HANDBOOKS PREPARED UNDER THE DIRECTION OF THE HISTORICAL SECTION OF THE FOREIGN OFFICE.—No. 120

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ANGOLA

(INCLUDING CABINDA)

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

Angola, or Portuguese West Africa, lies between 4° 20′ and 18° 2′ south latitude and 11° 40′ and 24° east longitude. The total area is estimated at 484,000 square miles.

The country falls into two detached parts. To the north of the Congo lies the Cabinda enclave, a district of about 3,000 square miles, surrounded on its landward sides by French Equatorial Africa and the Belgian Congo. The main part of the province lies to the south of the Congo, and is bordered on the north by the Belgian Congo, on the east by the Belgian Congo and Northern Rhodesia, and on the south by what was German South-west Africa.

The boundary between Cabinda and French Equatorial Africa starts from Shamba Point (Futa Massabe), at the joint mouth of the Loema (Loémé), or Louisa Loango, and the Lubinda, and keeping approximately an equal distance from the two rivers, follows an irregular line first north-east and then south-east, to the point at which French, Portuguese, and Belgian territory meet. From there the boundary between Cabinda and the Belgian Congo follows the course of the Shiloango as far as its confluence with the Lukula, and then the *thalweg* of the latter river to the point (5° 10′ S., 12° 32′ E.) at which it is joined by the Zenze. From there a straight line is drawn southward to the parallel of latitude (5° 44′ S.) which passes through the sources of the River Lulofe on the western slope of the plateau of Nime Chima. The boundary then runs along this parallel westward to the geodetic pillar at Yema (5° 44′ S., 12° 18′ E.), whence it follows first the

thalweg of the Lulofe and then that of the Venzo as far as Mallongo. From Mallongo a purely conventional line is drawn to the coast, which is reached about $1\frac{3}{4}$ miles north of the lagoon of Lunga.

In December 1886 a Declaration between Portugal and Germany defined the Kunene as the boundary between Angola and German South-west Africa from its mouth to the cataracts at Ruacana; from there the line is carried due eastward until it reaches the Kubango (Okawango), which it follows down-stream to the village of Andara in 18° south latitude. From Andara to the Kwando the boundary is formed by a straight line drawn in the direction of the falls of Katima on the Zambezi.

The frontier between Angola and Rhodesia, as defined by the King of Italy's award in 1905, begins where the line just mentioned crosses the Kwando and follows the course of that river up-stream until it meets the line of 22° east longitude. It then follows that meridian northward until it intersects 13° south latitude. This parallel is followed as far eastwards as the meridian of 24°, which forms the frontier until Belgian territory is reached.

Various agreements define the Belgo-Portuguese frontier, the most important of which are the Convention of May 25, 1891, the Declaration of March 24, 1894, and the letters exchanged between the two Powers in April and June 1910. From 24° east longitude the frontier runs westward along the Congo–Zambezi divide to the north of Lake Dilolo. At the point where this watershed approaches most closely to the source of a tributary of the Luakanu, near Sha Kalumbo, the frontier leaves the divide and follows these rivers to the confluence of the latter with the Kasai. The *thalweg* of the Kasai then becomes the frontier as far north as 7° 17′ south latitude. From this point its general direction is westward to the Shikapa, north along that river to beyond 7° south latitude, westward to the Loange, south along that and other rivers as far as 8° south latitude, and west-

ward to the Kwango. The details, however, can only be shown on a large scale map.

The frontier then follows the *thalweg* of the Kwango as far north as 5° 52′ south latitude. From this point to Noki (Nogui) on the lower Congo it was finally adjusted by an agreement of July 5, 1913, which made it follow approximately the parallel of 5° 52′ south.

(2) Surface, Coast, and River System

Surface

Angola belongs mainly to the north-western portion of the South African plateau, and the chief features of its structure are simple. The coast is fringed by a plain, which in the north has a breadth of 150 miles or more, but narrows till it practically disappears near 17° south latitude. Behind it the land rises in steep escarpments to the plateau of southern Africa. This plateau country extends inland and has an elevation over vast areas varying from 4,000 to 6,000 ft. (1,200–1,800 metres). It falls towards the east, and beyond the Kwanza gradually passes into a fourth physical region which is lower and more level than the plateau.

The geographical features of Angola are still but imperfectly known, and a systematic description of the country is impossible. Its general character can, however, be gathered by an examination of certain sections.

Cabinda.—The greater part of the enclave is a low plateau which in general terminates along the west in a series of cliffs of no great height. The surface soils are either sands or clays, and there are considerable areas of marshland. In the north-east the land is higher and is much cut up by rivers.

Northern Angola.—From the lowlands which border the Congo and the coast the land rises to the first plateau (2,000 ft., 600 metres). The ascent to the second plateau is very steep. This second plateau is traversed by many streams, and its surface, which lies at a height of between 3,000 and 3,500 ft. (900–1,050

metres), is generally undulating in character. Towards the Kwango the land decreases in height, and in places becomes swampy and unhealthy.

Farther to the south, along the parallel of Loanda, the coastal zone (about 90 miles broad) is generally flat. Over wide stretches of country some districts are entirely bare, while others have a covering of bushes and grass. Farther inland the land rises gradually to the central plateau, which has an elevation of between 4,000 and 5,000 ft. (1,200–1,500 metres), a great part of it being broken and often mountainous country. Farther to the east lies the wild Lunda region, of which very little is known.

Central Angola.—Here the coastal zone, which is much narrower than that farther north, consists in the main of barren wastes, though in some places there are fertile districts. From the coast the land rises towards the interior in a series of terraces, their heights being 500 ft. (150 metres), 800 ft. (250 metres), and 1,000 ft. (300 metres) respectively. From the top of the Lengue Gorge the country extends inland as a waterless desert, and its surface is dotted with granitic domes and tors. Another ascent through the Portella Corotava leads to a higher plateau of 3,000 to 4,000 ft. (900–1,200 metres), which again rises to the highest plateau in this part of Africa (7,000 to 8,000 ft., 2,100–2,700 metres). Thereafter there is a change in the character of the topography. From Bihé (Ecovongo) to Moshiko (Mosiko) the country is lower, with a gently rolling appearance, while between Moshiko and Nana Kandundu (Nyakatoro) it is almost level, and this characteristic continues until the Congo–Zambezi divide is reached. This eastern region is drained by tributaries of the Zambezi, which, in contrast to those farther west, flow in shallower troughs and have more gentle gradients.

South Angola.—From Mossamedes the land rises gradually for about 100 miles to a height of over 2,000 ft. (600 metres). From here an elevation of between 6,000 and 7,000 ft. (1,800–2,100 metres) is speedily attained. Farther south, however, there is practically

no coastal region. Towards the north the escarpment appears to break up into several distinct ranges, but in the south there is a high massif which falls steeply and sometimes precipitously to the east, where the Huilla plateau occupies the greater part of the country. The surface is comparatively level and does not exceed 4,000 ft. in height. Farther to the east the country has the appearance of a sandy plain; the rivers are separated by low heights and meander along in flat marshy valleys.

Coast

The coast of Angola has a total length of about 1,000 miles, but there are comparatively few openings of any description. The approaches to it from the sea are not always well adapted to navigation. In some places the depth is great close inshore, and it is impossible to find good anchorage except in a few narrow bays, but farther north the 4-fathom line is carried well out to sea. Rollers, though troublesome, are seldom dangerous if proper precautions are taken.

The approaches from the land are also difficult, and owing to the structure of the country the rivers seldom provide good means of access to or from the interior.

In Cabinda the Massabe (Masabi) and the Shiloango have ports near their mouths, but vessels have to anchor off Massabe and Landana respectively. The chief ports upon the southern bank of the Congo are Santo Antonio and Noki. The former is not a good port, and the latter is said to have an awkward anchorage.

To the south of the Congo there are ports at Ambrizette, Ambriz, São Paulo de Loanda, Lobito Bay, Benguella, and Mossamedes. At Ambrizette there is an anchorage off the mouth of the Kouza, and at Ambriz one off the mouth of the Loje (or Loge). Neither place has facilities for a good harbour. At the port of São Paulo de Loanda vessels of large size can lie in smooth water at all seasons, and the anchorage is good. Lobito Bay is deep and well sheltered, while Mossamedes has a fairly good anchorage. For further particulars, see *infra*, pp. 36–7.

River System

Angola lies within the drainage areas of the Congo, the Atlantic, the Zambezi, and the inland basin of Lake Ngami.

In the north-west, the rivers which flow to the Congo rise on or near the margin of the plateau, and are as a rule short and rapid. Farther to the east the Kwango and the Kasai have pushed their head-waters much more to the south and are important rivers, they and their tributaries draining no inconsiderable part of the plateau.

Many of the rivers which flow into the Atlantic rise upon the margin of the plateau and flow directly to the sea. Others, of which the Kwanza and the Kunene are the most important, rise far in the interior, and collect numerous tributaries before they cut their way through the escarpment and descend by many rapids to the coast.

The Kubango (Okawango) and the Kwito are the principal rivers which flow towards the depression of Lake Ngami, but authorities differ as to their later course (see *infra*, p. 32, and also *South-West Africa*, No. 112 of this series, p. 57).

Of the rivers which belong to the Zambezi system the most important are the Zambezi and the Kwando, the latter of which is broad, deep, and free from obstructions and rapids.

Owing to the structure and climate of Angola its rivers are of comparatively little economic value. Those which rise upon the margin of the plateau are little more than mountain torrents, while those which flow from the interior are so interrupted by rapids that they are seldom navigable for any considerable distance. The depth of water is also variable. For these reasons therefore the rivers play but a small part in the development of the country. On the Kwango very small steamers can ply on the stretches between the rapids ; the Kwanza is navigable for about 100 miles from its mouth ; small boats and canoes use

parts of the Kunene during the dry season and steamers could probably find sufficient draught at times of high water. But with these exceptions the rivers of the north and west are of comparatively little use for navigation. In the south-east the courses of the rivers are less interrupted by falls. The Kubango and the Kwito are both reported to be navigable; on the Kubango, indeed, it is said that there are over 400 miles of waterway during the dry season. These rivers, however, will only prove of value if they are connected by rail with the coast. The Kwando is little known, but it also is said to be navigable.

(3) Climate

The data available for a discussion of the climatic conditions of Angola are very scanty, and all the figures given in the following account must be regarded as approximate.

The main features which control the climate of Angola are its position between the equator and the tropic, its situation on the western side of the continent, the high altitude of the greater part of the country, and the relatively cool current which flows along its coast. The climatic regime which results from these geographical controls is somewhat as follows. As the sun moves southward from the equator the temperature rises and reaches a low maximum about October. Then follows the lesser rainy season. As the sun continues to move south the rainfall decreases and is followed in the beginning of the year, when the sun is moving north, by a second and higher maximum. During February, March, and April comes the second rainy period or season of great rains. After the sun is well across the equator the temperature falls and the long dry season begins. Thus there is a double maximum and a double minimum both in temperature and in rainfall in the course of the year.

Temperature.—As a general rule the temperature

decreases from north to south and from the coast towards the plateau. At Shinshasha (Chinchoxo) in Cabinda, a two-years' observation shows a maximum of 79° F. (26° C.) in March and a minimum of 72° F. (22° C.) in August. Farther south, Loanda has a maximum of 79° F. (26° C.) in February and a minimum of 68° F. (20° C.) in August. On the plateau, inland from Loanda, Malange (at an elevation of 3,500 ft.) has a range from 68° F. (20° C.) in March to 64° F. (18° C.) in June. At Mossamedes on the coast the mean temperature is reported to be about 72° F. (22° C.) from December to February, while from June to August it is 66° F. (19° C.). On the plateau the range is said to be from 59° F. (15° C.) to 70° F. (21° C.). In the more elevated regions the diurnal range is considerable, and at night the thermometer in the south frequently falls to freezing point.

Rainfall.—The greater part of the rainfall occurs when easterly winds are blowing; hence the precipitation on the coast is low, and south of Loanda probably does not exceed 10 inches (250 mm.). It increases towards the north and at Shinshasha is said to amount to 40 inches (1,000 mm.). On the plateau it is greater, but varies very much with local conditions. At San Salvador in the north the mean is about 40 inches (1,000 mm.) and at Kibokolo some 50 inches (1,270 mm.). Farther to the south, along the line of the Benguella Railway, the observations taken so far show annual amounts varying from 25 to 55 inches (630–1,400 mm.) and even more. The districts of Mossamedes and Huilla are probably not so arid as was at one time believed, but it is doubtful whether the rainfall on the high plateau is sufficient for the needs of agriculture.

(4) Sanitary Conditions

The lowlands of Angola are on the whole less healthy than the uplands, and various tropical diseases are prevalent. About twelve or fifteen years ago sleeping-sickness seems to have been serious in the valley of the Kwanza, and more recently it has appeared in that

of the Katumbella, but no evidence exists that sleeping-sickness has ever been endemic on the plateau at heights of over 3,500 ft. and it is unlikely that it will ever become so.

Malaria is prevalent in the lowlands and along the coast; during the rainy season, also, it is not uncommon on some parts of the uplands. Blackwater fever exists. Leprosy in a mild form is rather common among the natives, and small-pox has often proved a scourge. A disease known as *katumbu*, somewhat similar to whooping-cough, is common among children. Goitre is confined to women living on the plateau. Elephantiasis is prevalent in the lowlands.

On the whole the plateau may be considered healthy for Europeans, and many diseases common in Europe are practically unknown in Angola.

(5) Race and Language

The native population of Angola belongs to two distinct races, the Bantu and the Bushman. The former inhabit the greater part of the country, while the latter are confined almost entirely to the southern districts. The European population, found mainly in the towns and coastal districts, is with few exceptions either Portuguese or of Portuguese descent. In the south there are some small Boer colonies at Humpata and elsewhere.

Bantu Peoples.—About forty different Bantu tribes have been recognized, but it is extremely difficult to give an adequate account of their distribution. No proper ethnological survey has been made, each writer adopts his own classification, and the same tribe has often more than one name.

All the tribes speak dialects of the Bantu language. In the district of Congo in the north the Congo dialect predominates, and is by far the most useful language of that part of the country. The languages spoken over the greater part of the remainder of Angola are closely allied to it and belong to the Mbundu group. They are used far into the interior.

Bushmen.—There is little reason to doubt that the

bushmen form the original element in the population of Angola. Several distinct types have been recognized, of which the most important are the Bacurocas and Mucancalas. Their language, of which there are several dialects, presents considerable difficulties to philologists. Its most distinguishing features are the peculiar 'click' sounds which are not found elsewhere except in the language of the Hottentots and probably that of one little-known East African tribe.

Portuguese.—The Portuguese inhabitants are either of European birth or of European descent. They are found in the main in the towns, or on the coastal districts, where they have established plantations. In many cases they have intermarried with native women, and between them and the natives there seems to be no hard and fast caste distinction. The total number of Europeans is, however, small.

Boers.—In 1876 a number of Boer families migrated from the Transvaal and eventually in 1880 settled 270 strong at Humpata. Their numbers gradually increased, and in 1906 it was estimated that there were more than a thousand of them scattered over the hills of Huilla. Within the last few years, however, there appears to have been a movement back to South Africa, and probably comparatively few are now left (cf. p. 20).

(6) Population

Distribution and Density

There are no adequate statistics of the population. According to the census of 1914 the native population numbered 2,124,000, but as the enumeration was based upon figures supplied by the natives for purposes of taxation it is probable that this is an underestimate. Other estimates seem to agree that the total is more nearly 4,000,000. As the area of the country is believed to be somewhat under 500,000 square miles, this would give an average of slightly over 8 to the square mile.

A rough idea of the varying density of population

in different parts of the country may, however, be obtained from the census figures. In the district of Congo in the north it was 20 to the square mile, in Loanda between 2 and 3, in Lunda 3, and in Benguella 6. The two southern districts of Mossamedes and Huilla had each less than 1 person to the square mile. If the population be estimated at 4,000,000, however, as indicated above, each of these figures would have to be doubled.

Towns

The chief towns of Angola are situated upon the coast. In Cabinda, Landana has 500 inhabitants and Cabinda 1,200. South of the Congo Loanda is the most important town, and at the census of 1911 it had a population of 17,500, of whom two-thirds were natives. In the same year Benguella had 4,000 inhabitants, Ambriz and Mossamedes 3,000 each, and Novo Redondo 1,200. On the plateau the places with a European population are either trading posts, railway stations, or agricultural centres, and are usually little more than villages.

Movement

Trustworthy statistics are almost entirely wanting. If the accounts of travellers like Capello and Ivens are to be trusted, it would appear that the native population on the plateau was larger forty or fifty years ago than now. Between 1888 and 1909 nearly 70,000 natives were sent to the cocoa plantations in San Thomé and Principe, but this would hardly be sufficient to account for the depopulation which is said to have taken place.

Apart from emigration to the cocoa plantations few natives leave the country, though some attempts have been made to obtain their labour in Katanga. There is little immigration. At the present time the Government is endeavouring to induce peasants from Portugal to undertake agricultural work on the plateau, but their efforts do not appear to have been very successful.

II. POLITICAL HISTORY

Chronological Summary

1482 (?). Discovery of the mouth of the Congo by Diogo Cão.
1490. Conversion of the Congo chiefs and foundation of San Salvador.
1559. Paulo Dias lands in Angola.
1574. Founds Loanda.
c. 1570–80. Invasion of Congo by Jaggas.
1597. First European colonists sent to Angola.
1602. Dutch attack Loanda.
1603. Defeat of Cafuche by Pereira.
1606. Rebello de Aragão attempts to reach the Zambezi.
1617. First colonization of Benguella by Pereira.
1627. War with Ginga Bandi, Queen of Angola, begins.
1641. Dutch take Loanda.
1643. Dutch take the governor prisoner.
1648. Dutch driven out by a Brazilian expedition.
1649. Attempts to cross Africa to Abyssinia.
1663. Godinho's scheme to reach the Zambezi.
1665. Victory over the King of Congo.
1676–80. Ayres de Saldanha's project for an expedition from Benguella to Sena.
1684–6. Kakonda taken by natives and recovered after a long war.
1717. Kakonda again attacked.
1758. Occupation of Ambriz.
1764. Reorganization under De Sousa Coutinho.
1783. Fort built in Cabinda.
1784. Fort abandoned to the French.
1785. Mossamedes colonized.
1802–10. Saldanha da Gama's efforts to open up communications with east coast.
1839–45. New settlement at Mossamedes.
1858. Colony formed at Sá da Bandeira.
1869. Establishment of existing system of administration.
1875. Cameron arrives at Benguella from Zanzibar.
1877–8. Serpa Pinto's journey.

1880. Boer settlement at Humpata.
1884–5. Journey of Capello and Ivens.
Boundaries laid down by treaties with

(1)	The Congo State.	February 14, 1885.
	Modified.	May 25, 1891.
	Modified.	March 24, 1894.
(2)	France.	May 12, 1886.
(3)	Germany.	December 30, 1886.
(4)	United Kingdom.	June 11, 1891.
	And arbitration.	May 30, 1905.

(1) The Portuguese Occupation, 1485–1559

The coast of West Africa, north and south of the mouth of the Congo (or Zaire as it is always called by the Portuguese), was first made known by the voyage of Diogo Cão in 1482. He reached the mouth of a great river which, as De Barros says, in the winter (i. e. in the rainy season) 'comes forth so proudly into the sea that its sweet waters are found twenty leagues from the shore'. At the point south of the estuary he erected the first *padrão*, a stone column surmounted by a cross, which King João II had ordered to be set up on newly-discovered lands. From this it obtained the name, which it still bears, of Cabo Padrão or Cape Padron. He then sailed some distance up the river, and it was no doubt at this time that he arrived at the foot of the falls, which bar all further navigation, about 115 miles from the sea. Here he had an inscription recording the fact carved on the face of a rock high above the water. This still exists, and has been rediscovered in modern times. He took away some natives, leaving some of his own men as hostages for their safety, and promised to return in fifteen months, a promise which he faithfully kept after sailing to Portugal and back. He thus established good relations with the local potentate known as the King of Congo, and prepared the way for the introduction of the Christian faith. He then prosecuted his voyage southwards along the coast as far south as the 22nd parallel of latitude (about 1,100 miles due south from the

mouth of the Congo, without allowing for the indentations of the coast) and erected two more *padrões*, one on Cape Santo Agostinho (Cape Padrão) and the other on Cape Cross in what was formerly German South-west Africa.

Thus the whole coast of the modern province of Angola, of which the southern limit is the mouth of the Kunene river below latitude 17° south, and a further part of the coast as far as Cape Cross, was explored by Diogo Cão. He then returned to the Congo kingdom, where his propaganda met with much success. It ended in the King sending an ambassador to Portugal with several youths for instruction in the faith. The Ambassador Caçuta and the youths were baptized on reaching Portugal, Caçuta taking the name of Dom João, after the King. This led to the dispatch of a regular mission and, after some vicissitudes, to the conversion of a great part of the kingdom in 1490. A cathedral and fort were built at the capital, Ambassa Congo, which was renamed San Salvador, and a native bishop was appointed.

The discovery of the Cape route to India, the opening up of the eastern trade, the struggle for the mastery of the entrances to the Red Sea and Persian Gulf, together with the discovery and colonization of Brazil, occupied all the resources of Portugal after this time till the middle of the sixteenth century, and while the east coast of Africa received some attention owing to its connexion with the Indian trade and the search for the gold-mines whence the gold was brought to Sofala, but little attention was paid to the west coast south of the equator. The Congo kingdom, however, remained nominally Christian, and the missions appear to have spread into the Angola country to the south of it, but the Portuguese seem to have lost their influence in the Congo, and Paulo Dias was joined in 1574 by forty Portuguese who had been expelled thence. San Salvador was probably a place of some importance until the Jagga invasions.

(2) Paulo Dias in Angola, 1559–88

Interest in the country appears to have been revived by a disagreement between the Kings of Congo and Angola about the trade in cowries. A cowrie, known as *zimbo*, formed the circulation of Angola and Congo, and stoppage of the trade by the King of Congo, who resented Portuguese interference, led to a protest by the King of Angola. Paulo Dias, grandson of Bartholomeu Dias, was thereupon sent to Angola to investigate the matter in 1559, and was received at the capital, Pungo Ndongo, in the valley of the Kwanza river, which enters the sea south of Loanda. He found traces of Christianity among the people, and remained for some time in Angola. After his return to Portugal, King Sebastião, who had lately succeeded to the throne, sent him out again in 1574 as 'Conquistador' and first Governor of Angola. He disembarked at the island of Loanda, which belonged to Congo and not to Angola; but, as soon as he had made terms with the King of Angola, he settled on the mainland and founded, probably in 1575, the city of São Paulo de Loanda, which has since remained the capital. Here he was joined by the Portuguese who had been in Congo. After a few years some Portuguese were treacherously massacred by the King of Angola, and for a while Paulo Dias had great difficulty in maintaining his position. He succeeded, however, in reducing the country to submission, and must be considered the actual founder of the colony of Angola. He died in 1588.

(3) Decay of Portuguese Power in Congo

Meanwhile in the kingdom of Congo Portuguese influence was on the decline, and a terrible invasion from the east seems to have wiped out its last traces. The invading race was described as the Jaggas or Iaccas, and seems to have been of Bantu origin. They took possession of the capital and the whole country, while the King of Congo and the few Portuguese who

remained took refuge in an island in the river Congo. Pigafetta, who relates this history from the verbal statements of Duarte Lopez,[1] says that the Jaggas were driven out by an expedition sent by King Sebastião in the early part of his reign under Francisco de Gouvea; but whether or not this was so, it is clear that the country had been ruined and that trade and religion had died out. After the accession of Philip II of Spain in 1580, Duarte Lopez, who had long lived in Congo, was sent by the King of Congo to ask for King Philip's assistance and for the re-establishment of Christianity. After long wanderings he arrived in Spain, but Philip seems to have been too much occupied with his expedition against England to attend to him, and he ultimately went to Rome as a religious mendicant; there Pigafetta took down his narrative.

We hear very little of the Congo kingdom from this time on. What remained of Portuguese power was concentrated in Angola.

(4) The Struggle for Angola, 1597–1648

Serious attempts to colonize Angola began about the year 1597. Flemings were brought out, but they all died, for European colonization on the coast is impossible, and the healthy uplands were as yet unknown.

Even the coast settlements were not left unmolested. Portugal was now involved in the Spanish wars, and shared with Spain the hostility of the Dutch; the island of San Thomé was plundered in 1600; an attack was made on Loanda in 1602, which failed; but the port of Pinda on the Congo was seized by the Dutch and held for a time. The principal object of these attacks, then and later on, was probably to obtain command of the lucrative trade in slaves, hitherto monopolized by the Portuguese. About 1603 the country was threatened by a powerful chief of Cam-

[1] *A Report of the Kingdom of Congo.* By F. Pigafetta. Rome, 1591. (Eng. trans., London, 1881.)

bambe, named Cafuche. He was ultimately defeated by the governor, M. Silveira Pereira, who afterwards, in his second term of office (beginning 1615) as 'Conquistador' of the kingdom of Benguella, extended Portuguese rule to the south, and founded the town of São Filippe de Benguella in 1617. He first led the way to the highlands of Kakonda, a plateau over 5,000 ft. above the sea, which has a healthy climate. Attempts were also made in the early part of the seventeenth century to open up communication by land between the Portuguese possessions on the east and west coasts of Africa. As early as 1592 D'Abreu de Brite had made a scheme to establish a chain of posts across the continent, and in 1606 Rebello de Aragão made an attempt to cross from Angola to Sena on the Zambezi. His attempt, however, and others of a like nature, ended in failure. The difficulties of the undertaking were not understood, and neither the knowledge nor the resources of that period were sufficient to give a hope of success.

All attempts at development were soon suspended by the war waged against the Portuguese by Ginga Bandi, the Queen of Angola, who, after professing to accept Christianity, turned against the Portuguese. The wars, which began about 1627, lasted for many years, and the Dutch took advantage of the weakness of the Portuguese Government to renew their attacks. The rebel Queen and many other chiefs allied themselves with the Dutch, and in 1641 a Dutch fleet appeared before Loanda, the fort was taken, and the Portuguese were driven out. The governor took refuge on the Kwanza river, to the south, and held on to the forts on that river. Portugal having by this date been set free from the Spanish yoke, a truce was made, which was treacherously broken by the Dutch, a large number of Portuguese being massacred, and the governor taken prisoner, in 1643. When Sotomayor came as governor from Brazil, he attacked and defeated the Angola Queen in 1645, but the Dutch were not expelled until 1648, when the Governor of Brazil,

S. C. de Sá Benevedes, crossed the Atlantic with a a fleet and troops from Rio de Janeiro, and recovered Loanda. Elsewhere, too, south of the equator, the Dutch were driven out at this period, though they were able to hold their strongly fortified posts on the Gold Coast, which passed permanently out of Portuguese possession.

(5) Extension and Consolidation of Portuguese Authority

The trans-continental schemes were revived by S. C. de Sá Benevedes after the recovery of Loanda, but their impracticable nature is shown by the fact that he proposed to conquer Ethiopia or Abyssinia by an expedition from Angola. In 1663 another scheme was propounded by M. Godinho, to communicate with Tete and Sena on the Zambezi by way of a supposed great lake called Zuchaf, which was probably a confusion of Nyasa and Tanganyika. Another similar project of opening up land communication from Benguella to Sena was formed by Ayres de Saldanha between 1676 and 1680. All these schemes naturally had no result.

In 1665 war broke out with the now independent kingdom of Congo. The King of Congo invaded Portuguese territory, but was killed in a battle which followed, and his army retreated. This country long retained its independence, and in 1785 an expedition was sent to re-explore it (Bowdich, *Discoveries*, p. 64).

There is little to be said of Angola during the first half of the eighteenth century, and it is probable that the only energy displayed was in the slave-trade, which was alone sufficient to paralyse all other efforts.

In 1764, however, an enlightened governor, de Sousa Coutinho, introduced a reformed system of government, more in accordance with civilized ideas than that which had hitherto prevailed. The administration of de Sousa Coutinho was evidently strong as well as enlightened, and Portuguese authority, which was everywhere diminishing, was reasserted. This applied

especially to the post on the Kakonda plateau, where the first establishment had been made by M. de Silveira Pereira soon after the occupation of Benguella in 1617. It had since then had a troubled existence. It was taken by a native chief in 1684, and only recovered after long and hard fighting. It was again attacked in 1717. Coutinho succeeded in re-establishing it firmly. He also encouraged and helped the colonies of Encoge and Ambaca on the high country above Loanda. A little before this date, in 1758, some extension to the north of Angola had taken place, the district of Ambriz on the coast-line of the old Congo kingdom being occupied.

Loanda and Benguella were still separated one from the other by land, and were dependent on sea communication. Coutinho drew attention to this fact in one of his dispatches (Bowdich, *Discoveries*, p. 64).

Cabinda was occupied by a naval expedition and a fort erected in 1783, but it surrendered in less than a year to a French expedition sent out to secure freedom of trade on the Loango coast.[1]

(6) Angola in the Nineteenth Century

After the beginning of the nineteenth century, renewed attempts were made under Saldanha da Gama to open up communications with East Africa. These were continued for eight or nine years up to 1810, and although they were not successful, knowledge of the interior increased.

The most promising opening for colonization has been furnished by the development of the port of Mossamedes in the district south of Benguella. This town was founded in 1785 by the Baron de Mossamedes, Governor-General of Angola, on a bay known at that time as Angra do Negro, and took its name from him. No attempts were made to develop it till 1839, when a project of colonization was formed. Colonists from Madeira and Brazil began to settle

[1] *Catalogo dos Governadores*, p. 428.

there in 1845. More recently a good deal of colonization has taken place on the high plateau above this part of the coast. Some Boers from the Transvaal settled in 1880 at Humpata near Huilla, on the uplands between the Shila and Munda ranges (Serra da Chella and Serra da Munda), and after some trouble they accepted Portuguese rule. Some, who depended on hunting, have now left this neighbourhood. Colonization from Portugal is slowly being extended not only here but on many other parts of the high plateau, which has a great area.

The opening up of this magnificent and healthy plateau country by railways and roads is one of the most important features in the modern administration of Angola. Three railways have been constructed from the ports of Loanda, Benguella, and Mossamedes respectively, and all of them have already surmounted the mountain barrier and arrived at the healthy uplands (see below, p. 33). It is proposed to extend these lines to the eastern frontiers of the province and to connect them with the lines of Rhodesia and the Congo State. The agricultural colony of Sá da Bandeira (or Lubango) on the Mossamedes line is under the control of Mossamedes, and bands of colonists from Portugal, Germany, Cape Verde, and Portuguese Guinea have settled there at various times since its foundation in 1858. More recent colonies are those reached by the Angola and Benguella railways, established in 1899 and 1902, and since the establishment of the Portuguese Republic efforts have been made to divert to these healthy lands part of the stream of emigration which flows from Portugal, the Azores, and Madeira, to Brazil and the Sandwich Islands. The section of the Benguella Railway connecting Benguella with Lobito Bay (see p. 33) gives a much better port than Benguella as the terminus of a line which, as stated above, may ultimately form part of a trans-continental system.

It is clear that the Angola colony has great resources and vast areas of land fit for colonization, of which the development has only just commenced. The demarcation of the boundaries has made such a develop-

ment possible, and although some of the aspirations entertained by patriotic explorers have had to be curtailed, yet in exchange Portugal has obtained the certainty of holding this excellent and valuable territory in permanence.

(7) Trans-continental Aspirations

The attempts to open up communications between East and West Africa in former times have already been noticed. More recent attempts have been made with the distinct object of establishing Portuguese rights of occupation across the continent, so as to form a belt of Portuguese territory, which would be a bar to any extension of foreign Powers from the north or the south into the central block of country which lies around the head-waters of the Congo and the Zambezi. The advance of British South Africa and the journeys of Stanley, Cameron, and Wissmann across Africa stimulated the Portuguese to make similar attempts. Cameron had started from Zanzibar in February 1873, and arrived at Benguella in November 1875. Wissmann travelled in the opposite direction, also traversing territory to which Portuguese claims extended. Stanley's early journeys seem to have led to the departure of Major Serpa Pinto from Benguella in November 1877. The latter travelled *via* Bihé (Ecovongo) and thence by the sources of the Kwando, the Kubangwe, and the Kushibi to the upper Zambezi at the Katima rapids.[1] Another important journey was that of two naval officers, H. Capello and R. Ivens, who had already in 1877–8 explored the less known portions of the Angola plateau. They started from Mossamedes in April 1884 and after passing the Kwando river and the Barotse valley, reached the upper Zambezi. Instead of following the river to the sea they struck northwards to the feeders of the Congo, the Lualaba and Kilombo, returning by the Luapula river, west of Lake Bangweulu to the Loangwa river, and rejoining the Zambezi

[1] His further proceedings are referred to below, p. 24.

at Zumbo (the furthest point west of Portuguese East Africa).

By encouraging these expeditions Portugal aimed at obtaining such a hold over these regions as would entitle her to European recognition of her claims to a trans-continental empire, stretching from west to east, from Angola to Mozambique. In 1886 she did secure such recognition from France and Germany, for both the Franco-Portuguese Treaty of May 12, 1886, and the German-Portuguese Treaty of December 30, 1886, contained an article to that effect, the article in the French Treaty, Article IV, being worded:

> The Government of the French Republic recognizes the right of His Most Faithful Majesty to exercise his sovereign and civilizing influence in the territories which separate the Portuguese possessions of Angola and Mozambique, reserving rights already acquired by other Powers, and binds itself on its side to abstain from occupation there.

Article III of the German Treaty was to precisely the same effect. A White Book, which was laid before the Portuguese Cortes in 1887, contained a map colouring the whole of Africa between Angola and Mozambique as Portuguese. The publication of this map called forth a formal protest from Great Britain on August 13, 1887,[1] and eventually the Anglo-Portuguese Treaty of 1891 put an end to the trans-continental aspirations of Portugal.[2]

(8) The Demarcation of Frontiers

On the north Portugal desired definitive recognition of her claim to the territory stretching north of Ambriz, from 8° to 5° 12′ south latitude, including the mouth of the Congo. This latter claim was recognized by Great Britain by the treaty of 1884 in exchange for renunciation by Portugal of certain other claims,

[1] See Hertslet, *Map of Africa by Treaty*, ii. 705.

[2] See Africa No. 2 (1890), February, 1890, C. 5904; and for the map, see Hertslet, *op. cit.*, iii. 1004. Reference should also be made to *The Partition of Africa*, No. 89 of this series.

especially those relating to Nyasaland;[1] but this treaty never came into force, and was superseded by the General Act agreed upon at the Berlin Conference of 1885.

The limits of the Angola province were decided by several treaties following on the broad lines laid down in 1885, viz. that between Portugal and Germany of December 30, 1886,[2] and between England and Portugal of June 11, 1891,[3] the Convention between Portugal and the Congo of February 14, 1885,[4] as modified by the Treaty and Convention of May 25, 1891,[5] and by the Declaration of March 24, 1894,[6] and between France and Portugal of May 12, 1886.[7] The period of great tension between Portugal and the United Kingdom from 1885 to 1891, mainly on account of the affairs of East Africa, needs only to be alluded to here. The treaty of 1891 provided for arbitration as to a part of the boundary between Angola and Rhodesia. The arbitrator (the King of Italy) gave his decision on this point on May 30, 1905.[8]

With regard to the boundary between Angola and Rhodesia laid down in accordance with the King of Italy's arbitration in 1905 it may be noted that the treaty of 1891 had decided that the Barotse kingdom was to be within the British boundary, and the object of the arbitration was to ascertain what were the actual boundaries of that kingdom. In the words of Article IV of that treaty the line was to follow 'the centre of the channel of the Upper Zambezi, 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

[1] See Africa No. 2 (1883), Cd. 3531, and Africa No. 3 (1884), Cd 3886.

[2] Hertslet, *Map of Africa by Treaty*, ii. 703.

[3] Ibid., iii. 1016. [4] Ibid., ii. 591 (with map).

[5] Ibid., ii. 592, 594. [6] Ibid., ii. 596. [7] Ibid., ii. 673.

[8] See 'Award of His Majesty the King of Italy respecting the Western Boundary of the Barotse Kingdom, given at Rome, May 30, 1905', in Hertslet, *Map of Africa by Treaty*, ii. 1074 (with map).

boundary between the British and Portuguese spheres of influence, being settled by a joint Anglo-Portuguese Commission which shall have power, in case of a difference of opinion, to appoint an Umpire '.

Apparently the arbitration went beyond the terms of the reference, as it interfered with the boundary to the north as well as the west, and also substituted the Kwando for the upper Zambezi. No real attempt seems to have been made to ascertain the limits of the Barotse kingdom, as arbitrary meridians and parallels were adopted which did not in any respect correspond with ethnological boundaries, nor with those of the so-called Barotse kingdom. Such boundaries are bad in principle, and are certain to lead to trouble when a native race or dominion is divided between two spheres of influence.

The Portuguese claims in this region seem to have begun with Serpa Pinto's interference in the disputes between the claimants to the throne of the Barotse kingdom, an interference which led to his hasty flight from the country, and his rescue by the English traveller, Dr. Bradshaw, and the French missionary, M. Coillard. It is evident that at the time of his journey in 1877–8 Portuguese influence was non-existent beyond the territory of Bihé, which was the most easterly territory to which it had penetrated.

(9) Cabinda

The territory of Cabinda is entirely separated from the Angola colony, but nevertheless is politically part of it, and is under the Governor-General, whose headquarters are at Loanda. It is officially known as the District of Congo, and it has some right to this title, as it undoubtedly formed part of the ancient kingdom of Congo, and was included in the discoveries of Diogo Cão in 1482. At the present day it is only distinguished from the remainder of Angola by the fact that it is an enclave lying north of the estuary of the Congo, but its importance is diminished by the

fact that it is cut off from the actual bank of that river by a strip of territory belonging to the Congo State, and does not give Portugal command of both banks.

The authority of the Portuguese over this tract (which takes the name from Cabinda, a port of some importance and the seat of Government) never seems to have been effectively exercised until modern times. It was occupied for a short time in 1783, but a French expedition took it from the Portuguese after eleven months. In 1815 Portugal laid definite claim to it.[1] Its boundaries were delimited by several Conventions: (1) with the Belgian Congo by a Convention of February 14, 1885,[2] amended by a subsequent Convention of May 25, 1891;[3] (2) with French possessions by a Convention of May 12, 1886.[4] The treaty with Great Britain of February 26, 1884, had recognized Portuguese rights in the Cabinda enclave earlier, but as this treaty never took effect, its definite recognition may be dated from the later Conventions.

[1] See 'Additional Convention to Treaty between Great Britain and Portugal, January 22, 1815', in Hertslet, *Map of Africa by Treaty*, iii. 985.

[2] Ibid., ii. 591.

[3] Ibid., ii. 594 (with map). The Convention was ratified by the Declaration of March 24, 1894.

[4] Ibid., ii. 673.

III. SOCIAL AND POLITICAL CONDITIONS

(1) Religious

The Roman Catholic Church was established in Angola until the Portuguese revolution of 1908, but has been disestablished by the Republican Government. The power of the Church had been great ever since the foundation of the colony, and many missions had been promoted among the negroes, of whom many were nominal Christians. The Church was of late badly organized and the missions had fallen into decay. Caldeira, writing in 1852, complained that most of the churches in the interior were abandoned, and that there were only thirteen priests in the whole colony.

Down to the revolution the Church was under the provincial jurisdiction of Lisbon. There was a bishop at Loanda, but a concordat was under consideration at Rome for a new ecclesiastical organization. Several missions were maintained, of which the most important were at San Salvador do Congo, Landana, Malange, Santo Antonio de Celulo (Libollo), Bailundo, Caconda, Huilla, Bihé, Jau, and Cuanhama.

The Christianity which has been propagated among the native races appears to be decadent, and no doubt in most cases the older beliefs still exist beneath the surface. The greater part of the population, moreover, still adheres to its primitive beliefs without any admixture of Christianity. Mohammedanism is unknown in this region.

(2) Political

The system of administration still in force was introduced in 1869. According to this the whole province, including the Cabinda enclave, is under the

Governor-General of Angola, whose capital is Loanda. It is divided into the following districts, each under a governor:

1. Congo (which includes the Cabinda enclave). Head-quarters, Cabinda.
2. Lunda. Head-quarters, Malange (provisional).
3. Quanza. Head-quarters, N'Dala Tando (Dala Tando).
4. Benguella. Head-quarters, Benguella.
5. Mossamedes. Head-quarters, Mossamedes.
6. Huilla. Head-quarters, Sá da Bandeira (Lubango).
7. Loanda, the capital, which, with its neighbourhood, forms a separate district under a governor.

(3) Educational

The subject of education does not appear to have received much attention till lately. In 1852, according to Caldeira, its condition was lamentable. At Loanda one school was maintained in which Latin was taught, and there was a handful of primary schools, most of which were open only for about six months in the year; the total attendance being 7 Europeans and 269 natives. The Church had control over education until the revolution. The bishop presided over a council composed of two professors of the principal school and three other nominated members. There was one secondary school at Loanda, and primary schools at the head-quarters of districts. Mission schools were also maintained, and there was a clerical seminary at Huilla. It was intended to transfer the latter to Loanda and to transform it into a *lycée*.

Since the revolution a scheme for an extended system of instruction among the native population has been drawn up by the Governor-General Norton de Matos, under which primary education and instruction in useful arts are to be given to both boys and girls. Reading, writing, and arithmetic are to be taught to all, while boys are to be trained as smiths, carpenters, stone workers, cultivators, shoemakers, tailors, &c., and girls are to be instructed in sewing, cooking, and

house management. Professional schools of a more advanced type exist in Loanda.

The principal schools existing under this scheme are the following:

The Rita Norton de Matos School (Loanda).
The Norton de Matos School (Caconda).
The Patria Nova School (Bihé).
The Technical School (Pungo Andongo).

IV. ECONOMIC CONDITIONS

(A) MEANS OF COMMUNICATION

(1) Internal

(a) *Roads, Paths, and Tracks*

The province of Angola possesses very few metalled cart-roads beyond those constructed in 1914–15 for military purposes during the abortive German invasion of the southern districts. Elsewhere, though stone is abundant, the want of water makes road-making difficult. Lack of funds, however, constitutes the chief impediment to Government's programme of highway construction, and hampers alike the colonial administration and the various local authorities.

Since the inception of the Benguella Railway, something has been done to improve the roads in the town of Lobito. The harbour has been linked with the town by a good metalled road, 65 ft. wide and a mile and a half in length, running along the natural breakwater formed by the three-mile spit of sand which protects the harbour from the sea. This work, undertaken by Government, was completed in 1914, but the supplementary operation of ballasting the main street of the town, so as to improve the road surface as far as the railway station, has been delayed for want of funds.

In 1910–11 the municipality of Katumbella, a town 8 miles to the south of Lobito, voted sums amounting to £1,200 for the making of a road to convey goods to and from the port. This was done by way of protest against the rates charged by the Benguella Railway Company for the transport of goods, and against the defective and irregular service of trains. The road was finished in 1912, but trade continued to dwindle, and in 1914 Katumbella was reduced from the status of

an independent municipality to that of a village, its local administration being incorporated in that of Lobito.

Feeder roads have been made by the Benguella Railway Company from various points on the line. Huambo station has been connected with the district town of Bailundo, 45 miles to the north; and from Shingwar post a road 47 miles in length has been laid to Belmonte station, head-quarters of the Bihé sub-district. In addition to these, Government promised to build, and had begun work upon, certain other roads on the same table-land, but on the recall of the Governor-General who initiated the project the work was stopped, and does not appear to have been resumed. The projected roads were to run from Kakonda station, on the railway, to Kakonda town; from Huambo to Kubango and to Kwima and Kakonda; and from Bihé to the upper Kwanza. These routes, according to the British Consular Report on Southern Angola for 1914, were traced with little regard to the lie of the land, and would probably prove expensive to maintain. This may possibly be the reason why the scheme remains in suspense; but as the region to be served is an important one, inasmuch as its suitability to white colonization has been established, it is desirable that further efforts should be made to discover routes with reasonably easy gradients.

A similar promise, it is alleged, was given by the colonial administration to construct roads from stations on the Loanda Railway, the promoters of which appear to have expected Government to do for their undertaking what the Benguella Railway Company has done at its own expense. But as the Loanda Railway was begun without sufficient capital, and has throughout had to borrow from Government sums of money for which no adequate value was forthcoming in return, its property has been taken over in satisfaction of the mortgages on it. When the working of the railway is resumed under Government auspices, the needs, in the matter of feeder roads, of the district served by it

will in all probability receive such attention as the state of the colonial finances may warrant.

The central and northern parts of the interior of the province are dependent for land transport almost entirely upon paths and tracks, regarding which there is little, if any, information beyond the indication of their general direction on the official maps. Where cart-tracks exist, they are not macadamized, and vary from year to year, as in similar tropical regions elsewhere; the route is usually determined by the ruts left by the first bullock-cart that chances to traverse the country after the rains.

(*b*) *Rivers and Canals*

The only rivers navigable by ocean-going steamers are the Congo, which according to Portuguese geographers is more properly called the Zaire, the name given it by its discoverers, and the Kwanza.

The *Congo* bounds the province on the north as far inland as Noki, which is about 100 miles from the coast, and above which the river is within Belgian territory. A number of its tributaries, flowing northward, traverse the north-eastern portion of the province. Of these the *Kwango* and the *Kasai*, for about 200 and 250 miles respectively of their upper courses, form two sections of the eastern boundary, and they, as well as the *Chikapa*, are reported [1] to be navigable—presumably by motor launches and native boats.

The *Kwanza*, which reaches the sea some 20 miles south of Loanda, has at its mouth an inconvenient but not permanent bar, which generally allows of the entrance and exit of the small steamers that ply between São Paulo de Loanda and Dondo, a little over 100 miles up-stream. For a few miles above Dondo the river is navigable by small boats, but only as far as Kambambe, where cataracts interrupt transit. The upper waters, however, are again navigable as far as the fort of Neves Ferreira on the Benguella table-land —a distanec of 50 or 60 miles.

[1] *Anuario Colonial*, 1916.

Among the westward-flowing rivers navigable only by small craft may be enumerated the *Shiloango*, lying north of the Congo, and forming, on the interior, a section of the eastern boundary of the Cabinda enclave; also several rivers of considerable size which enter the sea between the Congo and the Kwanza, and run roughly parallel to both: among these are the *Brije* (*Mbrije*), *Loje*, *Lifune*, *Dande*, and *Bengo* (or *Zenza*). The last-named is canalized so as to supply São Paulo de Loanda with water for domestic and industrial purposes. In the south, the *Kuvo* (*Keve*), *Katumbella*, and one or two others, have stretches suitable for boat traffic, but are either inaccessible from the sea or so much obstructed by rapids that their value is insignificant. The *Kunene*, a large river forming the southern boundary of the province, loses itself in the sandy soil of the coast belt, and even during the rainy season has no visible outlet to the sea. In summer it dries up in the lower reaches, but in its course through the highland region of Mossamedes remains navigable for canoes.

The remaining rivers of the province, those of the south-eastern interior region, belong to the Zambezi system, and flow in a south-easterly direction. It is only the head-waters of the *Zambezi* and its upper affluents, of which the principal are the *Lungwe-Bungo* and the *Kwando*, that fall within the province. The *Kubango* or *Okawango*, which is fed by the *Kwito* and the *Kushi*, flows across the border to the depression of Lake Ngami (see *supra*, p. 6). On all these streams and on the upper Zambezi itself, navigation by light craft is possible for very considerable distances within Portuguese territory. The Kwito, in particular, is a wide and deep river presenting no impediment to the passage of boats for about 100 miles above its junction with the Kubango at Diriko.

(c) *Railways*

(i) *Construction.*—The province possesses no network of interconnected railways, but merely a series of

separate lines traversing, or intended ultimately to traverse, the country from the seaboard to the interior. Four such lines are at present open, all of which may, in course of time, be amalgamated under a more comprehensive scheme for the penetration of the continent. Enumerated from north to south, they are as follows:

The *Loanda* or *Trans-African Railway*, constructed by the Companhia do Caminho de Ferro atravéz de Africa, under a concession which has been repurchased by the Portuguese Government in order that the railway may be worked as a State line, is a metre-gauge railroad running from Loanda eastward for 226 miles to Lukalla, near Malange.

The *Lukalla-Malange Railway*, constructed by Government as an extension of the preceding line, is intended to tap the fertile regions on the banks of the Kwango river, and then to proceed to the Belgian frontier *via* Lunda. It is a metre-gauge railway, and 87 miles are now open.

The *Benguella Railway* is being built to a gauge of 3 ft. 6 in. by a company affiliated to Tanganyika Concessions, Ltd. It runs inland from Lobito Bay and Benguella to Bailundo station and Shingwar, and is intended to connect ultimately with the British South African and Belgian Congo railway systems at Kambove, in the Katanga mining district. It has 322 miles open, 67 miles under construction, and 415 more in project within Angola, besides a further projected length of 527 miles in Belgian territory.

The *Mossamedes Railway* is a Government line with 114 miles now open for traffic and an extension of 41 miles under construction, its provisional terminus being Lubango, on the Mossamedes plateau. Its gauge of 60 centimetres (23·6 in.) is too narrow for the traffic with which it will be compelled to deal, should the scheme entertained by the Germans immediately before the war, for the economic penetration of southern Angola from South-west Africa, be

adopted in a form modified to meet the altered conditions after the war.

But the German interest in railway projects for South Angola dates much farther back. As early as 1899, as the outcome of the visit of Cecil Rhodes to Berlin, an agreement was entered into between the German Government and the British South Africa Company for the taking over of the line projected by the Companhia de Mossamedes, a concessionary company, the capital of which was mainly French. That line was to have used Bahia dos Tigres (Tiger Bay) as its starting-point, and to have crossed southern Angola *via* Humbe, in the direction of the British or the German frontier. The Anglo-German agreement determined that the line should serve the copper-mines of Otavi and Grootfontein in German South-west Africa, and be extended south-east so as to link up with the Rhodesian railway system. The railway thus projected seemed likely to benefit the German and British colonies more immediately than Angola, but would at least have made Bahia dos Tigres a great port of transit, competing with Lobito Bay.

The scheme veiled a German plan for securing further advantages at Portuguese expense by picking a quarrel with Portugal whenever a propitious occasion might arise. The southern frontier of Angola, as demarcated by the Portuguese, had never been formally ratified by the Germans, and every invitation by the former for amicable adjustment had been evaded or postponed (cf. p. 43). The ulterior object of these delays will be discussed in connexion with the question of labour supply, but the bearing of the railway scheme on the frontier question lies in the necessity of any line constructed under it traversing the debatable tract of territory.

(ii) *Finances.*—The following table shows the financial position of the four railways:

Railway.	*Mileage open in* 1915.	*Cost of Construction up to* 1915.	*Average Annual Surplus or Deficit* 1911–15.	*Total Profit or Loss to end of* 1915.
		Escudos.[1]	*Escudos.*	*Escudos.*
Loanda . .	226	12,459,343	+19,097 [2]	−1,486,910 [2]
Lukalla–Malange .	87	2,665,861	−21,710	−183,690
Benguella . .	322	21,827,323	+124,856	+417,206
Mossamedes .	114	2,236,185	+32,446 [3]	+28,894
Total . .	749	39,188,712	+154,689	−1,224,500

(*d*) *Posts and Telegraphs*

The postal and telegraph services in Angola are sufficient for present requirements. There is a general post and telegraph office in Loanda, and in addition to the land lines of the Government telegraph service, there is a submarine cable connecting the ports of Loanda, Benguella, and Mossamedes, and owned by the West African Telegraph Company. The other coast and up-country towns possessing postal and telegraphic communication are:

Congo district. — Cabinda, Ambrizette, Kakonga (Landana), Maquela do Zombo, and San Salvador do Congo (postal only), and Santo Antonio do Zaire.

Lunda district.—Malange.

Loanda district.—Ambriz, Ngabela, Amboim, and Novo Redondo.

Benguella district.—Benguella, Bailundo, Bihé, Katumbella, Kuma and Huambo (postal only), and Lobito.

Mossamedes district.—Mossamedes, Bahia dos Tigres, Porto Alexandre.

Huilla district.—Lubango, Shibia, Fort Huilla, and Humpata.

[1] The *escudo* or Portuguese dollar is nominally worth 4*s.* 5¼*d.*, but its exchange value recently has been 2*s.* 6*d.* (see p. 85).

[2] This line was worked at a heavy loss from 1889 to 1909; there was a profit of 96,433 *escudos* in 1910, followed by deficits in 1911 and 1912; profits were recorded on a rising scale from 1913 to 1915, but fell in 1916 to 27,090 *escudos*.

[3] From 1908 to 1913 there were deficits averaging over 36,000 *escudos* per annum; in 1914 a surplus of 40,923 and in 1915 a surplus of 208,729 *escudos*, the latter being due to exceptionally heavy traffic in connexion with military operations.

(2) External

(a) *Ports*

The more important ports are Loanda, Lobito, Benguella, Mossamedes, Porto Alexandre, and Bahia dos Tigres. Cabinda has also the makings of an excellent port.

Ambriz is of declining importance, as it lacks facilities for loading and discharging cargo. The bay is an open roadstead with anchorage in 7 to 10 fathoms.

Loanda has a bay with an anchorage of about $3\frac{1}{2}$ square miles, or, in other words, with accommodation for 150 vessels, allowing a berth of 70,000 square yds. to each. This anchorage has a depth of water ranging from 4 to 20 fathoms, and is protected to the west by a sandy island. The harbour lies from north-east to south-west, the entrance being at the northern end, guarded by the small fort of San Pedro.

Lobito lies 23 miles north-east of Benguella, and is the terminus of the Benguella Railway, described above. The conformation of its harbour is very similar to that of Loanda. The anchorage ground has a depth of water of 3–22 fathoms, and accommodation for 70 large vessels. It is free from obstruction, and accessible at any hour of the day or night. There was formerly difficulty in obtaining sufficient water for local requirements, but now that the Benguella Railway Company has taken the matter into its own hands, and laid a pipe from the Katumbella river, the supply is not merely adequate but allows of water being sold to passing vessels for their wants. The water, moreover, is of remarkable purity.

Benguella and *Mossamedes* are both open roadsteads, the former exposed to the violent storms from the north known locally as *kalema*. Nevertheless, until the opening of the railway, Benguella retained its position as the second port of the province. Mossamedes has an anchorage of the same character, but its total area of $1\frac{1}{3}$ square miles, with depths ranging from

2½ to 18 fathoms, is so rocky in parts that its capacity can only be reckoned sufficient for 66 vessels at a time.

Porto Alexandre (Port Alexander), about 28 miles to the south of Mossamedes, is a valuable sheltered roadstead, which before the war was a special object of attention on the part of Germany. Its anchorage extends over 3 square miles, with a depth of water ranging from 5 to 20 fathoms, and is thus capable of receiving 130 vessels at a time.

Bahia dos Tigres (Tiger Bay), about 62 miles farther south, is another port, the possession of which was coveted by Germany as a compensation for the deficiencies of Swakopmund. Were there any natural water-supply within reach, it would be the most valuable of all the Angola ports, as its anchorage covers no less than 128 square miles, with a depth of water similar to that of Lobito. It could, therefore, accommodate 5,500 vessels at once. On the seaward aspect it is sheltered by a sandy peninsula, which, however, is so low and flat that in bad weather the harbour is liable to a heavy ground-swell. This disadvantage, as well as that of the defective water-supply, could no doubt be overcome, if the port were developed and frequented by shipping.

Statistics of ocean-going shipping entering the chief Angola ports in the years 1909, 1911, and 1913 are given in the Appendix (Table I).

(*b*) *Shipping Lines*

Before the war Lobito used to be served by the Deutsche Ost-Afrika and the Union–Castle lines as well as by the regular boats of the Empreza (now Companhia) Nacional de Navegação. Loanda and the smaller ports used to receive calls almost exclusively from the vessels of the Portuguese company, which maintained a monthly express service *via* Loanda and Lobito to Cape Town and Portuguese East Africa. This was supplemented by a coasting service of smaller vessels, calling at Santo Antonio do Zaire, Ambrizette, Ambriz, Loanda, Benguella, Mossamedes, and Porto Alexandre.

These used to do two trips a month out and home, and in addition the company sent a monthly cargo boat, not carrying passengers, to San Thomé and Loanda.

Irrespective of war conditions, this service is admittedly inadequate, and will prove more so when railway construction is again taken in hand. The congestion produced in Portuguese Africa generally is a matter of grave national importance, and the authorities are alive to the necessity of dealing with it.

(c) *Telegraphic and Wireless Communications*

The three cable stations of the West African Telegraph Company at Loanda, Benguella, and Mossamedes communicate with one another; southward they are connected with Cape Town, northward with San Thomé and Principe, and thence with Accra and St. Vincent (Cape Verde Islands).

A project for wireless installations to link up San Thomé with Loanda, and Loanda with Swakopmund and with Kakengi and Zumbo, Zambezi stations in Angola and Mozambique respectively, has been sanctioned by the Portuguese Government. The Governor-General appointed to the province in August 1918 is reported to have brought instructions from Lisbon to expedite this scheme, a contract for which has been entered into between the Government and the Marconi Company.

(B) INDUSTRY

(1) Labour

The labour problem, a peculiarly complicated one in the case of Angola, has been ably handled by the late Governor-General of the province, Senhor Norton de Matos, and by the Curator-General of Emigrants in his capacity as Secretary in Charge of Native Affairs. The task set before the latter official and his newly-created department, which was constituted by local

order ratified by Ministerial Decree of October 20, 1913, was a heavy one. It amounted to the reform and consolidation of the existing labour laws, and the elimination of a series of abuses which by established custom had acquired the force of law. This entailed, as a preliminary measure, the taking of a provisional census—the first systematic attempt in this direction ever made in the province—and involved a study of the tribes affected by the contemplated change of system. It was necessary to take stock of their habits of industry or idleness, their ideas of justice, and the extent to which these might be recognized and codified for administrative and judicial purposes without doing violence to European conceptions of law and of social organization. It was necessary to prepare at the same time a tentative inventory of native-owned wealth, native resources and industries, &c., with a schedule showing the chief commodities of the province and the various agricultural and industrial centres in which they are produced. The department was also required to furnish a statement of the existing distribution of native labour, as well as the outlines of a scheme for utilizing the available labour force, preferably within the district or centre in which it might be found, but elsewhere in the province should circumstances demand its migration.

It was not to be expected that complete and accurate statistics would be forthcoming, but the framework of the machinery could at least be set up, with provision for alteration and improvement within the limits set by the Organic Charter of the province. Its practical operation was facilitated by the general provisions of Portuguese colonial law. For instance, Article 1 of the Ministerial Decree of May 27, 1911, which codified that law, lays it down that 'every native of the Portuguese colonies shall be bound, morally and legally, to earn his livelihood and improve his social condition by means of labour'. This and subsequent articles define the limits within which the principle shall operate, and take cognizance of special cases for

exception or exemption. The native 'shall have full liberty of choice as to the manner of fulfilling this obligation, but on his failing to do so, the public authority shall enforce compliance'. Articles 2 and 3 define 'compliance', and Articles 5, 31, and 32 require the public authority, when proceeding to enforce it, to give the recalcitrant the option of taking up and cultivating vacant land if available, or of accepting employment as a labourer. Where neither land nor employment is available, no compulsion is to be exercised. Thus the measure is educative without being unduly onerous.

(*a*) *Supply*

Particulars as to sources of labour supply, necessarily incomplete but valuable as far as they go, are to be found in the first Report of the Department of Native Affairs, Angola. The total population of the province is there stated to be 1,984,824, but this figure is almost certainly an under-estimate. A total of 2,125,361 is given in the *Anuario Colonial*, 1916, which is probably nearer the mark than the Census Report, the latter being admittedly incomplete in details.

For purposes of the labour problem, however, the most important information in the Census Report relates to the numbers of able-bodied adults on the one hand, and of children, aged and infirm persons, on the other. Assuming that the proportion of able-bodied adults to the total population is uniform throughout the province, the total number of these would be, roughly, 1,110,000 (500,000 males and 610,000 females). That this reservoir of labour has not been drawn upon to any appreciable extent is apparent from other tables contained in the Census Report, which show that the total number of labourers recruited and employed within Angola in 1913 was 29,500. The proportion of male to female employees was very nearly 4 to 1. Agricultural labour occupied 79 per cent. of the total number. The number of labourers recruited in Angola

for San Thomé and Principe might, it is estimated, be raised to 10,000 without prejudice to domestic requirements, and even with this outside figure the total of labourers engaged would not exceed 3·5 per cent. of the available supply, the men employed being about 6·5 per cent., and the women about 1 per cent., of the adult male and female population respectively.

The reasons for this difference between numbers available and numbers employed have been carefully investigated by the Department of Native Affairs. In the first place, the suitability of the able-bodied population to agricultural or industrial work varies greatly from district to district, the chief factor being probably the degree of distaste, on the part of the natives of a district, for manual labour of any kind, and especially protracted labour. But apart from this, there is the fact that many white employers begin undertakings on a scale out of proportion to their available capital, and, when they find themselves in difficulties, defer indefinitely the payment of their employees' wages. The natives, naturally, come to distrust contract labour, and show a very marked preference for work on daily wages.

The results of the investigations made in the six districts by the commissioners who collected the materials for the Census Report are instructive, and may be briefly summarized as follows. It should be borne in mind that the Report refers to conditions prevailing in 1913.

In the *Congo* district labour conditions are satisfactory alike to Europeans and natives, and the supply forthcoming is adequate to local requirements. In the *Lunda* district labour can be engaged only by the day, as natives who had been hired for the collecting of rubber were frequently left unpaid by employers hard hit by the rubber crisis. The *Loanda* district suffers from a serious shortage; the Ambaka natives, in particular, are averse from all work beyond the cultivation of small garden plots, and Government has

been constrained to decree enforced labour. The planters of this neighbourhood desire to introduce workmen from the south side of the Kwanza river and also from Benguella; but, the latter district being at present free from sleeping-sickness, it is deemed imprudent and inhumane to employ Benguella natives within the fly zone of Loanda. The centres of Tunda, near Novo Redondo, and of Ikolo and Bengo, near Loanda, though close to the fly belt, are free from the pest, and, like Amboim, some 90 miles north-east of Lobito, are well populated and well supplied with labour for agricultural work. The Killengi tribe, to the north of Loanda, furnish contract labour for San Thomé and for railway construction. In *Benguella* district the natives are ready enough to work by the day, but reluctant to enter upon contracts. The *Mossamedes* natives, Bushmen for the most part, are very averse from labour; but the measures taken by Government seem to have reconciled the plantation workmen to the conditions of their contracts, and there has been no recrudescence of the unrest and ill will that threatened trouble in 1912. In *Huilla* district the large proprietors have usually assigned allotments of land to their labourers, furnished them with seed, and purchased a fixed percentage of their crops. This system has had encouraging results, and Government is anxious to see it extended over the whole of the upland plateau.

(*b*) *Emigration and Immigration*

Apart from the migrations of labour within the Province, Angola furnishes annually a contingent of estate hands to the cocoa islands of San Thomé and Principe. The history of the controversy which for many years past has centred upon these arrangements will be found sufficiently discussed in *San Thomé and Principe* (No. 119 of this series), but its bearing on the affairs of Angola demands some notice. In 1912, to go no farther back, the Portuguese Government decided that recruiting for the islands, instead of being a function

of the Government of Angola or Mozambique as the case might be, was to be carried out by a *Junta* specially nominated for the purpose; or, if the planters of the islands preferred it so, a company might be formed whose operations should be governed by the provisions of the decree ratifying its constitution. The latter alternative found favour, and the island planters created, under the title of the Sociedade de Emigração para San Thomé e Principe, a limited liability company, not working for profit but co-operatively, the shares of which could be held only by members of the planting community interested. Its first working year was 1913, and the figures of its operations, so far as Angola is concerned, are as follows:

Year.	*Recruitments.*	*Repatriations.*
1913 . . .	1,070	2,373
1914 . . .	1,602	4,249
1915 . . .	4,876	5,081
1916 . . .	4,233	3,131
1917 . . .	2,327	463
Total, 1913–17	14,108	15,297

A special case, which for many years engaged the attention of both Portugal and Germany, is that of labour recruiting for what was German South-west Africa among the various tribes composing the Ovambo race. These, according to recent estimates, number about 156,000, and are to be found both in Portuguese and ex-German territory, as well as in the debatable zone between the Kunene and the Kubango or Okawango. Knowing that the Germans placed the boundary line somewhat farther north than the Portuguese placed it, the latter made repeated proposals for an amicable adjustment, but these overtures met with no response, as it suited the Germans to keep the question open until their plans for 'an administrative protectorate over Angola' should ripen. Meanwhile the latter made free use of the Ovambo country, both within the disputed belt and in admittedly Portuguese territory,

as a recruiting ground for labour for their copper and diamond mines at Tsumeb and Lüderitz Bay.

The theory on which they justified these repeated trespasses was that 'tribes of identical manners and customs could only be educated by means of a unifying system worked by one and the same Government, and Portugal's methods with the natives were not Germany's'. Moreover, as the *Berliner Neueste Nachrichten* pointed out in January 1913, southern Angola possesses two excellent seaports, Bahia dos Tigres and Porto Alexandre, whereas the German port of Swakopmund is 'a mere anchorage, without shelter, and with every possible defect'. Portugal defended herself by prohibiting recruitment by foreigners within her territory, and Germany retaliated by assigning three million marks in her supplementary budget for 1914 for the construction of a railway to penetrate the Ovambo country, and connect the Otavi Railway, which serves the copper-mines at Grootfontein and Tsumeb, with one or other of the two ports of southern Angola.

From the point of view of labour, the race in question is especially valuable. Its people are handsome and athletic, with little of the negro in their appearance, and, unlike the majority of Africans, the men work as hard as the women. They are industrious agriculturists, working on a well-developed system of cultivation. Unfortunately, the lack of effective Portuguese control in the Ovambo regions was noted and turned to account by the Germans, who, after the destruction of the Hereros, drew the bulk of their labour force from these regions.

On the subject of immigration, the only remark called for concerns the convict population which Portugal still ships out to Angola. She maintains a disciplinary battalion with head-quarters at Loanda, and disciplinary companies at Benguella and Mossamedes; these absorb a certain proportion of the annual shipments, but the remainder have to find employment for themselves as best they can.

(c) *Labour Conditions*

It remains to add to what has been said above that the special case of the labourer returning from San Thomé or Principe has received due attention from the public authorities of the province. It has been borne in upon the Government that the Angolan, naturally thriftless and improvident, returns to the African continent with these defects, if possible, accentuated. In the islands everything is done for him. He is housed, fed, clothed, and medically attended free of charge, and the bulk of his wages are placed to his credit against his repatriation or re-engagement, a small dole only being given him as pocket-money. When paid off and landed at an African continental port, he is frequently victimized, and after a few days of riotous living may find himself penniless and starving. To render this practically impossible, the Government has arranged that the balance of his wages shall be payable to him only when he reaches his home up-country or, at his option, takes up an allotment within the reservations marked out for returned labourers. Several such reservations have been created, but so far the results have not been very encouraging. Natives usually prefer to re-engage for estate work, and in many cases return to San Thomé.

The conditions governing contracts for the engagement of labour for the islands are set forth in a Ministerial Decree having the force of law, which was issued at Lisbon on July 20, 1912. It is of general application wherever the labourer may be recruited, and fixes the maximum period for duration of the contract at three years in the first instance, reserving to the labourer the option, on expiry of the term agreed upon, of re-contracting for a further period, subject to the same maximum, or of claiming repatriation then and there, with payment of the bonus due to him from the repatriation fund.

But as the circumstances of the different African colonies where labourers are, or may be, recruited vary

considerably, the decree reserves to governors-general of provinces powers for the regulation and supervision of recruiting operations in conformity with local conditions. In exercise of these powers, the Governor-General of Angola issued in March 1913 a notification determining the local limits within which recruiting may be undertaken. It defines the duties and powers of the Curator-General of Emigrants at Loanda, and his relations with the various public authorities at the ports and up-country, all of whom are enjoined to work in co-operation with him in respect of these matters. For the better supervision of the work of recruiting, and the repression of attempts at coercion or other abuses, local public authorities are required to select, within the various recruiting areas in their jurisdictions, suitable sites for concentration depots, to be duly visited and inspected when in use, so that the authorities may satisfy themselves as to the regularity of the methods employed. Certain routes are specified by which alone recruits are to be brought down to the coast, and the maximum number of hands to be engaged in any given year is to be notified in advance for that year. Thus the arrangements for securing the observance of the Ministerial Decree, in the spirit as well as in the letter, are fairly complete.

(2) Agriculture

(a) *Products of Commercial Value*

As long as the slave-trade survived, the only Angola product regarded as deserving attention from the commercial point of view was native labour—a tradition which proved hard to eradicate, despite much practical evidence of its fallacy. Hence the potential wealth of the province has largely remained unexplored by the agriculturist. For many years the abundance of the products of indigenous plants of the country was in itself a source of discouragement to planting enterprise, or an excuse for inaction. And to this day most of the commodities exported are non-cultivated. Cotton, sugar, and—in the Cabinda enclave—cocoa, have been cultivated, but rubber, palm kernels, palm oil, and coffee still figure more largely in the list of exports, and these are obtained mainly, if not entirely, from plants and trees growing wild.

Vegetable Products.—Cassava, or *manioc,* is the *Manihot aipi* of the West Indies and South America, acclimatized here and furnishing an abundant and wholesome food, eaten by white colonists as well as by natives. It flowers very scantily and bears few seeds; its reproduction is usually effected by cuttings, as any part of the stem or branches takes root readily. The usual size of the tubers is six or nine inches in length, with a diameter of one or two inches; they sometimes grow up to two feet long, and proportionately thick. The tubers are fit for eating at nine months from planting, but do not attain their best condition till the fifteenth or sixteenth month, and may, without deteriorating, be left in the ground for two or three years. A certain amount of the flour or meal made from them, known locally as *fuba,* is exported, and were its value as a food-stuff better known, much more might be made of it in outside markets than has as yet been attempted.

Cocoa has been grown in certain areas of the coast belt, in that portion of Angola which lies between the

Congo and the Kwanza, but commercially its greatest success has been in the Cabinda enclave to the north of the former river. The forest region of Mayumbe, which extends beyond the limits of Portuguese territory into French Equatorial Africa and the Belgian Congo, has been found almost as well adapted to cocoa as the islands of San Thomé and Principe. Here the Companhia de Cabinda possesses a concession covering some 54,000 acres of valuable land, and though the company is actively exploiting its large forests of oil-palms, it has developed its cocoa plantations to such good effect that in 1918 it had more than 3,400 acres under cocoa and 543,000 trees in bearing, not counting those planted in 1911, which should come into bearing in 1919. The progress made in this respect is reflected in the company's exports of cocoa, which in the years 1913–17 were successively 19, 56, 84, 132, and 203 tons.

Coffee, in Angola at least, must be regarded as mainly a wild product. Whatever may have been the circumstances of its first introduction, its dissemination throughout the regions where it is now to be found has presumably been the work of birds, monkeys, or other animals. If originally planted in the coast belt, as is possible, by the early missionaries, it has not survived there, the climate being too arid and the region too treeless. In the damp forests of the second elevation from the level of the sea it has found an environment such as it requires. Enkoye (Encoje), about 200 miles inland from Ambriz, is a noted centre, where the native gatherers search for coffee just as they do for rubber or gum, and treat it by primitive processes before bringing it down to the traders for sale or barter.

Another coffee-producing region is the fly-infested and partially depopulated area of Dembos, extending southward to Kazengo and Golungo Alto, and to the country traversed by the Loanda–Malange Railway. Here, in addition to the wild coffee of the forests, extensive plantations have been formed, but these suffer from scarcity of labour owing to the ravages of

sleeping-sickness. The coffee grown is, moreover, of inferior quality, although up to the outbreak of hostilities the bulk of the crop used to find a market in Hamburg.

Still farther to the south, and beyond the range of sleeping-sickness, Amboim, about 100 miles south-east of Novo Redondo, has been made a planting centre. Success here seems assured, as labour is plentiful, and the grade of coffee raised is excellent.

The average annual export of this commodity from the whole province is about 4,560 tons, of which the share of the Cabinda enclave is about 100 tons.

Fibres. A very useful fibre for paper-making and other purposes is the inner bark of the *imbondo* or baobab tree (*Adansonia digitata*), the commonest of all trees in the coast regions between the Congo and the Kwanza, and found, though less abundantly, as far south as Novo Redondo. The trunk of the tree, which is of enormous circumference in proportion to its height, has no wood capable of being sawn into planks, but merely a core of pith permeated with irregular layers of woody fibre, apt to decay while the tree is still alive and to leave a cavity in the centre; this the natives utilize as a storage tank for rain-water. The fibre of commerce is obtained by chopping off the soft outer bark, and stripping the inner bark in large sheets. This can be taken off all round the trunk of the tree without apparent injury, as a fresh layer grows which in its turn can be removed six or eight years later. Care is taken to strip this bark only where the outer bark is free from knobs and scars. The bark is saturated with sap when first cut, and has to be dried in the sun and beaten to soften it and free it from pith as far as possible. It is then made into bales by hydraulic pressure for shipment to the European market, where it realizes from £9 to £10 per ton.

The natives use it themselves in a variety of ways. String and rope are made of it; or it is simply cut into strips and used to support loads. Cut into suitable widths, it is woven into strong sacks for the transport of coffee and ground-nuts. Finer pieces are treated by

being pulled out so as to form a coarse network, of which the edges are sewn together to make bags for grain, gum copal, or cotton.

Many other fibre-yielding plants are to be found throughout the country, and these deserve more attention than they have hitherto received, if the province is to make good its ambition of becoming the storehouse and granary of Portugal—a perfectly justifiable ambition in the light of its native possibilities. Several useful agaves, including the *Agave sisalana*, are now being cultivated experimentally, also two sansevieras (*S. longiflora* and *S. angolensis*), respectively north and south of Ambriz. But so far their products have not figured to any great extent in the lists of exports. A sanseviera fibre from Angola, the *jife*, has been tested and reported upon at the Cordoaria Nacional at Lisbon, and found equal in resistance to the best Riga hemp, but not up to the standard of Manila hemp. It is, nevertheless, said to be suitable for the manufacture of cables.

Ground-nuts are the fruits of a small leguminous plant, grown by the natives of the warmer parts of Angola, partly for trade, but to a great extent for their own consumption, as both the green and the ripe nuts enter largely into their dietary. The demand for the ripe nut, chiefly in France, is large and steady, so that the failure of the European planters in Angola to cultivate this product on an extensive scale can only be explained by the prejudice that exists against planting crops which natives of the country have adopted as their own.

The plant (*Arachis hypogaea*) requires a rich soil, preferably that to be found at the bottom of valleys or on the banks of rivers. It grows from one to two feet in height, and its flower-stems have the habit, after blossoming, of curling downwards and forcing the pod into the ground to ripen under the surface. It is sown in October or November, at the beginning of the rainy season, and about April the green nut is ready for eating. But where the ripe fruit is required, the plant is left

undisturbed till July or August, when the seed has attained its maximum of oiliness. In its unripe state it is eaten roasted in the husk, and is then wholesome and palatable; when fully ripe it is so rich a food as to be edible only in combination with manioc or some other farinaceous matter, or as an ingredient in a stew. For native domestic purposes a certain amount of oil is extracted from the fruit by processes both primitive and wasteful; it is more profitable for the trader to buy the nuts or take them in barter.

It is not clear where the nuts sold are consumed; the export must have fallen off very considerably of late years, seeing that ground-nuts have not been mentioned in the official returns for Angola exports since 1912 (when their value was only 56 *escudos*), though since that year the export from Portuguese Guinea has quadrupled itself, and ground-nuts have now become the most valuable commodity shipped from that province.

A plant of similar habits, the *Voandzeia subterranea*, which also ripens its fruit beneath the surface of the soil, is grown, but not on any large scale, in the neighbourhood of Kambambe on the Kwanza, and in the same region there is to be found a handsome foliage plant, the *Solanum saponaceum*, whose fruit, like that of the well-known *Sapindus trifoliatus* of southern India, serves as an efficient substitute for soap.

Gums. Gum arabic is found in the Dembos region and sold in Mossamedes, and gum elemi (*mubafo*), the product of *Canarium* (chiefly *C. schweinfurthii* and *C. edule*), was formerly brought in large cakes from about Bembe, but was never highly esteemed in the European market. Besides these, some *almeidina* (the coagulated milk of a *Euphorbia*) and two kinds of gum copal are exported from the province. One of these copals is known as red gum copal, the other as white Angola gum. The former might with propriety be classified as a mineral, as it appears to be the fossilized droppings of a forest-tree which has disappeared without leaving a trace of its form. The latter is certainly

a vegetable product, but the tree from which it is obtained has not been identified with certainty; all that is known is that it is not the *Trachylobium hornemannium* from which the copal of Zanzibar is derived, nor is it the *Copaifera guibourtiana*, the copal tree of Sierra Leone, as neither of these exists in Angola. The red gum, known to the natives as *makata*, is found chiefly in the Mossulo country to the south of Ambriz, and also farther north, in the vicinity of Cabeça da Cobra, between Ambrizette and the mouth of the Congo. It generally lies concealed under a layer of hard ferruginous clay, sometimes cropping out above the surface, but oftener at a depth of from six inches to a couple of feet, with an occasional thickness of two or three feet. The native diggers do not attempt to bring in the slabs and small boulders in which it is found, but for convenience of carriage break them into more or less uniform fragments. This gum is very pure, and is free from leaves, twigs, insects, or other adventitious matter usually found in fossil gums.

Up to the sixties of last century a large trade in copal was carried on with the United States, but the Civil War interrupted this, and the commodity has never since regained its former importance. The quality of the copal from Angola is reported to be indifferent. As a gum it is soft and opaque, and sells at a lower price than similar gums from elsewhere. These defects are probably those of the white Angola gum. In Angola, as in German South-West Africa, fossil gum is apparently becoming exhausted.

Oil-palms. The *Elaeis guineensis* is very abundant in the colony near the coast, where it fringes the banks of most of the streams down to about 10° 30′ south latitude. Inland to the north, where the soil is rich, as for instance on the undulating plains around Bembe in the Congo district, it grows quite freely, even away from running water. A very fertile centre in this respect is the vicinity of Novo Redondo and Egito, to the north of Benguella, for the exploitation of which a company was in project when war broke out.

The comparative neglect of this tree, and of the coconut palm, seems inexplicable, when the price of palm oil (as high in Angola as in London) must be known to every Portuguese resident. Protectorates such as Nigeria and Sierra Leone, not to mention the Belgian Congo, owe a large share of their prosperity to the oil-palm, though the nuts in some cases have to be transported over long distances before shipment, whereas in Angola most of the oil-bearing regions are within easy reach of seaports. Even should planting be necessary, there are few trees so profitable which demand so little labour for their cultivation.

Rubber, like coffee, is a product which was formerly collected from wild plants only, but it is now produced increasingly on cultivated plantations. The main source of the wild rubber, which still composes the bulk of the export, is a *Landolphia* (*L. florida*, according to earlier writers, but now stated on consular authority to be *L. kirkii*). It is a creeper with numerous branches, and its stem attains the thickness of a man's thigh. Every part of it, from the roots upward, yields latex. It is to be found in the forests described above, where wild coffee grows, but is even more abundant farther inland, in the Lunda district. A characteristic of this plant is that the latex dries so rapidly on exposure to the air that it cannot be tapped in the fluid state and removed to a central shed for treatment, as is the case with the *Hevea*, *Manihot*, and *Ficus* varieties. To avoid its coagulation on the stem and the sealing-up of the cut made, the natives smear it on their own bodies, covering their arms, shoulders, and chests with layer upon layer of it until a solid sheet is formed, which is then stripped off and cut into squares for transport to the purchaser. The rubber thus prepared is of good quality, but to add to its weight, and possibly to prevent its becoming gummy and adhesive from contact with perspiring human skin, the natives are apt to adulterate it by an admixture of earth or sand.

Another source of wild rubber is the tuber known as *bitinga* (*Raphionacme utilis*), a root resembling a yam

in colour, but of the shape and size of a small turnip. It is found in comparatively arid soil in southern Angola, and yields a fair quantity of latex coagulable into rubber of good quality. But the supply is limited by the restricted area in which it is found, and though there is no difficulty in reproducing it, the growth of the tuber to the laticiferous stage is so slow that the plant has been discarded in favour of the more productive plantation trees.

Of these, the Ceará rubber-tree (*Manihot glaziovii*) has succeeded in commending itself to the Angolan planter more than other species preferred in other countries. By 1910, some 2,000 acres were reported to be under this tree in the Loanda district alone, and by 1914 the province was said to possess 2,600,000 young trees, chiefly Ceará, which would cover 7,000 to 10,000 acres of plantations. The tree grows at elevations up to 3,000 ft., and, as in San Thomé and Principe, sows itself so freely as to overrun the land like a weed. But in Angola, otherwise than in the islands, it has justified its existence by yielding rubber of excellent quality, though in characteristically small quantity—as many ounces per annum as the Pará rubber-tree (*Hevea brasiliensis*) yields pounds. For the rest, it shows the same defects in Angola as elsewhere, the tree being fragile, easily overthrown or broken by high winds, and very liable to injury from careless tapping, as the outer bark and the cambium layer are thin. Moreover, coagulation of the latex on the tree is responsible for an undue proportion of scrap rubber. But the planters have discovered that by keeping the surface of the trees moist with an alkaline solution they can retard coagulation and collect practically the whole yield in the form of milk. They estimate the average yield of the tree at $1\frac{1}{4}$ oz. per annum, which, as far as this species is concerned, is quite as good a result as has been attained elsewhere outside Brazil, though insignificant compared with the yield of the Pará rubber-tree in Ceylon and Farther India.

Next in popularity with the planters comes *Ficus*

elastica, the source of the 'Rambong rubber' of the Malay States and Java, where it has been virtually discarded in favour of the Pará rubber-tree. The advantage of the *Ficus* is its very abundant yield, coupled with its ability to stand much rougher treatment at the hands of the tapper than any other species. With Pará rubber the Angolan planters have been unfortunate. The seeds had to be brought at great expense from Ceylon, and only a small proportion germinated.

The average annual export of rubber for the years immediately preceding the war was 2,440 tons in round numbers, but it is improbable that plantation rubber contributed even one per cent. of this quantity.

Sugar-cane. For fifty years or so previous to 1911, sugar-cane and sweet-potatoes were grown in Angola almost exclusively for the production of alcohol, one of the most important industries of the colony. In that year, however, Government decreed the abolition of its manufacture. Compensation was to be given the planters, and to this end a 3 per cent. loan of 3,000 *contos* (about £600,000 at the exchange of the day), secured by the proceeds of an increased import duty upon wines and spirits, was issued, redeemable by yearly drawings of 2 per cent. of the total sum raised. The redemption was to be spread over a period of thirty years, the drawings up to 1916 to be at prices ranging from 80 to 100 per cent. of the face value of the bonds, and after that year at par. The rate of the compensation payable to the planters was 632 *escudos* 42 cts. per hectare of alcohol (a unit taken as equivalent to 1·5 hectare under sugar-cane or 3 hectares under sweet-potato).

Planters who could prove, by production of land-tax receipts, that they were entitled to this compensation, received 30 per cent. of it immediately, and the balance of 70 per cent. when they were in a position to show that the areas formerly under cane or sweet-potato had been brought under other crops. Those who already possessed sugar factories, or installed

them on publication of the decree forbidding the manufacture of alcohol, or who sent their cane to a sugar factory during the three years following 1911, were similarly indemnified, subject to the condition that they should increase their cane plantations by 1 hectare for every 500 *escudos* (£100) received as compensation. Allowance was made for the fact that in many cases the cane planted for spirit-making was unsuitable for the manufacture of sugar, and had to be replaced by a different variety.

The immediate effect of this measure was to give a great impetus to the production and export of sugar, for by 1913, according to the British Consular Report for that year, no less than seven principal factories were at work producing sugar, and the output for the year was about 4,600 tons. The area under cultivation was then being rapidly extended, and had it been possible to extract the full yield of the planted cane and convert it into sugar, the quantity available for export would have been some 22,000 tons of unrefined sugar. The matter was not mentioned in the British Consular Report for the following year, but it soon became apparent that the industry had received a severe check, from which it has not recovered. In his report for 1914, the Italian Consul-General stated that only two companies were engaged in sugar-making—one, the Companhia do Dombe Grande, an old-established concern; the other, the Sociedade Agricola de Cassequel, a new undertaking which had only then started operations on a concession of some 25,000 acres close to the railway line at Katumbella. The fall in the export of sugar from 4,600 tons in 1913 to about 3,000 tons in 1914 is, he remarks, inexplicable in the light of the facts. A liberal protection had been accorded to Angola sugar entering the port of Lisbon, a total exemption from duty had been granted to sugar-manufacturing plant imported into Angola, while from Portugal alone there was a regular demand for sugar of never less than 35,000 metric tons per annum, which hitherto had been met by supplies drawn from all parts

of the world. Thus the conditions for a vastly increased production could not have been more favourable.

Live-stock and Animal Products.—Many parts of the country, though not the whole province, are suitable for *cattle-breeding*, and there is a certain amount of native experience to guide the intending stock-farmer. A difficulty very generally encountered is to find suitable forage. Many of the grasses growing most luxuriantly and eaten freely by imported animals are so finely and strongly serrated as in course of time to destroy the digestive organs of the cattle. In many localities, however, especially in the damp forests, good wholesome grass is to be had; this is indeed frequently the only forage available after the close of the rainy season, owing to the native practice of burning all the hay on the open grazing grounds. Unfortunately the forest grass is so mixed up with herbaceous plants which the cattle refuse that its usefulness is much restricted.

But the introduction of suitable forage plants should present no insuperable difficulty. Many kinds of beans are indigenous, and are cultivated by the natives. And in the Huilla plateau, a region which has been highly recommended for white colonization in virtue of its climate, the fertility of its soil, and its general agricultural advantages, wheat and many varieties of the pea, vetch, and bean tribe have been acclimatized.

Attempts to introduce the *camel* as a transport animal have failed, chiefly owing to the pernicious effects of the native forage—an unexpected result, seeing that in many parts of the world the camel's habitual food is the foliage and branches of an extremely thorny acacia, which no other animal attempts to eat.

Sheep and *goats* breed very well, especially in the highlands of the Benguella district and near Ambrizette on the coast of the Congo district. But they yield almost no milk or wool. They are, however, remarkably free from disease, will eat any pasture they find, and tend to become fleshy. *Pigs* are very abundant in and around the native villages of Benguella, and have been successfully crossed with

the Portuguese black and the English white pig, the progeny being prolific and attaining considerable weight. Like the sheep and the goat, the pig seems to suffer little from disease of any kind, while horned cattle, and especially horses, suffer severely. *Oxen* and *cows* are very liable to skin diseases (*sarna*) and pleuropneumonia, especially in the coast zone; *horses* are scourged by a variety of epizootic diseases common to the central African uplands. *Mules* imported from Cape Town and from the Cape Verde Archipelago are in great demand, and fetch high prices, but no attempt has been made to breed them locally, though a good resistant type of *donkey* is available, and suitable horses can be imported from the same regions and from Senegambia.

Localities where cattle-breeding has succeeded are Benguella Velha and Novo Redondo, coast regions about 80 or 100 miles south of the Kwanza, and also the Mossamedes district. The tribes inhabiting the former region, unlike the Africans elsewhere, not only own large herds of fine cattle, but milk their cows regularly and drink the milk.

The best markets for surplus live-stock are no doubt San Thomé and Principe, South-west Africa, and the far interior of Angola itself. In the last-named region cattle are freely bartered for rubber and ivory. The shipping of the ports can also take considerable quantities, Mossamedes having formerly been a regular port of call for British cruisers in quest of fresh meat. With the development of Lobito this demand is likely to increase when normal conditions are once more established.

Ivory. No recent information regarding this commodity is available, and, in fact, of late years it has ceased to figure in the customs returns. In the time of the trader and explorer Joachim Monteiro, whose work on Angola [1] contains much that is valuable and true to this day, Mokulla, Ambrizette, and Kinsembo were the three centres of the trade in ivory in northern Angola.

[1] *Angola and the River Congo.* London, 1875.

The caravans of negroes, who in their turn were agents for the original hunters in the far interior, used to converge on those coast towns from the Zombo country, which lies astride what is now the frontier-line between Angola and the Belgian Congo. Possibly the formation of the Belgian Congo has had a good deal to do with the cessation of this traffic of late years.

Charles Jeannest, a French trader who spent four years in charge of a factory at Kinsembolhas, has placed it on record[1] that two distinct kinds of ivory used to be brought in for sale—the raw and the dead ivory. The former, of which comparatively little came in, was composed of the tusks of hunted and recently-killed elephants; the latter, forming the bulk of the consignments, was collected from the 'elephant cemeteries' up-country. It would appear that the habit of these animals is to form herds and select some forest glade as a habitation, browsing on the available forage as long as any remains available. But the elephant is a large eater, and supplies soon become exhausted. The old and feeble members of the herd do not wander far afield, but die in the vicinity. When the herd moves off in quest of fresh pastures, those unable to keep up with the rest drop out, and their bones strew the route. The tusks when discovered by the blacks used to contribute their share to the collection brought down by the caravans, and as the ivory thus obtained was much harder than that from newly-killed animals it was more sought after. It is curious to note that, notwithstanding its hardness, much of it bore the marks of teeth, a species of squirrel having the habit of nibbling at it. The marks were, of course, superficial, but they were persistent and characteristic of all the dead ivory collected in those regions.

When the tusks were long and heavy—Monteiro records two bought by him which weighed 172 and 174 lb. respectively, evidently from the same animal—the practice was to bring them down slung from a long pole carried by two men. Lighter tusks were encased

[1] *Quatre années au Congo.* Paris, 1886.

in a kind of cage, made of four short sticks inserted in hoops of twisted creeper, so as to keep them in position upon the heads or shoulders of the carriers.

Wax. The greater part of the bees-wax exported from Angola is collected from the nests of wild bees in the southern districts of the province. But farther north, in the hinterland of Novo Redondo and on the banks of the Kwanza, numbers of natives devote themselves to systematic bee-keeping, chiefly for the sake of the honey. They take the wax with it, but also gather a certain limited quantity from nests of wild bees. The latter they discover by watching the movements of a certain kind of bird—described by them as having a white bar across its tail, which they say leads them to the wild bees' nests. But they set more store by the supplies from the domesticated bee. The hives they provide for these are formed by cutting a branch about a foot thick to a length of four or five feet, then splitting it longitudinally, and scooping out the centre, while leaving the ends intact. They then bind the two troughs face to face, and perforate the ends with three holes of the calibre of a man's finger. The hive is completed by cutting in the middle of the cylinder a rectangular hole, big enough to admit the owner's hand. To this hole is fitted a door, which is luted on with clay so as to be watertight. The hive is then slung on the branch of a baobab—the tree generally selected for the purpose—and is thatched over with grass. Once a year, or in some cases oftener, it is visited, the bees are smoked out but not killed, and all the combs extracted except one, which is left to induce the bees to return.

The wax thus obtained is sold, as the natives have no special use for it. But the honey they keep, as it forms the basis of an intoxicating drink, known as *kingunda*, to which they are much addicted.

(*b*) *Forestry*

No systematic conservancy of the timber and other forestal resources of the province has as yet been

attempted, the neglect being doubtless due to the imperfect domination of the interior, where such measures would be of the highest value. That these resources are vast can hardly be doubted. The most important timbers are those which offer the greatest resistance to the inroads of the white ant. Many varieties are heavier than water, notably the mangrove and African ironwood; hence their transport by river or coastwise by sea can best be effected by building them into rafts in combination with a sufficiency of light woods—preferably those having some intrinsic value of their own, such as the fan-palm and the *bimba*. The former, an African variety of *Borassus flabelliformis*, while possessing a pithy core which gives it the desired lightness, has an extremely durable wood; the latter, the *Herminiera elaphroxylon*, resembles the baobab in that its wood is very soft and pithy, but, unlike the baobab, it is found in abundance in the swamps of the coast region, and is in great demand for boat and raft building, as the roughest surf fails to swamp craft of such construction. These rafts, when heavy timber has to be conveyed by sea to the nearest port, are equipped with sails and serve their purpose efficiently.

The useful timbers known to exist in the province include *kusa* (*Parinarium mobola*), the Mobola plum, a hard oak-like timber, suitable for shipbuilding; *mako* (*Burkea africana*), African ironwood, which sinks in water, and is impervious to the white ant; *amoreira* (*Chlorophora excelsa*), an excellent cabinet wood, the product of a lofty tree which contains a latex used by the natives to adulterate their collections of rubber; *ndikasondi* (*Pterocarpus erinaceus*), African or Senegal rosewood, resistant to white ants, and useful in pier and bridge construction; and *nganja* (*Cleistanthus angolensis*, or perhaps *Dalbergia melanoxylon*), African blackwood, also very hard and resistant to white ants.

Quick-growing shade trees exist in abundance, the types of this class being the *ulemba* (*Ficus sycomorus*), and the umbrella-tree (*Musanga smithii*). Some of

the indigenous forest-trees, by virtue of their great height and the absence of lower branches, survive forest fires which destroy smaller trees. The *amoreira* (*Chlorophora excelsa*), already mentioned, and the kapok or silk-cotton tree (*Eriodendron anfractuosum*) are examples of this class.

Such information as is available on the subject of the forests of the province is remarkable for the blanks it contains as to valuable trees and plants which are found and utilized in other West African possessions having a similar soil and climate, and probably also exist, though unreported, in Angola. The *Khaya senegalensis*, a source of African mahogany, is nowhere mentioned, nor is the shea butter-tree (*Butyrospermum parkii*). When the forest regions are effectively occupied, their contents ascertained, and forest reserves created, the province will gain a large accession to its realizable wealth, and also to its annual revenues.

(c) *Land Tenure*

The laws governing grants of lands to European settlers and to concessionnaire companies, whether for agriculture, mining, or railway construction, are contained in a series of decrees issued by the Portuguese Ministry of the Colonies from time to time. A comprehensive scheme for the settlement of the highlands of southern Angola by whites, preferably Jews, was elaborated and published in 1911–12, but as it failed to attract the class for whose benefit it was intended, its terms need not be recapitulated here. The most important decrees at present in force are those of November 11, 1911 (amended by decree of December 3, 1914), and of March 20, 1906, and February 15, 1908.

For many years, Portuguese publicists such as Eduardo da Costa, Oliveira Martins, and others having extensive colonial experience, have endeavoured to dispel the evil tradition that a colony exists merely for the benefit of the mother country, and to reduce to harmlessness the vexatious control of colonial affairs

from Lisbon, based upon that tradition. The advent of the republic gave the reformers their opportunity, and in Angola they found a favourable field for testing their faith in local self-government conceived in the interests of the man on the spot, be he white or black. Unlike certain other overseas possessions—San Thomé and Principe for example—Angola had no powerful vested interests barring the way; it was not penetrated, like Portuguese East Africa, by foreign influences exercised by great concessionnaire and chartered companies; and it was not peopled by an unruly congeries of native tribes such as those of Guinea, whose hostility to the white man is thinly veiled, and constitutes a perpetual menace.

The practical application of the new idea to Angola took the form of regarding the province as composed, roughly, of two more or less distinct regions—the *plan alto* or uplands, suitable to European occupation and European outdoor labour, and the coast belt and tropical interior to the north and north-east of the Kwanza basin, which was not in the same sense a white man's country. The distinction, of course, was not a hard and fast one; the highlands possessed their aboriginal native population, and the tropical coast and interior tracts had, to a certain extent, become planting centres for the development of which coloured labour was indispensable. In both cases the conflicting rights of whites and blacks had to be adjusted by some workable form of compromise. But this did not discourage the reforming jurists and administrators. They saw that many data for the adjustment were wanting, and the outcome of their deliberations was the establishment of the Department for Native Affairs, whose handling of the labour question has already been reviewed (see p. 41).

Early in the career of this department there appeared a *portaria* or notification by the Governor-General of the province (Senhor Norton de Matos), dated January 30, 1914, and entitled 'Provisional Regime for the Grant of State Lands in Angola'. This

regulation deals ably and exhaustively with at least one important aspect of the problem. After reserving similar powers to the Central Government in Lisbon, it affirms the competence of the Governor-General in Council to declare certain areas of the province to be reserved exclusively for native occupation. This occupation, it is laid down, shall not carry with it ownership rights over the land occupied. Outside those areas, certain villages are enumerated in which the native may exercise similar rights of occupancy. The regulation goes on to define the conditions on which this form of squatter's tenure may be established and confirmed, viz. by deed in writing; occupation to be proved by actual residence, habitual cultivation, or by pasture on the land; and the grant to be limited to 2 hectares (5 acres) per adult member of the native family, or 400 square metres in the case of village lands outside the native reservation. Within the reservation the native family shall be deemed to include, not merely its head and his wives, but also his minor children and his aged or infirm parents if residing with him, each of these being entitled to the allowance of 2 hectares.

Certain local functionaries are empowered to increase or decrease the extent of any such holding included within their jurisdiction, in accordance with the growth or diminution of the native family, provided, however, that no reduction need be made should the head of a diminished family desire to continue in occupation of the original holding and be in a position to utilize it. The competent functionary may double the extent of the holding if it is being used as pasture land.

Twenty years of continuous occupation under these conditions, reckoned from the date of the deed of grant, provided that at least one-third of the land has been under cultivation, shall *ipso facto* convert the squatter's tenure into one of absolute ownership. But until this takes place, no squatter shall exchange, alienate, mortgage, or lease out the land held by him; nor shall that land be subject to attachment or foreclosure. Any

disposition to this effect shall be null and void, and registrars are authorized to refuse registration of any document purporting to create an obligation of this nature. The notary who may draft any such document shall be struck off the rolls, and be further liable to civil law for any loss or damage arising out of the transaction or its cancellation.

The restrictive provisions which follow are not unreasonable. A native holder absenting himself with all his family, or failing, for any period exceeding a year, to utilize the land for the purpose for which it was granted, shall forfeit his occupancy rights, the further disposal of the land resting with the State. He is also bound to notify to the competent authority any absence of the kind exceeding 180 days, subject to a fine of 5 *escudos* (about £1) for the first omission, or 10 *escudos* for any subsequent one.

If the holder die before his tenure has matured into ownership, his rights in it shall pass to his heir according to the native law of succession (i. e. to his sister's son or other descendant in the female line), provided the heir is able and willing to utilize the land or reside on it. Otherwise rights in it shall lapse to the State.

Native lands held on squatter's tenure which may be found to be included in the limits of any concession applied for, may be transferred to the intending concessionnaire only under the express authority of the Governor-General, and then only after payment to the squatter of the value of his tenant-right and of improvements.

The squatter who has acquired ownership rights as above is exempt from compulsory military or police service, from forced labour, and from impressment as a sailor, boatman, porter, or scout; but not from the duty of attendance on the civil or military head of the district, should he be required in time of war or military operations for the restoration of public order.

Provision is further made for the demarcation of the holdings, and their registration, with full particulars of all the occupants. The regulation concludes with a

series of directions to the functionaries concerned in its execution. They are, for instance, expressly forbidden to exact or receive any sum in money or money's worth for official services rendered. All such services are gratuitous, though of course the holder must pay for the stones or pillars set up to mark the boundaries of his land.

(3) Fisheries

The whole of the Angola seaboard abounds in fish. Ambriz and Loanda are well provided for in this respect, and, farther south, Benguella, Mossamedes, and Porto Alexandre are so specially favoured that both fish-curing and whaling have become established industries. Fish-curing is mainly in Portuguese hands, native labour being largely employed; whaling is almost exclusively a foreign enterprise, under Norwegian, Dutch, and American control.

It is stated that south of the Congo there is practically no danger from sharks; but at Loanda a fish of the shark species is often caught by the natives. Its flesh, which is valued as an article of food, is dried and cured in considerable quantities. Another large fish, the *pungo*, sometimes over 100 lb. in weight, is found in the same waters; it has very large flat scales and is not attractive in appearance, but the flesh is neither coarse nor unpalatable. It has a curious habit of pressing its snout against the side of a ship or boat at anchor and producing a loud drumming sound, described as not unlike a deep tremolo note on an organ. So persistent is this noise that boatmen complain that they cannot sleep at night where this fish is present, and they try to drive it off by splashing the water with their oars. It is a migratory fish, appearing on the coast between June and August. The Portuguese have recognized its value as food, and make its flesh an article of export, salting it and packing it in barrels for shipment to San Thomé and other markets.

Another fish of a certain commercial value is the *cassão*, a kind of dogfish frequenting the waters of the southern coast (Benguella to Mossamedes) at certain seasons of the year. A boat's crew of two or three blacks can generally count upon taking in a night's work 60 or 70 of these fish, and, if specially lucky, may catch as many as 300. The livers of the fish are boiled and the oil extracted for the purpose, chiefly, of adulterating whale and other fish oils. About 300 livers will yield a quarter cask of oil.

Of smaller fish, forming the food of both Europeans and natives, there is abundance everywhere. The phenomenon repeatedly observed at Dakar, and at Lanzarote and elsewhere in the Canaries, occurs not infrequently on these coasts; at times the mouths of the bays and the channels between islands and the mainland seem to be blocked by a seething mass of fish pressing shoreward. This is an incident of common occurrence near Ambriz, and also on the Mossamedes coast, where as many as eight tons of fish have been taken at a single throw of the seine net.

The Norwegian and American whalers who have undertaken to fish the coasts of southern Angola are stated to be doing so well that factories for extraction of the oil have been established by them on shore at different points, whereas formerly the work was done on board depot ships. In 1913 the exported products of this industry are stated by the British Consul-General to have fallen off somewhat, owing possibly to unrestrained slaughter of whales in the years preceding. But the figures given, if the earlier years of the industry be taken into account, go to show progress on the whole, despite fluctuations. Neither the consular figures nor those of the official *Anuario Colonial*, read alone, give a complete and conclusive idea of the trade, one set quoting quantities without values, the other the reverse. Inferentially, however, something can be made of them by collating the information they give, and a careful scrutiny would appear to warrant the figures shown in the following table, which, incom-

plete as it is, conveys the general impression of a progressive industry:

		Quantities.	Values.
		Kg.	£
1910.	Whale oil alone . . .	2,160,000	25,920
1911.	All whale products . .	(not stated)	93,846
1912.	,, ,, . .	,,	158,652
1913.	,, ,, . .	,,	145,940
1914.	,, ,, . .	12,716,791	(not stated)
,,	Whale oil alone . . .	9,786,433	,,

(4) Minerals

The mineral wealth of the province, hitherto for the most part unexploited, consists, as far as is known, of malachite and other copper ores, iron, gold, sulphur, gypsum, petroleum, and salt.

Copper ores.—Malachite is to be found in the vicinity of Bembe, in the interior of the Congo district, to the south of San Salvador do Congo. A valley separates the Bembe table-land from the high flat country to the north and east, and through this valley a stream has cut its way, exposing the clay slate of the table-land in a perpendicular wall on one side, the opposite bank being a gentle slope, throughout which irregular patches of malachite occur. The discovery of deposits is also reported from lower down the Brije river on which Bembe stands, and also on the Kuvo, about 25 miles from its mouth. The malachite is often found in solid blocks; Joachim Monteiro[1] describes three of these which together weighed a little over three tons. But, he adds, it generally occurs in flat veins without any definite dip or order, sometimes over two feet thick, and much fissured from admixture with dark oxide of iron, and sometimes cemented by the latter to the ferruginous clay containing it.

In the forties and fifties of last century, during a period of fifteen years, from 200 to 300 tons annually used to be brought down to Ambriz for sale by natives

[1] *Angola and the River Congo*, i. 190.

of the interior. This fact drew the attention of capitalists to its possibilities, and an English company, the Western Africa Malachite Copper Mining Company, took up a concession in the Bembe valley. This company was badly served by the men it sent out, and failed to make a thorough exploration of the deposits, though several of the shafts, sunk by them to a depth of 36 to 48 ft., showed very encouraging prospects and revealed, in most cases, a bottom of pure malachite. As no malachite was found in the clay-slate rock, it was concluded that the deposit was water-borne. About 1859 the company abandoned the mine, ascribing the failure of its operations to the loss of many of the Cornish miners employed—a loss due more to ignorance of tropical conditions and neglect of personal hygiene than to the direct influence of the climate. The natives then resumed the working of the ore, and made it pay them, though they too, by mining it in their own primitive and dangerous fashion, lost many of their number, buried alive through neglect of precautions.

A few years later, copper ore was found in the Benguella district, at Kwio (13° 6′ south latitude), about nine miles south of Dombe Grande. This ore was a deposit at the bottom of a small circular valley or depression in gneiss rock, evidently brought there by the action of water. Monteiro extracted about 1,000 tons of good ore from this bed, and considerably more from another bed higher up the River Kopororo, in which traces of silver also appeared, amounting occasionally to 100 ounces in the ton. In one place the same explorer reports having found a few tons of lead ore.

The only copper discovered by Monteiro *in situ* was inland from Mossamedes, where the schistose rock changes to a quartzose granite, and in places to a fine-grained porphyry; in these are found quartzose veins with small strings or lodes of sulphide of copper, very rich, but in quantity too scanty to repay the labour of extraction. In the interior of Lunda also there must be a certain amount of copper ore, as the caravans bring

down blocks of copper, curiously shaped like the letter X, and said to be smelted by the natives of that region.

Gold.—Two auriferous deposits were discovered about twenty years ago, one in Golungo Alto, the other in Bailundo. The former, on the banks of the River Lombiye, is merely alluvial, and has not proved remunerative to any of the companies which from time to time have attempted the working of it. In the Kassinga district of Mossamedes, about 1902, gold-bearing sands and some veins of gold in quartz were discovered on the banks of the Shitanda, and companies were formed to work the find. No record of results is available, and these companies do not now appear in the lists. In the interior of Benguella, in regions now being opened up by the Benguella Railway, gold has been discovered, chiefly in the streams rising in the Serra Andrade Corvo, and in the Huambo country. It is hoped that the construction of a line from Porto Alexandre to Humbe will open up some further regions where gold is believed to exist.

Gypsum is found in considerable quantities, along with a certain amount of sulphur, at Morro das Langostas, on the coast a few miles north of Loanda. On the road from Dombe Grande to Kwio, deep perpendicular ravines show an extensive surface of gypsum rock, which can be made into excellent plaster of Paris by processes so simple that no skilled labour is necessary. In other parts of Benguella it is reported to be equally abundant.

Iron has been found in the valley of the Lukalla, one of the tributaries of the Kwanza, and also in much larger quantities in Bailundo. In the former region, at Oeiras, smelting works were erected, but had to be abandoned owing to the unhealthiness of the climate.

Petroleum.—In Dande, on the slopes of Lilongo, and at Kitatua and Kabangana, petroleum is found in the form of bitumen, formerly used for caulking the seams of boats. It used to be brought in by the natives of that region in payment of taxes. Another fairly

important deposit is at Quizao, in the Congo district, where for many years it was made fetish by the natives in order to conceal its existence from Europeans. The point at Musserra is composed of sandstone, from the lower beds of which pitch oozes out in the hot season.

Salt is extensively worked on the coast between Kinsembo (Quissembo) and Ambrizette, particularly in the vicinity of the latter, where there are innumerable salt marshes. At the end of the dry season, the native women and children who devote themselves to this occupation divide the surface of the marshes into little square plots enclosed within mud walls a few inches in height and each containing about two or three gallons of brine. The marsh water evaporates under the sun and deposits its salt on the mud of the floor. When possible, it is supplemented by cutting small channels so as to admit sea-water at high tide. From these pans baskets are filled. The salt, which is very muddy, is purified by pouring sea-water over it till all the mud disappears, leaving the salt crystals white and shining. Towards evening the workers carry their loaded baskets home to the town. Each worker is independent of her neighbour, her claim being marked out by fetish-sticks erected at the corners. This industry has a by-product in the numerous small fish captured incidentally within the enclosures and subsequently cured in the sun and sold to natives returning to the interior.

In 1914–15 similar salt-pans were first worked between Lobito and Katumbella, and, as those places are on the railway to the interior, the industry has a fair future before it, salt being scarce and in great demand up-country.

Sulphur occurs in considerable quantities in the gypsum hills of Dombe Grande, and the cliffs by the River Giraul, near Mossamedes, are frequently covered with an abundant efflorescence of almost pure sulphate of magnesia.

(5) Manufactures

The chief manufactures of the province are fish-curing (mainly in southern Angola), sugar-making (at Novo Redondo and elsewhere in the central coast region), soap-boiling (at Loanda), and the preliminary treatment of rubber, as far as possible by the methods employed on the Ceylon and Malay plantations.

A *sugar-producing* enterprise was started at Novo Redondo about 1910 by a planter, Mr. V. P. Leiro, who had some 1,200 acres of his estate under cane and desired to use up-to-date methods. The installation was supplied by the Compagnie de Fives-Lille, France, with the exception of the granulating machinery, obtained from Messrs. Watson, Laidlaw & Co., of Glasgow. The maximum output of the factory is 6,000 tons of sugar per annum, but in 1913 the produce available was only sufficient to yield 2,000 tons; the owner expected, however, to succeed within four or five years in raising the output to the factory's full capacity. For the supply of electric power he has constructed a dam about two miles farther up-stream, where he is erecting turbines and accessory machinery.

A mill capable of handling 7,000 tons of cane per annum is reported to have been erected in 1914 at Kassekel, eight miles from Lobito, by the Sociedade Agricola de Cassequel. In the following year machinery capable of treating 3,000 tons of cane per annum was erected at Katumbella in the same region, but as this enterprise was of German origin, and all Germans were then compelled to leave the province, the factory has suffered from lack of a competent technical staff for planting and manufacturing.

The *soap-making* and *rubber-cleaning* industries are as yet in their infancy in the province. In 1913 an oil and soap factory was being erected at Loanda by a Hull firm of contractors for the production of a high-class soap in addition to the common soap previously manufactured there. Rubber-cleaning machinery has been introduced by an Englishman settled at Bihé on

the Benguella Railway, and an English company (the Valour Rubber Extracting Machine Company, Ltd.) is pushing its machinery in the province.

(6) Power

Besides Mr. V. P. Leiro's installation at Novo Redondo mentioned above, the Benguella Railway Company has effected an agreement with the Lobito, Benguella, and Katumbella Electric Light and Power Company, Ltd. (practically an English enterprise), for the lighting of its wharves, stations, offices, and warehouses. The latter company has a concession for ninety-nine years dating from 1906, under which it has already provided for the lighting of the three towns from which it takes its name. It is stated that power for the main generating station will eventually be obtained from the Katumbella river, where dam works were in course of construction;[1] but for present use two Garrett superheated steam-engines, each of 160 horse-power, have been installed on a siding of the railway. The whole of the street lighting is said to be complete, and the company further expects a good return from electric fans and other cooling plant, also from electric pumps for irrigation works and for house water-supply.

This undertaking is but a single instance of the possibilities of Angola, here developed, but elsewhere, for the most part, allowed to remain dormant. Costa Serrao, writing on the agriculture and manufactures of Angola, urges the immediate utilization of the falls of the Dande, Lukalla, and Kwanza rivers, which, he states, are capable of producing 30,000, 34,000, and 257,000 horse-power respectively. These three sources, supplemented by an irrigation scheme calculated to create an energy of 80,000 horse-power, would, if employed for the production of electric power, yield an annual gross return of £500,000, and would serve to convert the district into a fabulously rich centre of production.

[1] See *The African World* of February 7, 1914.

(C) COMMERCE

(1) Domestic

Germany, followed in recent years by Italy, has announced the discovery that the province of Angola, subject to certain tariff modifications and a general modernization of official methods of procedure, is capable of becoming an excellent market for European trade. This belief had been translated into practice by Germany some years before the war, but Italy had not advanced beyond the stage of prospecting when both countries had to break off their trade operations.

(*a*) *Principal Branches of Trade*

Textiles, mostly of the cheaper grades manufactured to meet native demands, are the leading import of the colony, and therefore the chief commodity of its domestic trade. The tariff of the province is designed to protect Portuguese goods of this description, but has failed to do so completely, owing to the inferiority of the Portuguese article compared with that made elsewhere in Europe for the same class of customer. Next in order come canned goods, groceries, wine, beer and spirits, machinery, hardware and cutlery, clocks, watches and cheap jewellery, haberdashery, boots and shoes, and cement.

(*b*) *Towns, Markets, &c.*

Loanda, the capital of the province, has hitherto been the most important market for imports, though its preeminence is challenged by *Lobito*, with its excellent harbour and railway communications. Now, however, that Government has taken over the existing line of the Companhia do Caminho de Ferro atravéz de Africa, which never penetrated beyond Lukalla, and proposes to carry forward its extension, the Malange line, into the district of Lunda as far as the frontiers of the Belgian Congo, it is possible that Loanda may

retain, or regain, its former ascendancy. *Benguella* used to do a large trade, but the town of Lobito, which is bound to grow in size and importance, has already made serious inroads upon local commerce, not only at Benguella but also at *Katumbella*, which from a considerable exchange centre in earlier days, is now reduced to a village subordinate to Lobito. It is to this district, and especially to its upland interior, that Italian attention has been specially drawn. The latter regions enjoy a climate suited to European colonization and manual labour, and at the same time possess a large native population, which is not the case with the corresponding regions inland from Loanda.

Farther south, *Mossamedes* and its upland interior (Huilla district) are also suitable for development, with the added advantage that even the coast belt may be regarded as a white man's country. It is a matter of common observation that the up-country stores are very deficient in what is known as 'Kaffir truck' goods, such articles as form their stock-in-trade being both inferior and devoid of variety. This region used to be worked specially by German traders, owing to its proximity to South-west Africa and to the ulterior political aims of their nation in respect of southern Angola. It should offer the most promising field for British and South African commercial enterprise after the war.

Mention must also be made of the ports and towns of the Congo district and the Cabinda enclave. Down to the outbreak of war, these used to do a considerable export trade, conducted almost entirely by barter against European manufactured articles. *Ambriz*, *Ambrizette*, and *Santo Antonio* are still active, as they retain some share in the coasting service of the Companhia Nacional de Navegação. From *Cabinda* and *Landana* complaints are loud and persistent, as for two years no vessel has called at either to take the produce accumulating on the wharves. All these ports are without interior railway communication, but as the region to the east of the three Congo ports

is very rich, and as the hinterland of the Cabinda enclave, rich also, is likely to be opened up by rail, their import trade may be expected to increase with the creation of new markets for goods in the French and Belgian interior. Even as it is, their water-borne trade is important. Landana is a valuable commercial centre. Stores of influential firms have been established along the Shiloango river, some of these, by agreement with the Belgian Government, being set up on the left bank in Belgian territory; the produce bought or acquired by barter is brought down to Landana for shipment. The imports into the Landana district are cotton goods, woollens, hosiery, blankets, quilts, jute carpets and rugs, jute bags, hardware, earthenware, palm-oil casks, lime, tar, cement, and provisions. For all these there is a ready market.

(c) *Organizations to promote Trade and Commerce*

As far as Portuguese West Africa is concerned, the most important of these are to be found in Lisbon, the only bodies in Angola dealing directly with trade questions being the Chambers of Commerce at Loanda, Benguella, and Mossamedes. In Lisbon there are the Agencia Colonial, Ltda., the Centro Colonial, the Commerciantes de Angola Residentes na Metropole, the Commerciantes de Angola, the Junta da Defeza dos Direitos d'Africa, and the União Colonial Portugueza.

Of these the Agencia Colonial is the most active. This is a purely business undertaking, and deals with colonial trade in sections corresponding to the individual provinces. It still publishes a monthly journal, the *Revista Colonial*, which used to be a valuable organ in the days when Dr. Souza Ribeiro was at the head of affairs (up to 1914).

The Centro Colonial retains only a limited connexion with Angola, having deputed its daughter organization, the Sociedade de Emigração para San Thomé e Principe, to undertake the principal part of the business (labour

recruiting) which brought it into relationship with the mainland colony. It now concerns itself almost exclusively with the affairs of the cocoa islands. The Commerciantes de Angola Residentes na Metropole and the Commerciantes de Angola are reputable associations, doing useful work in Lisbon in the interests of the colonial mercantile community. The Junta da Defeza dos Direitos d'Africa is a small group composed mainly of negroes from San Thomé and Principe. It has branches in both islands, but does not appear to have much support in Angola. The União Colonial Portugueza is also a semi-political organization ; its membership is small.

(*d*) *British Interests*

In the capital of the province British interests are represented by a single business house, the Angola Coaling Co., which exists only in virtue of the exemption of coal from the general protective tariff. A British consul-general is stationed here, and under him are a vice-consul at Lobito and an honorary vice-consul at Benguella. At the two last-named places, and at Katumbella, there are two companies registered as Portuguese, with capital mainly British, the Lobito, Benguella, and Katumbella Electric Light and Power Co., and the Benguella Railway Co.

(*e*) *Methods of Economic Penetration*

Down to 1916, when Germany declared war upon Portugal, German interests were represented at Loanda by a consul, assisted by an honorary vice-consul; at Benguella by an honorary consul who was at the same time consul for Belgium; and at Mossamedes by an honorary consul who was head of the commercial house of G. Schöss & Co., of Mossamedes and Humpata. Germany's traders and consuls had from time to time been reinforced by pseudo-scientific explorers, notably the German engineer, Schubert, and Dr. Schatzabel, who declared himself to be an ethnographer. On the

spot, these German agents made no concealment of their national intention of dealing with Angola as a sphere of influence for German trade.

(2) Foreign

(a) *Exports*

In the years immediately before the war the exports from Angola showed a marked tendency to diminish. Thus while in 1910 their total value was nearly 8,500,000 *escudos*, it had fallen below 6,000,000 in 1911. In 1912 it rose to nearly 7,000,000 *escudos*, but in 1913 it was only 5,600,000 *escudos*, and in 1914 5,200,000 *escudos*.

Of the principal article of export, *rubber*, there has been a steady decrease in quantity and a very considerable decrease in value. On the other hand, in the case of *coffee*, the next most important commodity, in the years 1910 to 1912 the quantity exported declined, but the value rose not only relatively but actually; in 1913, however, there was an increase in the quantity and a fall in price. Of the goods exported in smaller quantities, *wax* has shown a consistent slight increase and a steady price, and *sugar* a very considerable increase since 1911; *palm kernels* have fluctuated within well-defined limits. Certain articles, e.g. raw cotton, ivory, and whale oil, appear to have been exported in some years and not in others, but it is possible that in the years for which no figures are given for these commodities they are included among the unspecified articles (see Appendix, Table II).[1]

[1] The figures given in the Appendix are reproduced, and to a certain extent rearranged, from the statistics given in the *Anuario Colonial* of 1916. As will be seen, those relating to unspecified commodities are a matter of inference, if not of conjecture, from the differences between total exports and the totals of the lists of principal exports. But none of the tables can be relied upon as rigorously correct, for even obvious errors abound; in one of the years reviewed the total of the specified goods, which constitute only a part of the exports, exceeds the total of all the exports. The *Anuario Colonial* gives no detailed information as to the destination of exports.

(b) *Imports*

There are no details available in respect of specific classes of goods imported into Angola. These goods, however, are such as are normally supplied to African colonial countries, i. e. cotton piece goods, railway and building materials, and articles of general necessity. The total values[1] of the imports for the years 1910–14 are given in the Appendix (Table III).

(c) *Customs and Tariffs*

The existing organization of the Customs services dates from October 25, 1899, when a decree of the Colonial Ministry created two separate circles for Angola and San Thomé, each subject to the Government of its own province. In Angola there are three distinct tariffs in force, one for Loanda, Benguella, and Mossamedes, another for Ambriz, and a third for the Congo. The first-named is the rigidly protectionist tariff of 1892 with a few subsequent modifications, the most important of which relate to duties on alcohol and sugar; the second and third are more generous to foreign traders, who, however, do not appear, in recent years at least, to have been attracted in any large numbers.

(i) *The Loanda–Benguella–Mossamedes Tariff.*—The commodities in respect of which foreign competition seems to be most feared, judging from the duties payable upon them, are alcohol in the form of brandy or whisky, which is charged from 3 to 4 *escudos* per decalitre (2·2 gallons); footwear for Europeans,

[1] The totals given in the *Anuario Colonial* do not agree with those in the only British Consular Reports (1913 and 1914) which contain figured statements of imports. The discrepancy may possibly be due to the inclusion in the former of figures for the coasting trade between Angola ports, and their exclusion from the latter; or, more probably, though nominally covering the total trade, the consular figures may relate only to the general (foreign) trade of the country exclusive of that with the mother country. There is no trustworthy information as to countries of origin.

which pays 1 *escudo* per kg.; and textiles, paying 25 cents to 2·50 *escudos* per kg. according to the proportion of cotton, wool, or silk they contain. Unspecified goods pay 25 per cent. *ad valorem.*

(ii) *The Ambriz Tariff.*—The history of this scale of duties is interesting for its bearing upon the dominant fiscal theory of exclusive tariffs designed to foster a trade purely Portuguese. Joachim Monteiro, whose writings show him to have been emancipated from the prevailing traditions, narrates that up to the year 1855, when the Portuguese first occupied Ambriz, the River Loge, upon which it stands, marked the northern boundary of Portuguese Angola, the country beyond, nominally the kingdom of Congo, being in the hands of natives who ruled it according to their own laws, and owed no allegiance to any white authority. American and British traders had established themselves at the town, and used to buy gum copal, malachite, and ivory, or acquire these in barter for Manchester goods and other wares.

The Portuguese signalized their assumption of sovereignty at Ambriz by setting up a custom-house and imposing high duties on all goods imported. The foreign houses at once removed to Kinsembo, six miles off, on the other side of the river, and thenceforward for many years the duties levied at Ambriz barely sufficed to pay the totally inadequate salaries of the custom-house officials. When Monteiro established himself in trade at Ambriz he persuaded the Governor-General of Angola, in the teeth of violent opposition on the part of the petty merchants and functionaries of Loanda, to reduce the duties leviable at Ambriz to 6 per cent. *ad valorem* on all imports, so as to enable the remaining factories of that town to compete with those of Kinsembo, which was a free port except for certain small annual payments, amounting to a few pounds in value, made to the native chiefs in the form of gifts of cloth, &c. The result was eminently satisfactory, and the bulk of the trade which had left Ambriz with the exception of that in ivory, returned to its

former market.[1] Moreover, the duties on the reduced scale yielded so considerable a revenue that a surplus amounting to one-third of the whole could be, and was, devoted to public works—among others to the construction of the only iron pier which Angola possessed for many years.

The Ambriz tariff remains moderate to this day, though it has undergone some modification since the period to which Monteiro's story relates. Arms, ammunition, gunpowder, small wares, and salt pay 10 per cent. *ad valorem*; foreign sailing or steam vessels, of over 200 cubic metres capacity, pay 12 per cent. *ad valorem*; wines, spirits, and liqueurs pay on the scale of the Loanda tariff; and other notable items are a 10 per cent. duty on watches, and a 25 per cent. duty on clocks, as at Loanda.

(iii) *The Congo Tariff.*—The tariff for the Congo district remains reasonable, the 6 per cent. *ad valorem* rate being retained for most imports, the exceptions taxed more highly being the same as for Ambriz. Alcohol has a special regime, conformably with Art. 92 of the Minutes of the Conference at Brussels.

(*d*) *Commercial Treaties*

The Anglo-Portuguese Treaty of Navigation and Commerce (1914, ratified 1916) has not yet been extended to the Portuguese overseas possessions.

(D) FINANCE

(1) *Public Finance*

Budget Estimates.—The Provincial Budget Estimates for 1916–17 are given in Table IV of the Appendix, along with a comparative statement of the total revenue for the three years immediately preceding (1912–13 to 1914–15). The latter shows the annually recurring differences between estimated and actual receipts; the fluctuations in expenditure for those years are also

[1] *Angola and the River Congo*, i. 153–4.

recorded, with the aggregate deficit for the same period, insufficiency of revenue being a persistent characteristic of the finance of the province. Under the same table are shown the method employed for meeting the deficit for the triennium in question, and also the final adjustments for the twenty-five years preceding (1889 to 1913), from which it appears that an expedient which might be admissible to meet a temporary case of urgency has been allowed to develop into an established financial practice.

In the statement of revenue and expenditure several items call for explanation. 'Compensation from expenditure' (*compensações de despezas*) means the sums recovered incidentally from an item of outlay not susceptible of estimate in advance. These would include, for instance, the sale proceeds of materials from a building dismantled or a plantation felled for public reasons, such as to make way for a road or railway, or to admit of reconstruction on a different plan. On the side of expenditure the term 'closed accounts' (*exercicios findos*) means unadjusted items not discharged in the year for which their payment was estimated, and therefore brought over in the accounts of a subsequent year. A notable instance of the kind is to be found in the excess expenditure shown in 1913–14 over that of the year immediately preceding. In this case a large number of charges upon public funds could not be met when due for payment, owing to non-receipt of the annual grant-in-aid required to maintain the solvency of the colony. Hence settlement of these had to be postponed till the money arrived from Lisbon. Again, the term 'extraordinary expenditure' covers certain major heads of outlay, such as hygiene, sanitation, and poor-law administration, road-making and public works, military expenditure, and miscellaneous expenditure not otherwise provided for. The use of such a patently elastic expression is open to serious objection from the point of view of the auditor. Thus the information given by the *Anuario Colonial* (1916) regarding the pro-

gramme of road-making and public works is instructive. The total sum assigned for the public works of the six districts of the province was 151,000 *escudos*, but the sum actually expended was 109,583 *escudos*. The balance of 41,417 *escudos* is claimed as an economy, which, it is admitted, has been effected only by deferring the appointment of men required to fill existing vacancies on the sanctioned establishment, and consequently by rendering impossible of execution a number of more or less important items on the sanctioned programme.

The practice of adjusting the deficits of one colony by transferring to it the surpluses earned in another seems open to grave objection. Such appropriations deprive the colony whose budget shows the surplus of the incentive to further improvement which would result from the free control and disposal of funds which really belong to it, and on the other hand they tend to pauperize the backward colony by fostering a habit of dependence upon doles which it has done nothing to earn, instead of stimulating it to raise its own administrative standards and fiscal methods to the level of its more successful sister-colony. As is evident, Angola does not even pay its way, but nevertheless relies for revenue almost exclusively upon a protective tariff which, though it yields a certain income, at the same time drives away those who might become its best customers, and whose trade, if encouraged, would considerably raise the wealth and revenues of the province.

Taxation.—Direct taxation exists in Angola only in the form of a hut tax (*imposto de cubata*) levied exclusively upon the natives. Hitherto its assessment appears to have been more or less arbitrary, and in earlier times was accompanied by much corruption and extortion. Such native risings as have from time to time taken place in the colony have generally been caused by this tax or by the manner of its collection. This matter is one of the subjects now being studied by the Department of Native Affairs charged with the census of the people and the codification of native customary law.

The expenditure which in a British possession of a similar order, with a fairly large and for the most part prosperous European agricultural community, would be met by income-tax, succession duty, and possibly a trade and profession tax, here has to be met almost entirely from the proceeds of the duty on imports and exports. It is true that certain licence taxes are levied: for big game hunting a resident's ordinary licence costs 15 *escudos* per annum, a special licence 25 *escudos* while non-residents pay twice these rates; ordinary prospecting licences cost 5 *escudos*, and special licences 50 *escudos*, the latter entitling the prospector to declare a much higher number of claims. Similar fees are charged for the demarcation of grants and concessions of lands; but as all are, properly speaking, payments for definite rights or privileges, they are hardly of the nature of taxation in the general revenue sense of the term.

(2) *Currency*

The currency of Angola is that of Portugal, and the standard coin is the *escudo* or Portuguese silver dollar, at present (1918) worth about 2*s.* 6*d.*, but in theory still reckoned at its former par value of two-ninths of a pound sterling (4*s.* 5¼*d.*)—a rate not attained since the close of last century. Both at home and in the colonies, the currency is mostly paper, and in the case of Angola the medium is notes of the Banco Nacional Ultramarino at Loanda, which, under a monopoly embodied in its charter, is the sole bank of issue. These notes circulate at face value within the limits of the colony where issued, but are not current save at a discount in the other colonies, nor in Portugal itself.

(3) *Banking*

The Banco Nacional Ultramarino still retains its rights of issue to the exclusion of all other institutions, but the whole system of colonial banking has been under revision for some years, and a new colonial bank, the Banco Colonial Portuguez, has recently (1918)

been chartered and empowered to do ordinary banking business, to make advances on mortgage, and to perform the usual credit operations, including the discounting of mercantile paper and negotiable instruments generally. Its intention is to establish branches in Angola and elsewhere in the Portuguese overseas possessions, but definite information as to the present stage of its development is not yet to hand.

(4) *Influence of Foreign Capital*

In addition to the British interests mentioned on p. 77, it may be noted that a concession, largely French, has existed since 1894 in the Mossamedes district of southern Angola, the Companhia de Mossâmedes. Its original capital, increased in 1901, was 2,250,000 *escudos*, then taken as equivalent to 13,750,000 francs (£550,000), but, at present exchange, worth only 7,300,000 francs, or £280,000. Its head offices are in Lisbon, with a branch committee in Paris and an agency in London.

(5) *Possible Fields for Investment*

In northern Angola, mineral resources may repay further investigations; but available information is scanty. The same is true of the timber resources of the province. Openings for trade seem to offer themselves in the Mossamedes and Huilla districts, and in the Congo district, including the Cabinda enclave: it is believed that the authorities of French Equatorial Africa and the Belgian Congo have under consideration schemes of railway development embracing extensions into Cabinda.

On the whole, agricultural enterprise, notably in the cultivation on a large scale of the ground-nut, the coconut, and the oil-palm, seems to offer the fairest field for the investment of capital.

TABLE

OCEAN-GOING SHIPPING: ENTRIES

Year and Flag.	Loanda. Vessels. Sail.	Loanda. Vessels. Steam.	Loanda. Tonnage.	Lobito. Vessels. Sail.	Lobito. Vessels. Steam.	Lobito. Tonnage.	Benguella. Vessels. Sail.	Benguella. Vessels. Steam.	Benguella. Tonnage.
1909									
Entered:									
Portuguese .	6	75	189,994		72	177,367		71	108,931
British . .		18	35,310		15	42,421			
German .		12	22,088		10	21,179		12	21,333
Other Nationalities	1	15	4,387						
Total entered .	7	120	251,779		97	240,967		83	130,264
1911									
Entered:									
Portuguese .	3	80	192,517		65	180,240	1	51	122,062
British . .		26	42,270		16	58,032			
German. .		13	31,221		5	13,710		13	34,116
Other Nationalities	1	28	6,622	1	2	1,861		6	4,870
Total entered.	4	147	272,630	1	88	253,843		170	161,048
1913									
Entered:									
Portuguese .		85	210,919		71	180,128		59	134,133
British . .		5	6,987		19	69,260			
German .		17	50,962		9	31,094		13	44,923
Other Nationalities .	2	49	11,688				3	26	10,941
Total entered	2	156	280,556		99	280,482	3	98	189,997

I

AT ANGOLA PORTS, 1909, 1911, and 1913

Mossamedes. Vessels.			*Ambriz.* Vessels.			*Total.* Vessels.		
Sail.	*Steam.*	*Tonnage.*	*Sail.*	*Steam.*	*Tonnage.*	*Sail.*	*Steam.*	*Tonnage.*
1	36	75,380		57	92,532	7	311	644,204
	3	2,475					36	80,206
	16	26,776		6	9,996		56	101,374
	18	287				1	33	4,674
1	73	104,918		63	102,528	8	436	830,458
1	45	105,539		50	96,935	5	291	697,293
	3	3,594					45	103,896
	12	29,472		7	15,010		50	123,529
2	6	8,534				4	42	21,487
3	66	147,139		57	111,945	9	428	946,205
	38	84,288		46	101,044		299	710,512
	7	5,218					31	81,465
	16	55,842		2	7,044		57	189,865
1	20	10,857				6	95	33,486
1	81	156,205		48	108,088	6	482	1,015,328

TABLE II

EXPORTS FROM ANGOLA, 1910–13

Commodity.	1910. Quantity. Metric tons.	1910. Value. Escudos.	1911. Quantity. Metric tons.	1911. Value. Escudos.	1912. Quantity. Metric tons.	1912. Value. Escudos.	1913. Quantity. Metric tons.	1913. Value. Escudos.
Beans . .					180·2	6,635		
Cocoa . .	16·8	3,407						
Coffee . .	6,056·4	951,042	4,446·7	1,022,873	4,031·3	1,046,438	4,833·5	898,949
Cotton (raw) .	144·3	54,556	123·2				3,562·2	139,018
Fish (dried) .	3,777·7	159,869	5,539·7	214,765	3,687·5	145,072		
Fuba (manioc meal)						88,494		
Hides . . .						72,632		
Ivory . . .	3·6	4,868	1	3,944				
Oxen (head of) .	1,014	40,123	2,027	38,101	4,733	44,680		
Palm kernels (tons)	2,317·5	153,254	3,360·3	222,638	2,046	147,815	3,760·4	354,390
Rubber . .	3,282·8	6,207,826	2,538·2	3,089,559	2,737·1	3,747,870	2,002·2	1,993,907
Sugar . . .	1,717·5	154,102	1,157·6	104,593	3,262	288,946	4,561·5	410,787
Wax . . .	716·7	422,652	742·7	432,107	791·3	487,687	813	515,836
Whale oil . .	2,160	129,600			11,622·7	825,842		
Unspecified . .		175,296		750,332		46,831		1,292,492
Total (in *escudos*)		8,456,595		5,878,912		6,948,942		5,605,379

TABLE III

IMPORTS INTO ANGOLA,[1] 1910-14

Year.	*Value. Escudos.*	*Duties. Escudos.*
1910		
General (Foreign Countries)	3,908,968	908,899
National (from Portugal)	5,336,101	226,684
Total	9,245,069	1,135,583
1911		
General	5,886,923	628,869
National	2,796,488	114,770
Total	8,683,411	743,639
1912		
General	5,466,946	525,963
National	2,657,761	102,791
Total	8,124,707	628,754
1913		
General	5,952,076	462,643
National	2,956,669	86,958
Total	8,908,745	549,601
1914		
General	5,214,467	336,927
National	5,239,695	80,946
Total	10,454,162	417,873

[1] Authority, *Anuario Colonial.*

TABLE IV

PUBLIC FINANCE OF ANGOLA

A. *Budget Estimates for* 1916–17

Revenue.	*Escudos.*	*Expenditure.*	*Escudos.*
Direct taxation and contributions . .	674,950	General administration	1,886,612
Indirect taxation .	383,700	Treasury . . .	244,845
National and miscellaneous . . .	176,106	Law and Justice . .	80,890
Compensation from expenditure [1] . .	15,480	Ecclesiastic. . .	27,463
Revenue for special objects and for local self-government . .	1,897,895	Marine . . .	219,180
		Military . . .	1,941,700
		General charges . .	197,552
		Miscellaneous . .	379,624
		Closed accounts [1] .	8,500
	3,148,131		4,986,366
Grant-in-aid from Home Government . .	3,397,310	Extraordinary expenditure [1] . . .	1,559,075
Escudos	6,545,441	*Escudos*	6,545,441

[1] For explanations, see above, p. 82.

B. *Revenue estimated and Revenue realized,* 1913–14–15

Revenue Estimated.	*Escudos.*	*Revenue Realized.*	*Escudos.*
Estimate 1912–13 .	2,282,634	Actual 1912–13 . .	1,917,142
		Over-estimate . .	365,492
			2,282,634
Estimate 1913–14 .	2,809,022	Actual 1913–14 . .	1,608,009
		Over-estimate . .	1,201,013
			2,809,022
Estimate 1914–15 .	2,809,022	Actual 1914–15 . .	1,256,773
		Over-estimate . .	1,552,249
			2,809,022

C. *Deficits,* 1913–14–15

Revenue.	*Escudos.*	*Expenditure.*	*Escudos.*
For 1912–13 . .	1,917,142	For 1912–13 . .	2,749,890
1913–14 . .	1,608,009	1913–14 . .	4,007,814
1914–15 . .	1,256,773	1914–15 . .	3,570,607
	4,781,924		
Deficit . . .	5,546,387		
Total . .	10,328,311	Total . .	10,328,311

D. *Adjustment of Deficits*, 1913–14–15

Revenue.		*Escudos.*	*Expenditure.*	*Escudos.*
Grants-in-aid :			Deficit as per Table C .	5,546,387
From Home Government				
1912–13 . .		2,376,580		
1913–14 . .		1,020,132		
1914–15 . .		832,000		
		4,228,712		
Transfers of surplus :				
From San Thomé				
1913–14	310,000			
1914–15	200,000			
		510,000		
From Mozambique				
1913–14 . .		240,000		
From Guinea . .		113,000		
		5,091,712		
Temporary appropriations :				
Balance of deposits in Colonial Treasury, borrowed to meet urgent demands . .		48,288		
		5,140,000		
Balance still in default brought forward 1915–16 . .		406,387		
Escudos		5,546,387	*Escudos*	5,546,387

E. *Adjustment of Deficits*, 1889–1913

Adjustments.	*Escudos.*	*Sum Total of Deficits.*	*Escudos.*
Transfers :		1889–1913 . . .	2,674,000
From Cape Verde .	147,000		
Guinea . .	113,000		
San Thomé .	2,214,000		
Mozambique .	200,000		
Escudos	2,674,000	*Escudos*	2,674,000

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MAPS

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