in East Africa are British. Quelimane and Angoche have no purely British mercantile communities, but of the retail trade some two-thirds is in the hands of British Indian shopkeepers.

In the northern half of the Province, before the late war, the domestic trade was being gradually concentrated in the hands of a few energetic German firms. The firm of W. Philippi & Co. had almost a monopoly of both export and import trade from Quelimane to Cape Delgado; its head-quarters were in Port Amelia and on Mozambique Island. Other prominent firms were Hoffmann & Co. and the so-called Scandinavian Swiss house, Société du Madal, which was then supported by capital and connexions in Germany as well as in France, Belgium, and Switzerland. North of Beira there was apparently no competing British firm, and there were only a few Portuguese merchants, who were less enterprising than their German rivals and commanded far less working capital.

The German merchants in this northern area sometimes acted as agents for the larger Indian firms, but generally imported goods on their own behalf and supplied the Banyan traders on easy terms. Latterly they had themselves engaged in retail business and established numerous small shops along the coast and along the main roads for about 100 miles inland. In this region the British Indian retail trader was, before the recent war, gradually being driven out; and only one strong Indian firm remained, maintaining its own shops, giving liberal credit to small traders, and thus preventing the establishment of a complete German monopoly.

An English firm in Mozambique is now making steady progress, and the important 'Kaffir truck' house of Solomon & Co., which enjoys a large proportion of this trade throughout Rhodesia, has recently been making vigorous and successful efforts, not only in Lourenço Marques and Beira but in Chinde, Quelimane, Angoche, Mozambique, and the north.

(*e*) *Methods of Economic Penetration*

It has been generally recognized that there was no ulterior motive in these British undertakings, no scheme of commercial penetration leading up to political changes, and no attempt to eliminate Portuguese competition or interfere with Portuguese administration. The progress made represented the natural growth of legitimate business, of mining and agricultural ventures, and of projects intended to facilitate communications and trade within the Province and also between Europe and the British possessions in the interior.

German penetration, on the other hand, was of a more insidious and dangerous character. No exception could be taken to the thoroughness of their business methods

and to the care they took to suit their goods to their customers' tastes and means, but they owed their success no less to the special advantages they enjoyed over their competitors, such as cheap freights on the German State railways and on the subsidized German East Africa line, secret rebates on German goods shipped to East Africa, and the powerful support of their banks, which enabled them to offer their customers lengthy credits. By these means they had succeeded in practically monopolizing the trade of the northern territories of the Province, without contributing in any marked degree to their agricultural or mineral development.

The territory administered under charter by the Companhia do Nyassa marches with the former German East Africa, now Tanganyika territory. There is evidence to show that the interest the Germans took in the trade of this territory extended from the commercial to the political field, and that they made as great efforts to control the approaches to the Upper Congo from the east as from the west. The success of the two schemes would, it was hoped, give Germany control of a trans-African belt unsurpassed for the production of minerals and of the raw material for industries. In regard to Portuguese East Africa the first necessity was to secure control of the Nyassa Company. The majority of the directors of this company were appointed by Nyassa Consolidated Limited; so that, when the German banks succeeded, in 1914, by means of a neutral intermediary, in buying up the greater portion of the shares in the latter company, they acquired complete command over the operations of the chartered Companhia do Nyassa. The German programme appears to have included not only the economic permeation of the northern territories, but their eventual political absorption in German East Africa, by the aid of a German

directorate on the Nyassa Chartered Company. The outbreak of hostilities between Portugal and Germany interrupted the progress of this well-considered scheme. On the other hand, it gave a large number of well-known German publicists[1] an opportunity of openly claiming, as spoils of war and constituent parts of the projected German Empire of Mittel-Afrika, Angola and the Portuguese islands on the west coast, and the whole of Portuguese East Africa north of the Zambezi.

(2) Foreign

Table I printed in the Appendix gives a summary of the trade of Mozambique Province during the years 1906 and 1911–15. The figures in Table II, covering the years 1911–16, show the comparative values of imports, exports, re-exports, and transit trade (excluding gold and silver, in bar or bullion), and also the proportion of trade passing through each of the harbours. The features which call for special notice are, first, the relatively high values of goods in transit and re-exports, which together represent twice the value of domestic imports and exports; second, the insignificance of the trade of other ports as compared with that of Lourenço Marques and Beira. Both features emphasize the interdependence of these Portuguese ports and the British possessions inland.

[1] The following works and references may be mentioned: *Koloniale Friedensziele*, by Dr. F. Oskar Karstedt (Weimar, 1917); *Gegenwart und Zukunft der deutschen Kolonien* (Berlin, 1917) and *Das portugiesische Kolonialreich der Gegenwart* (Berlin, 1918), by Professor Hans Meyer; *Mittel-Europa–Mittel-Afrika* (1917), by Paul Leutwein; *Afrikanische Kriegsziele*, by Davis Trietsch (Berlin, 1918); *Kolonial-Kalender*, 1917, articles by Dr. Solf; *Preussische Jahrbücher*, articles by Dr. Helfferich; *Bismarck's Erbe*, by Professor Hans Delbrück (1915). The map of Mittel-Afrika (scale 1 in 2,000,000) is being published in sections by the German Imperial Colonial Office.

(*a*) *Exports*

(i) *Values.*—The total value, in *escudos*, of exports for the years 1906 and 1911–15 is shown in Table I of the Appendix.

The accompanying table gives a summary of the chief products exported during the years 1911–15 from the territory administered directly by the State.

CHIEF EXPORTS FROM STATE-GOVERNED TERRITORIES OF PORTUGUESE EAST AFRICA, 1911–15 (Values in *escudos*[1])

	1911	1912	1913	1914	1915
Sugar . . .	397,004	565,866	438,006	382,787	519,218
Ground-nuts . .	325,571	377,575	253,350	320,096	420,811
Copra . . .	267,630	284,707	249,107	268,386	380,316
Whale-oil . .	120,426	322,627	142,645	244,283	201,876
Feijão (Kaffir beans)	68,823	80,804	108,520	91,251	102,623
Mafureira (oil-seeds)	28,861	41,899	268,976	30,151	23,766
Maize (in grain) .	108,616	29,380	77,132	97,416	73,204
Wax . . .	56,797	93,182	44,918	41,630	63,768
Rubber . . .	103,258	77,227	41,356	10,782	18,627
Mangrove bark .	37,561	42,683	69,312	35,636	51,358
Sesame (oil-seeds) .	16,835	22,946	25,939	23,235	44,493
Skins and hides .	22,659	21,397	24,650	19,143	26,573
Mapira (Kaffir corn)	8,848	2,264	21,728	30,487	39,063
Ivory . . .	5,743	6,480	2,244	1,129	4,160

From the Mozambique Company's territory the export of highest value is sugar; gold (in bar), maize, and mangrove bark are next in importance; wax, ground-nuts, cotton, ivory, rubber, alcohol, Kaffir beans, and copra are also exported in appreciable quantity.

The territory of the Nyassa Company is in a lower state of development; its exports are on a minor scale and include wax, ground-nuts, sesame, maize, rubber, tobacco, and gum copal.

For the whole of Portuguese East Africa, including the territories of the Mozambique and Nyassa Companies, the exports come as follows in order of average annual value: sugar, ground-nuts, maize, copra, gold (in bar), whale-oil, wax, mangrove bark. The value

[1] For the value of the *escudo*, see below, p. 91.

of sugar exported is four times the value of the next item on the list. Sisal hemp will probably become one of the leading exports in future years.

(ii) *Countries of Destination.*—The exports which Portugal received from her East African possessions were sugar, ground-nuts, wax, maize, tobacco, salt, hides, and skins. The Portuguese possessions shared in the exports of sugar, ground-nuts, maize, tobacco, and wax. *Mafureira* and other oil-seeds were shipped to Marseilles, and France seems also to have absorbed the greater part of the copra shipment. Germany received a portion of the rubber, wax, oil-seeds, and mangrove bark. The United States purchased mangrove bark before the outbreak of war, and since then has taken three-quarters of the total, with a large proportion of the beans and peas. The Union of South Africa is a good customer for sugar, ground-nuts, maize, mangrove bark, tobacco, beans and peas, and dried fish. Rhodesia received, presumably for transmission, all the gold produced in the Province, also a quantity of maize and ground-nuts. The United Kingdom bought sugar, oil-seeds, beans and peas, maize, mealie meal, rubber, wax, hides, and skins.

(*b*) *Imports*

(i) *Values.*—The values of imports for the years 1906 and 1911–15 are shown in Table I of the Appendix. They rose from 7½ millions in 1906 to 13 millions in 1912, but have since fallen below 10 millions.

(ii) *Countries of Origin.*—The imports are miscellaneous in character and drawn from many countries. From Portugal and Portuguese possessions the Province obtains a large share of its imports of preserved meat and fish, lard, butter and cheese, soap, coffee, tobacco, spirits and wines, boots and shoes, cotton cloth, and other cloth. The United Kingdom and British posses-

sions before the war used to supply agricultural and mining machinery, sacks and sacking, cement and building materials, cotton cloth, canvas and other cloth, cutlery, lard, butter and other provisions, earthenware, grain and flour, furniture, paper, hardware, railway material, electric and telegraphic material, spirits, ale and beer. The Union of South Africa contributes coal, mealie meal, grain, vegetables, beer, tobacco, and live animals. Germany used to supply beer, railway material, cement, cutlery and hardware, furniture, cotton cloth, cheap window-glass, agricultural and other implements. Preserved milk came chiefly from Switzerland. The Netherlands sent spirits, cheese, and coffee. A large percentage of imported coffee came from Brazil. The United States furnished mineral oils, agricultural implements, office instruments, timber, furniture, and provisions. Cotton cloth from Belgium, hardware from France, cement and timber from Sweden, were the only other items calling for mention.

(c) *Customs and Tariffs*

The schedules of duties payable on exports and imports are so framed as to secure for Portugal and Portuguese possessions the largest possible share of the trade with the Province. Portugal's nominal share of this trade seems to have been about one-seventh of the exports and two-fifths of the imports intended for domestic use. The latter figure is only attained by the practice of 'nationalizing' goods at Lisbon on the voyage from Europe: the payment of a small fee of 12*s.* 6*d.* per ship's manifest entry when the vessel calls at Lisbon effects a saving of 20 per cent. on the customs duties payable at Lourenço Marques, nationalizes the cargo, and entitles it to be designated Portuguese.

The customs dues are not uniform for all Portuguese East Africa. The Nyassa and Mozambique Chartered Companies have their own tariffs, differing from the

general scheme applicable to the territory administered directly by the Provincial Government. Goods passing out of one administrative area into another are liable to duty; an unnecessary number of customs officials is employed on this work, and the internal trade of the territories suffers much inconvenience and hindrance. Even within the Provincial Government's territory municipal surcharges are made at the various ports, and in addition fees are payable to the customs officials.

The limited number of imports from foreign countries which are generally free of duty includes books, coal, ice, telegraphic and railway material, boats, scientific instruments, sewing and calculating machines, agricultural, mineral, and industrial machinery, and (in accordance with the Mozambique Treaty) products of the Transvaal. On the other hand, a measure of protection is given to imports from Portugal, including soap, preserved meat, preserved fruits and vegetables, boots and shoes. All exports consigned to Portugal enjoy a generous rebate on the ordinary export rates.

(*d*) *Commercial Treaties*

The Berlin Act of 1885 provided for free trade in the basin of the Congo and the zone extending thence eastward to the Indian Ocean and including Portuguese territory north of the Zambezi. The Declaration attached to the Brussels Act of 1890 authorized the imposition of import duties not exceeding 10 per cent. *ad valorem* (except on spirituous liquors), but again disallowed transit dues and differential treatment.

In a convention drawn up with Great Britain in 1890, but never ratified, Portugal reserved her right to exclude her ports on the east coast from the operation of the free-zone provisions of the Berlin Act. Subsequent ratified agreements with Great Britain provided for the free and unrestricted navigation of the Zambezi and Shire, the lease of the concession at Chinde, and

the exemption from transit dues of all traffic passing along the Zambezi waterways, but authorized transit dues not exceeding 3 per cent. *ad valorem* for merchandise imported or exported along other routes through the Province.

The Mozambique Treaty, signed in 1909 by the Transvaal and Portuguese Governments and afterwards confirmed and renewed year by year by the Government of the Union of South Africa, provided that all products (except alcoholic liquors) of the Province of Mozambique and of the Transvaal may pass free of import or export duty from one province to the other, and that merchandise of any origin may pass inwards through Lourenço Marques free of import or transit dues. The same treaty—as has been mentioned above—regulated the recruiting of Mozambique natives for the Rand mines; while a third section aimed at dividing in equitable proportions the seaborne traffic passing inwards through Lourenço Marques, Durban, and the Cape ports to the 'competitive area' of the Transvaal. The share assigned to Lourenço Marques was to range between 50 and 55 per cent. of the whole of this traffic. After the outbreak of the late war, however, Lourenço Marques received less than the minimum reserved to it under the agreement.[1]

[1] The following returns for recent years show the drop in the percentage of the 'competitive area' traffic secured by Lourenço Marques:

Year.	*Tonnage.*	*Per cent.*
1910	407,388	66·06
1911	326,468	59·85
1912	268,436	55·43
1913	240,394	51·39
1914	179,399	48·78
1915	119,759	36·17
1916	103,363	31·19

According to statements in the daily press in 1918, action was then being taken to attract an increased proportion of such traffic to the Portuguese line.

(D) FINANCE

(1) *Public Finance*

Until recent years public finances, including budget and taxes, were controlled by the Portuguese Colonial Office and administered from Lisbon. The surplus or deficit appeared in the Portuguese budget under the head of Colonial Administration. Sometimes the surplus of one colony was assigned to making good the deficit of another. The Province of Mozambique on different occasions made contributions of this description—e.g. one of 200,000 *escudos* (or *milreis*) to Angola, another, of 313,000, to Portuguese India. For the year 1913–14 the estimated revenue of the Province of Mozambique was 5,878,598 *escudos*. The item of general administration accounted for over 40 per cent. of the total expenditure, military and naval administration for over 20, the administration of justice for under 2 per cent. In the same year revenue was estimated to be slightly in excess of expenditure; rather more than half of it was produced by taxation, direct and indirect.

A considerable change was effected by the legislation of August 25, 1914, whereby the Portuguese colonies received a status and autonomy comparable to that of British Crown colonies. The Financial Organic Act of this date made provision for the financial independence of the colonies, and gave them power, under safeguards, to raise loans for their internal development. The highly protective system of tariffs was modified to some extent, the mother country agreeing to accept a reduction in the preference which it had previously enjoyed. Portuguese shipping is, however, still protected by the 20 per cent. reduction of duties on colonial imports shipped *via* Lisbon, and the importa-

tion of sugar to Portugal remains subject to the same duty as before, with reduction granted for the same limited quantity. The details of the Mozambique budget are arranged by the provincial authorities and the Lisbon Government exercises a merely nominal sanction of annual expenditure. Under war conditions the estimates of revenue and expenditure had risen, and for the year 1917–18 balanced at 8,042,626 *escudos*.[1]

(2) *Currency*

Until the establishment of the Republic in Portugal, the unit of currency was the *milreis* (1,000 *reis*). Since then the milreis has been replaced by the *escudo*, of the same nominal value, with decimal parts in *centavos*. The Portuguese coinage, however, is little used; at Lourenço Marques British gold and silver coins are chiefly employed, and at Mozambique the currency is largely British Indian rupees, on which an import duty of 10 per cent. is levied. Paper money circulates in the form of notes, issued by the Banco Nacional Ultramarino, of the values of £1 and £5, and of 1, 2½, 5, 10, 20, 50, and 100 *escudos*. A subsidiary issue, as a war-time measure, of notes for 50 and 20 *centavos*, was in contemplation in 1915.

The exchange value of the *escudo* in normal times is 4*s*. 5¼*d*. (or 4·5 *escudos* to the sovereign). Since the outbreak of war, Portuguese currency has depreciated heavily. The *escudo* varied in value during 1916 between 2*s*. 11½*d*. and 2*s*. 8*d*., and subsequently fell as low as 2*s*. 6*d*. The decline in its purchasing power has to be considered in reviewing financial returns for the years of war. For instance, the rise in 1916 in the

[1] From recent notices in the Lisbon press it appears that all the legislation described in this paragraph has been, or will shortly be, annulled. In some of the colonies it had never come into operation.

apparent value of imports is discounted to the extent of the depreciation of the standard coin.

(3) *Banking*

There is only one Portuguese bank in the Province, the Banco Nacional Ultramarino, which transacts all the financial business of the Government and has a monopoly of the privilege of issuing legal-currency notes. Its head office in the Province is at Lourenço Marques, and it has branches at Inhambane, Beira, Quelimane, Mozambique, Chinde, and Tete. The two principal South African banks, the Standard Bank of South Africa and the National Bank of South Africa, have branches in Lourenço Marques and Beira, and transact the bulk of the commercial exchange business between Portuguese East Africa on the one hand, and Rhodesia and the Union of South Africa on the other.

The National Bank has branches also at Inhambane, Massikessi, Mozambique, Quelimane, and Villa Pery.

In view of the constant stream of transactions between the Banyan traders in the Province and the Indian merchants in Bombay, Calcutta, and Madras, it is somewhat surprising that none of the Anglo-Indian banks has yet established a branch in the Province. The National Bank of India is represented in Mombasa, Tanga, Dar-es-Salaam, and Zanzibar.

(4) *Influence of Foreign Capital*

There is practically no Portuguese capital available locally, and even the Portuguese *prazo* plantation companies are dependent upon foreign shareholdings. The local Portuguese traders and merchants require all their capital for the maintenance and extension of their own trade. It was for this reason that, before the

war, the German merchants in the north of the Province, by providing capital for trading purposes, had succeeded gradually in securing a practical monopoly of the lucrative barter trade with the native population through the Banyans.

(5) *Principal Fields of Investment*

There is scope for the investment of funds in trading and plantation companies, in the development enterprises, mineral and agricultural, promoted or authorized by the Mozambique and Nyassa Chartered Companies, in railway and transport undertakings, and in individual farming or business.

(E) GENERAL REMARKS

A survey of the economic conditions of Portuguese East Africa leads to the conviction that the resources of the country have as yet been inadequately and unevenly developed. It would be unfair to ignore the good work done by numerous energetic officials in difficult circumstances, but the impetus to progress has for the most part been given by foreign capital and enterprise. The most flourishing part of the Province is the territory administered by the Mozambique Company, which has a progressive policy and funds sufficient to promote mining, cattle-raising, maize and sugar growing, and to improve the means of communication within its boundaries.

An undeveloped country like Portuguese East Africa requires to be helped on its way either by free grants or by generous loans. The Portuguese Government, being unable to provide money for these purposes, has handed over its administrative powers in the northern and central regions to the Nyassa and Mozambique Chartered Companies, and given extensive privileges

to such bodies as the Zambezia, Luabo, and Boror Companies, the Société du Madal, and the other associations or individuals who hold *prazo* concessions.

Progress in recent years has been most marked in the production of sugar and copra; and it may be assumed that, as further areas are brought under cultivation, the export figures will continue to rise. Sisal hemp is attracting so much attention that the fibre export is likely to attain high values within a few years. Maize and oil-seeds will most probably continue to be extensively grown and exported; tobacco and cotton are also likely to repay cultivation.

Agricultural development generally will depend mainly upon the introduction of the working capital necessary for laying out new plantations and for the improvement of transport facilities. The labour supply is abundant for the needs of the Province.

The prospects of mining industries are too uncertain to be forecasted with accuracy. There is at present no reason to anticipate startling developments; but the coal and gold deposits in the Tete district may be worked extensively, when the completion of the projected railways facilitates traffic between the upper Zambezi and the coast.

APPENDIX

(Document I)

Anglo-Portuguese Treaty of June 11, 1891.

Art. I.—Great Britain agrees to recognize as within the dominion of Portugal in East Africa the territories bounded—

1. To the north by a line which follows the course of the River Rovuma from its mouth up to the confluence of the River M'Sinje, and thence westerly along the parallel of latitude to the confluence of these rivers to the shore of Lake Nyassa.

2. To the west by a line which, starting from the above-mentioned frontier on Lake Nyassa, follows the eastern shore of the lake southwards as far as the parallel of latitude 13° 30′ south; thence it runs in a south-easterly direction to the eastern shore of Lake Chiuta, which it follows. Thence it runs in a direct line to the eastern shore of Lake Chilwa or Shirwa, which it follows to its south-easternmost point; thence in a direct line to the easternmost affluent of the River Ruo, and thence follows that affluent, and, subsequently, the centre of the channel of the Ruo to its confluence with the River Shiré.

From the confluence of the Ruo and Shiré the boundary will follow the centre of the channel of the latter river to a point just below Chiwanga. Thence it runs due westward until it reaches the watershed between the Zambesi and the Shiré, and follows the watershed between those rivers, and afterwards between the former river and Lake Nyassa until it reaches parallel 14° of south latitude.

From thence it runs in a south-westerly direction to the point where south latitude 15° meets the River Aroangwa or Loangwa, and follows the mid-channel of that river to its junction with the Zambesi.

Art. II.—To the south of the Zambesi the territories within the Portuguese sphere of influence are bounded by a line which, starting from a point opposite the mouth of the River Aroangwa or Loangwa, runs directly southwards as far as the 16th parallel of south latitude, follows that parallel to its intersection with

the 31st degree of longitude east of Greenwich, thence running eastward direct to the point where the River Mazoe is intersected by the 33rd degree of longitude east of Greenwich ; it follows that degree southward to its intersection by the 18° 30′ parallel of south latitude ; thence it follows the upper part of the eastern slope of the Manica plateau southwards to the centre of the main channel of the Sabi, follows that channel to its confluence with the Lunte, whence it strikes direct to the north-eastern point of the frontier of the South African Republic, and follows the eastern frontier of the Republic, and the frontier of Swaziland, to the River Maputo.

It is understood that in tracing the frontier along the slope of the plateau, no territory west of longitude 32° 30′ east of Greenwich shall be comprised in the Portuguese sphere, and no territory east of longitude 33° east of Greenwich shall be comprised in the British sphere.

The line shall, however, if necessary, be deflected so as to leave Mutassa in the British sphere, and Massi-Kessi in the Portuguese sphere.

Art. III.—Great Britain engages not to make any objection to the extension of the sphere of influence of Portugal, south of Delagoa Bay, as far as a line following the parallel of the confluence of the River Pongolo with the River Maputo to the sea-coast.

Art. IV.—It is agreed that the western line of division separating the British from the Portuguese sphere of influence in Central Africa shall follow the centre of the channel of the Upper Zambesi, starting from the Katima Rapids up to the point where it reaches the territory of the Barotse Kingdom.

That territory shall remain within the British sphere ; its limits to the westward, which will constitute the boundary between the British and Portuguese spheres of influence, being decided by a Joint Anglo-Portuguese Commission, which shall have power, in case of difference of opinion, to appoint an Umpire.

It is understood on both sides that nothing in this Article shall affect the existing rights of any other State. Subject to this reservation, Great Britain will not oppose the extension of Portuguese administration outside of the limits of the Barotse country.

Art. V.—Portugal agrees to recognize, as within the sphere

of influence of Great Britain on the north of the Zambesi, the territories extending from the line to be settled by the Joint Commission mentioned in the preceding Article to Lake Nyassa, including the islands in that lake south of parallel 11° 30′ south latitude, and to the territories reserved to Portugal by the line described in Article I.

Art. VI.—Portugal agrees to recognize, as within the sphere of influence of Great Britain to the south of the Zambesi, the territories bounded on the east and north-east by the line described in Article II.

Art. VII.—All the lines of demarcation traced in Articles I to VI shall be subject to rectification by agreement between the two Powers, in accordance with local requirements.

The two Powers agree that in the event of one of them proposing to part with any of the territories to the south of the Zambesi assigned by these Articles to their respective spheres of influence, the other shall be recognized as possessing a preferential right to the territories in question, or any portion of them, upon terms similar to those proposed.

(Document II)

Award of H. M. the King of Italy as Arbitrator appointed under the Declaration signed at London on August 12, 1903 (which took the place of the procedure indicated in Art. iv of the Treaty of June 11, 1891), delivered on May 30, 1905. (Regarding the Western boundary of the Barotse Kingdom).

We decide as Arbitrator that the western frontier of the territory of the Barotse Kingdom was, on the 11th June, 1891, as follows (see annexed explanatory sketch-map) :—

The straight line between the Katima Rapids, on the Zambesi, and the village of Andara, on the Okovango, as far as the point where it meets the River Kwando ;

The eastern side of the bed of the upper waters of the Kwando as far as the point of intersection with the 22nd meridian east of Greenwich ;

The 22nd meridian east of Greenwich as far as the point of intersection with the 13th parallel ;

The 13th parallel as far as the point of intersection with the 24th meridian east of Greenwich ;

The 24th meridian east of Greenwich as far as the frontier of the Independent State of the Congo.

Document III

Award of Signor Vigliani, appointed as Arbitrator regarding the Manika Plateau Boundary under the Declaration of January 7, 1895, under Article II of the Treaty of June 11, 1891, delivered at Florence on January 30, 1897.

We declare that according to Art. II of the Treaty signed at Lisbon on the 11th June, 1891, the line which should separate the spheres of influence of Great Britain and Portugal in Eastern Africa south of the Zambesi, from latitude 18° 30′ to the confluence of the Save (or Sabi) with the Lunde (or Lunte), should be drawn as follows :—

1. As regards the first section of the frontier in dispute, according to the designation used in the joint Note of Reference (' Compromis ') the line on leaving the point where latitude 18° 30′ intersects longitude 33° east of Greenwich runs due west to a point situated at the intersection of 18° 30′ by a straight line drawn from the *stone pinnacle* on the crest of Mahemasemika (or Massimique), and a height on the northern spur of Mount Panga marked 6,340 feet. From this point of intersection on the parallel of latitude it ascends in a straight line to the above-mentioned point marked 6,340 feet ; then after following the watershed to the point marked 6,504 feet, it runs in a straight line to the summit of Mount Panga (6,970 feet). From this point it runs in a straight line to the point marked 3,890 feet, and thence it runs also in a straight line, crossing the River Inyamkarara (or Inhamucarara) to the point marked 6,740 feet situated to the north of Mount Gorongoe.

After this it follows the watershed, passing through the points marked 4,960 feet and 4,650 feet till it reaches the summit of Mount Shuara or Chuara (5,540 feet) ; and then following the watershed between the Inyamkarara and the Shimezi (or Chimeza, 3,700 feet) reaches the trigonometrical point marked on Mount Venga (or Vengo, 5,550 feet).

From Mount Venga it follows the watershed between the upper valley of the Inyamkarara and the Revué, and subsequently that between the Revué and the Odzi as far as the point at which the spur branches off, which forms the watershed between the Menini (or Munene) and the Zombi (or Zombe), whence it follows the crest of this spur to Mount Vumba (4,950 feet).

From Mount Vumba it runs in a straight line to the trigonometrical point situated on the Serra Chaura between 4 and 5 kilom. east of the main watershed, and thence in a straight line to a point situated at the eastern extremity of Serra Inyamatumba (4,650 feet).

From there it follows the watershed, which incloses on the north the valley of the Mangwingi (or Munhinga) till it rejoins the main watershed between the Save and the Revué. It follows this watershed to the point where the small spur branches off which incloses on the north the upper valley of the Little Mussapa (or Mussapa Pequeno), and runs along the crest of this spur to the point marked 5,100 feet, whence it runs due east, crossing the Little Mussapa, and reaching the crest of the eastern slope of Mount Guzane, which it follows till it meets the meridian of longitude 33° east of Greenwich; after this it follows this meridian, crossing the Great Mussapa (defile of Chimanimani) till it reaches the point marked *A* on the map hereto annexed.

2. As regards the second section of the frontier, which is comprised between the end of the preceding section and the point where the upper part of the eastern slope of the plateau cuts longitude 32° 30′ east of Greenwich, the boundary follows the line shown on the map hereto annexed by the letters *A*, *B*, *C*, *D*, *E*, *F*, *G*, *H*, *I*, *J*, *L*, *M*, *N*, *O*, meeting the meridian 32° 30′ at about latitude 20° 42′ 17″.

3. As to the third section, which concerns the territory which extends from the intersection of the edge of the eastern slope by 32° 30′ in latitude about 20° 42′ 17″ to the point at which the Rivers Save and Lunde meet, the line following the aforesaid meridian 32° 30′ runs in a straight line to the centre of the main channel of the Save, and then ascends this channel to its confluence with the Lunde, where the frontier submitted to our arbitration comes to an end.

Document IV

Annexe to the Treaty of June 11, 1891.

This provides for a Lease by Portugal to Great Britain of a block of land at Chinde, and for a Lease by Great Britain to Portugal of a block of land on Lake Nyasa. Leases signed on May 7, 1892. An agreement modifying this lease and substituting other pieces of land for those therein specified was signed on September 12, 1898. This amended concession was carried out and a deed of transfer executed on December 27, 1898.

Document V

German-Portuguese Treaty of December 30, 1886.

After preliminaries the Treaty continues :

Art. I.—The Boundary line which shall separate the Portuguese and German Possessions in South-West Africa follows the course of the River Kunene from its mouth to the waterfalls which are formed to the south of the Humbe by the Kunene breaking through the Serra Canna. From this point the line runs along the parallel of latitude to the River Kubango, then along the course of that river to the village of Andara, which is to remain in the German sphere of influence, and from thence in a straight line eastwards to the rapids of Catima, on the Zambesi.

Art. II.—The Boundary line which shall separate the Portuguese from the German Possessions in South-East Africa follows the course of the River Rovuma from its mouth to the point where the River M'sinje joins the Rovuma and runs to the westward on the parallel of latitude to the shores of Lake Nyassa.

Art. III.—His Majesty the German Emperor recognizes the right of His Majesty the King of Portugal to exercise his influence of sovereignty and civilization in the territories which separate the Portuguese possessions of Angola and Mozambique, without prejudice to the rights which other Powers may have acquired there up to now of exercising their sovereign and civilizing influence.

And in accordance with this acknowledgement, binds himself not to make acquisitions of sovereignty in the territories in question, not to accept Protectorates in them, and, finally, not to place there any obstacles to the extension of Portuguese influence.

His Majesty the King of Portugal and the Algarves undertakes identical obligation as regards the territories which under Articles I and II of this Agreement are within the sphere of German action.

Art. IV.—Portuguese subjects in the German Possessions of Africa and German subjects in the Portuguese Possessions shall enjoy in respect to the protection of their persons and goods, with the acquisition and transfer of personal and real property, and to the exercise of their industry, the same treatment without any difference whatever, and the same rights as the subjects of the nation exercising sovereignty or protection.

TABLE I. TRADE OF MOZAMBIQUE PROVINCE, 1906 AND 1911–15

(Including gold and silver in bar and in bullion: values in *escudos*.*)

		1906	1911	1912	1913	1914	1915
Territory administered by Government	Imports	6,055,478	7,503,705	9,187,690	8,728,868	8,255,871	7,384,272
	Exports	3,779,397	4,622,166	5,886,986	5,568,589	4,612,158	5,443,705
	Re-exports	1,407,901	2,738,509	4,001,780	4,883,544	4,438,390	5,336,294
	Transit	21,364,651	26,303,044	23,070,479	23,812,251	18,116,252	11,681,279
	Total	32,607,427	41,167,424	42,146,935	42,993,252	35,422,671	29,845,550
Territory of Mozambique Company	Imports	1,075,152	2,896,322	3,432,012	2,978,621	2,266,467	1,911,421
	Exports	602,557	2,715,311	3,361,354	2,886,505	2,609,381	2,054,185
	Re-exports	918,845	1,733,574	1,772,946	3,383,677	4,487,356	5,283,081
	Transit	2,785,211	6,944,990	6,857,484	7,710,374	5,682,158	3,890,280
	Total	5,381,765	14,290,197	15,423,796	16,959,177	15,045,362	13,138,967
Territory of Nyassa Company	Imports	409,806	483,187	597,950	581,445	562,165	372,878
	Exports	396,307	449,421	452,845	355,449	238,847	191,738
	Re-exports	5,379	87,197	54,999	60,119	28,024	15,266
	Transit	—	120	7	—	—	—
	Total	811,492	1,019,925	1,105,801	997,013	829,036	579,882
Totals for Mozambique Province	Imports	7,540,436	10,883,214	13,217,652	12,288,934	11,084,503	9,668,571
	Exports	4,778,261	7,786,898	9,701,185	8,810,543	7,460,386	7,689,628
	Re-exports	2,332,125	4,559,280	5,829,725	8,327,340	8,953,770	10,634,641
	Transit	24,149,862	33,248,154	29,927,970	31,522,625	23,798,410	15,571,559
	Grand Total	38,800,684	56,477,546	58,676,532	60,949,442	51,297,069	43,564,399

* Cf. p. 91 above for the value of the *escudo*.

TABLE II. TRADE OF MOZAMBIQUE PROVINCE BY PORTS, 1911–16

(Values in *escudos*.)

	Year.	Lourenço Marques.	Inhambane.	Chinde.	Quelimane.	Mozambique.	Beira.	Ibo.	Total.
Imports for consumption (National and Foreign)	1911	4,491,674	730,312	612,305	483,457	838,021	2,523,044	424,688	10,103,501
	1912	5,417,813	976,998	871,152	671,076	981,219	3,036,807	513,005	12,468,070
	1913	5,098,874	643,761	1,029,809	709,256	901,273	2,823,316	514,303	11,720,592
	1914	4,604,442	583,519	1,235,675	643,027	904,748	2,064,597	475,243	10,511,251
	1915	4,790,319	581,653	729,268	415,831	627,030	1,734,091	372,877	9,251,069
	1916	7,396,127	646,361	886,437	883,635	815,832	2,313,180	Not available	
Exports, national and nationalized	1911	445,637	308,689	414,394	369,315	342,351	2,609,811	445,613	4,935,810
	1912	800,803	421,568	315,643	461,910	327,513	3,032,362*	448,990	5,808,789
	1913	842,655	371,112	208,951	446,565	277,877	2,818,455*	332,585	5,298,200
	1914	646,342	423,275	211,700	376,029	377,401	2,084,794*	234,376	4,353,917
	1915	971,798	394,042	231,223	655,547	410,472	1,676,439	182,351	4,521,872
	1916	1,649,158	111,886	415,337	818,005	610,359	— †	Not available	
Re-exports	1911	1,298,701	1,036	1,285,397	1,499	99,476	1,733,574	87,197	4,506,880
	1912	2,058,258	14,255	1,791,226	401	76,827	1,772,946*	54,999	5,768,912
	1913	3,480,490	1,667	1,222,619	5,281	124,287	3,383,674*	60,119	8,278,137
	1914	3,796,980	760	575,392	962	44,296	4,487,354*	28,024	8,933,768
	1915	5,119,014	9,024	93,837	2,971	111,448	5,283,081	15,265	10,634,640
	1916	6,754,499	170	209,192	972	142,814	— †	Not available	
International Transit	1911	26,133,380	—	169,664	—	—	6,944,990	120	33,248,154
	1912	22,735,431	—	333,548	—	—	6,857,484*	7	29,926,470
	1913	23,275,076	—	537,175	—	—	7,710,374*	—	31,522,625
	1914	17,903,214	—	213,038	—	—	5,682,158*	—	23,798,410
	1915	10,818,837	—	853,055	—	—	3,890,280		15,562,172
	1916	14,667,833	—	1,267,997	—	—	— †	Not available	

* The figures for the years 1912, 1913, and 1914 are taken (with corrections) from *Estatistica do Commercio e Navegação Provincia de Moçambique* (1916). They do not include the value of gold and silver, in bar or bullion The figures for 1916 are taken from American Commerce Reports, Supplement 76 a, March 11, 1918.

† Exports, re-exports, and transit goods from Beira in 1916 totalled 12,168,992 escudos.

TABLE III. RETURN OF SHIPPING VISITING LOURENÇO MARQUES, 1909–13

(showing number and nationality of vessels and tonnage of cargo discharged and shipped)

Year.	Portuguese.		British.		German.		French.		Scandinavian.		Russian & other Nationalities.		Total.	
	No.	Cargo.	No.	Cargo.	No.	Cargo	No.	Cargo.	No.	Cargo.	No.	Cargo.	No.	Cargo.
A. Vessels Entered: Cargo Discharged.														
1909	162	14,978	278	292,950	68	78,867	4	2,246	41	51,721	8	10,257	561	451,019
1910	190	21,186	320	376,732	77	99,833	11	6,473	33	44,982	6	7,048	637	556,254
1911	176	22,214	327	296,055	81	93,600	13	4,266	30	37,499	4	4,698	631	458,332
1912	243	24,669	329	208,230	78	72,280	11	1,483	27	25,141	8	9,694	696	341,497
1913	246	27,212	403	221,882	86	86,988	7	234	34	45,229	8	7,263	784	388,808
B. Vessels Cleared: Cargo Shipped.														
1909	174	44,051	202	108,325	54	4,922	1	2	19	2,924	5	5,184	455	165,408
1910	202	50,025	222	96,406	63	4,102	5	4	27	5,124	2	269	521	155,930
1911	194	56,526	236	65,988	62	1,899	5	787	9	622	3	151	509	125,973
1912	237	68,257	329	221,122	79	8,564	11	6,210	28	34,384	7	170	691	338,707
1913	246	61,984	403	433,363	86	24,571	7	149	32	82,988	8	11,427	782	614,482

TABLE IV. RETURN OF SHIPPING VISITING BEIRA, 1913–16

(showing number and nationality of vessels and tonnage of cargo discharged and shipped)

A. Vessels Entered: Cargo Discharged.

Year.	Portuguese.		British.		German.		French.		Scandinavian.		American.		Not specified.		Total.	
	No.	Cargo.	No.	Cargo.	No.	Cargo.	No.	Cargo.	No.	Cargo.	No.	Cargo.	No.	Cargo.	No.	Cargo.
1913	93	4,157	236	103,062	197	23,814	—	—	—	—	—	—	8	5,909	534	136,942
1914	121	6,123	224	61,996	143	17,825	1	—	10	6,337	—	—	—	—	499	92,281
1915	116	3,539	202	43,803	—	—	1	56	23	3,963	1	983	1*	67*	344	52,411
1916	112	2,287	212	40,238	—	—	1	158	27	2,770	1	—	1*	120*	354	45,573

B. Vessels Cleared: Cargo Shipped.

1913	94	5,504	231	55,358	196	22,057	—	—	—	—	—	—	8	4	529	82,923
1914	120	7,343	221	66,456	141	14,737	1	—	10	3,821	—	—	—	—	493	92,357
1915	116	6,696	200	120,506	—	—	1	14	23	8,914	1	½	1*	½*	342	136,131
1916	111	20,341	213	106,197	—	—	1	1	27	11,840	1	2,402	1*	1*	354	140,782

* Japanese.

TABLE V. RETURN OF SHIPPING ENTERING PORTS OF STATE-ADMINISTERED TERRITORIES[1] OF PORTUGUESE EAST AFRICA, 1911–15

(showing number and tonnage of vessels entering, and tonnage of cargo discharged and shipped)

Year.	Portuguese.				British.				German.			
	No.	*Tonnage.*	*Cargo discharged.*	*Cargo shipped.*	*No.*	*Tonnage.*	*Cargo discharged.*	*Cargo shipped.*	*No.*	*Tonnage.*	*Cargo discharged.*	*Cargo shipped.*
1911	659	693,788	43,403	87,990	464	1,850,305	299,483	70,844	345	1,113,068	106,221	28,801
1912	1,031	754,256	59,362	97,145	484	1,787,981	213,857	227,554	328	1,096,765	25,906	43,445
1913	985	724,289	57,668	96,224	497	2,156,418	234,085	436,084	309	986,609	106,602	61,836
1914	917	674,399	58,582	106,504	461	2,130,290	173,636	618,268	229	764,491	70,450	48,169
1915	831	687,636	66,754	137,427	384	1,274,553	123,941	391,393	—	—	—	—

Year.	Norwegian.				Other Nationalities.				Total.			
	No.	*Tonnage.*	*Cargo discharged.*	*Cargo shipped.*	*No.*	*Tonnage.*	*Cargo discharged.*	*Cargo shipped.*	*No.*	*Tonnage.*	*Cargo discharged.*	*Cargo shipped.*
1911	35	52,825	25,057	1,486	114	72,324	25,604	1,939	1617	3,782,310	499,768	191,060
1912	40	62,903	16,331	26,235	106	88,521	26,107	18,985	1989	3,790,426	341,563	413,364
1913	35	65,130	34,838	73,788	84	74,348	10,362	23,007	1910	4,006,794	443,555	690,939
1914	32	49,890	11,047	37,410	79	75,701	12,480	37,482	1718	3,694,771	326,195	847,833
1915	75	89,436	20,953	48,424	44	71,428	19,675	34,199	1334	2,123,053	231,323	611,443

NOTE.—This table shows the tonnage of cargo shipped, but not the number or tonnage of vessels departing. The latter differ only slightly from the number and tonnage, shown above, of vessels entering.

[1] The ports dealt with in this table include Lourenço Marques, Inhambane, Chinde, Quelimane, Mozambique, and some small ports with local trade.

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MAPS

Mozambique is covered by 2 sheets (Mozambique and Limpopo) of the War Office Map of Africa (G.S.G.S. 2871), on the scale of 1 : 2,000,000 (1919), except for the narrow strip of country between lat. 12 S. and the Rovuma river, which is shown on the sheet 'Zanzibar'.

There are Portuguese maps of Mozambique in the 'Atlas Colonial Português', published by the Ministerio das Colonias, Commissão de Cartografia, at Lisbon in 1914; one of these maps is in one sheet on the scale of 1 : 4,500,000, and the others in two sheets on the scale of 1 : 3,000,000.

One sheet of the 'International' series on the scale of 1 : 1,000,000, viz. sheet South F. 36 'Inhambane', has been prepared, and was published by the Ministerio das Colonias, Commissão de Cartografia, at Lisbon in 1912.

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