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No. 1592

ANNUAL REPORT ON THE SOCIAL AND ECONOMIC PROGRESS OF THE PEOPLE OF

# NORTHERN RHODESIA, 1931

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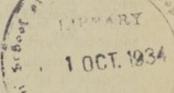
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# ANNUAL REPORT ON THE SOCIAL AND ECONOMIC PROGRESS OF THE PEOPLE OF NORTHERN RHODESIA, 1931

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# CHAPTER I.

# GEOGRAPHY, CLIMATE, AND HISTORY.

# Geography.

The territory known as the Protectorate of Northern Rhodesia lies between longitudes  $22^{\circ}$  E. and  $33^{\circ} 33'$  E. and between latitudes  $8^{\circ} 15'$  S. and  $18^{\circ}$  S. It is bounded on the west by Angola, on the north-west by the Belgian Congo, on the north-east by Tanganyika Territory, on the east by the Nyasaland Protectorate and Portuguese East Africa, and on the south by Southern Rhodesia and the mandated territory of South-West Africa, comprising in all an area that is computed to be about 288,400 square miles. The River Zambezi forms the greater part of the southern boundary ; its two main northern tributaries are the Rivers Kafue and Luangwa. With the exception of these river valleys, the territory consists of a table-land varying from 3,000 to 4,500 feet in height, though in the north-eastern portion, and especially in the vicinity of Lake Tanganyika, the altitude is greater.

#### History.

The little that is known of the early history of Northern Rhodesia is very fragmentary and is gleaned from the accounts of the few intrepid travellers who penetrated into this unknown territory. The curtain of obscurity lifts for a moment when we read the diaries of the Portuguese Governor of Sena, Dr. Lacerda, who led an expedition in 1798 from Tete into Kasembe's country, close to the eastern shores of Lake Mweru. He was followed in the early 19th century by two Portuguese traders, Baptista and José, who brought back stories of the great interior kingdom of the Balunda, which extended from Lake Mweru to the confines of Barotseland and included the whole of the country drained by the Upper Congo and its tributaries. This kingdom is reputed to have lasted from the 16th to the 19th century. Very few historical facts are known about it, but the name of Muati Yamvo, the dynastic title of the Paramount Chief, is associated, like Monomotapa, with many half-legendary stories. Neither of these expeditions was of any very great geographical value and it was not till 1851, when Dr. Livingstone made his great missionary journeys and travelled through Barotseland and in 1855 discovered the Victoria Falls, that the civilized world had its first authentic information of Northern Rhodesia. Other and later explorers who brought back stories of the barbarism of the natives, of the wealth of game, and of the glories of the Victoria Falls were Serpa Pinto, Cameron, Selous, and Arnot.

From the very early days when the hordes of migratory Bantu swept southward from Central and Northern Africa, Northern Rhodesia has been subject to constant invasions from stronger tribes on its borders, so much so, that the vast majority of the present native population, though of Bantu origin, is descended from men who themselves invaded this country not earlier than 1700 A.D. One or two small tribes, numbering now only a very few thousand, such as the Masubia on the Zambezi, are all that remain of the inhabitants of Northern Rhodesia prior to that date. Though the story of these invasions has passed into oblivion, their traces remain in the extraordinary number and diversity of races and of languages in the country.

At the present time statistics are available of seventy different tribes resident in the territory, of which the most important are the Awemba (110,659), Achewa (75,108), Angoni (50,632), Awisa (41,706) in the Eastern Districts; the Barotse (55,123), Batonga (95,445), Balenje (39,580), Balovale (58,853), Balaonde (33,642), Baila (21,632) in the Western Districts; and the Asenga (64,546) and Alunda (66,445) members of which are resident in both Eastern and Western Districts. There are said to be 50 distinct native dialects in use, of which Chiwemba and Chinyanja have been adopted for educational purposes in the Eastern Districts and Chitonga (closely allied to Chila) and Sikololo in the Western. In addition to these, Chinyanja is in use as the official language of

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the police, and is probably the language most generally spoken by Europeans; it is, in reality, a Nyasaland language—the word means "Language of the Lake "—but it is also spoken to some extent round Fort Jameson.

The chief invaders of the early part of the 19th century were the Arabs from the north; the Angoni, a branch of the early Zulus who fied from the oppressive tyranny of Tchaka and who settled in the north-east of the territory; and the Makalolo, an offshoot of the Basuto family, who, in the beginning of the 19th century, fought their way from the south through Bechuanaland and across the Zambezi under the noted Chief Sebitoani; they conquered the Batoka, the Basubia, and the Barotse and founded a kingdom which was distinguished by a comparatively high degree of social organization.

The duration of the Makalolo kingdom was short. Soon after the death of Sebitoani, the Barotse rebelled and massacred the Makalolo to a man. The influence of their occupation is still to be seen in the Sikololo language, which is largely spoken amongst the tribes near the Zambezi. The Barotse under Lewanika enlarged their kingdom by conquering one or two of the surrounding tribes, such as the Bankoya and the Balovale. Beyond these limits their authority was both nebulous and ephemeral.

In the year 1891 Lewanika was informed that the protection of Her Majesty's Government had been extended to his country as he had requested it should be, and on 17th October, 1900, the Barotse Concession was signed by him and his Chiefs and representatives of the Chartered Company. The concession was in due course confirmed by the Secretary of State for the Colonies and under its terms the Company acquired certain trading and mineral rights over the whole of Lewanika's dominion, while the Paramount Chief was to receive, among other advantages, an annual subsidy of £850.

During this time the slave trade established by the Arabs continued unchecked. Its baleful influence had gradually spread from the shores of Lake Nyasa and Tanganyika over the whole territory ; but with the establishment of a Government post at Abercorn in 1893, the slave trade in this part of Africa received its first serious check. In each succeeding year more Arab settlements on the Lake shore were destroyed. Sir Harry Johnston defeated the Arab Chief Mlozi at Karonga in 1894, and the last caravan of slaves, which was intercepted on its way to the east coast, was released at Fort Jameson in 1898. Even after that, bands of slave raiders were occasionally encountered on the north-east boundary, and skirmishes with them took place as late as 1900; but with the final establishment of the administration of the British South Africa Company the slavers quickly disappeared from the country.

The status of the conquered tribes under Lewanika's dominion was that of a mild form of slavery. This social serfdom was

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brought to an end by the edict of Lewanika, who in 1906 agreed to the emancipation of the slave tribes.

Previous to 1899 the whole territory had been vaguely included in the Charter granted to the British South Africa Company, but in that year the Barotseland—North-Western Rhodesia Order in Council placed the administration of the western portion of the country by the Company on a firm basis; and this was closely followed by the North-Eastern Rhodesia Order in Council of 1900 with similar effect. The two territories were amalgamated in 1911 under the designation of Northern Rhodesia, and the administration of the Company (subject to the exercise of certain powers of control by the Crown) continued until 1924, when, in terms of a settlement arrived at between the Crown and the Company, the administration of the territory was assumed by the Crown, and the first Governor was appointed on 1st April, 1924.

## Climate,

There are considerable climatic differences between various parts of the country. The Zambezi, the Luangwa, and the Kafue valleys experience a much greater humidity and a more trying heat than do the plateaux above 3,500 or 4,000 feet. The hottest months are October and November before the rains break, when the mean maximum is 97° in the Zambezi valley stations and 85° at plateau stations. The mean maximum for the eight months of the hot season (September to April) is approximately 90.3° with a mean minimum of 64.5° while the corresponding figures for the four months of the cold season (May to August) are 78.7° and 46.6°.

The following table gives representative temperatures for the territory experienced during 1931:

Place.	Highest mean Max. °F.	Month.	Lowest mean Min. °F.	Month.	Abso- lute Max.°F	Month.	Abso- lute Min.°F	Month.
Livingstone,		~	10.0			0.1		
3,000 ft	96.5	Oct.	46.0	July	104	Oct.	40	July-
Broken Hill,		~ .					10	Aug.
3,753 ft	88.8	Oct.	44.0	June	97	Nov.	42	June
Abercorn						10.000	1	
5,110 ft	83.0	Oct.	50.5	July	90	Nov.	45	June
Highes	t Temper	ature	11	2° Bai	rotse	National	Scho	ool.
Lowest	5	,,	2	1° Sec	eheke.			

The rainy season usually commences in November and lasts until April, after which month rain is rarely experienced and then in negligible quantities.

In the past year the rainfall throughout the southern portion of the territory was slightly above normal, starting in November and carrying on fairly regularly until April. Along the Congo Border the rainfall was exceptionally heavy and in consequence the Zambezi flood was unusually high. The winter was again cold and there occurred a very sudden drop of temperature early in September.

# CHAPTER II. GOVERNMENT. Central Administration.

The office of Governor was created by an Order of His Majesty in Council dated 20th February, 1924, and the first Governor assumed his duties on 1st April, 1924.

The Governor is advised by an Executive Council which consists of five members; the Chief Secretary, the Attorney-General, the Treasurer, the Secretary for Native Affairs, and the Director of Medical and Sanitary Services. Provision is also made for the inclusion of extraordinary members on special occasions.

The Order in Council provided that a Legislative Council should be constituted in accordance with the terms of the Northern Rhodesia (Legislative Council) Order in Council, dated 20th February, 1924, to consist of the Governor as President, the members of Executive Council *ex officio*, nominated official members not exceeding four in number, and five elected unofficial members.

In 1929 the number of elected unofficial members was increased to seven consequent upon the very considerable increase in the European population.

# Provincial Administration.

For administrative purposes the territory is divided into nine provinces, each of which is under a Provincial Commissioner responsible for his province to the Governor. The provinces are divided into districts under the charge of District Officers responsible to the Provincial Commissioners.

# Native Administration.

In 1929 the Native Authority Ordinance was passed and was subsequently applied as from 1st April, 1930, to all the territory with the exception of Barotseland. Barotseland was exempted from the application of the Ordinance on account of the rights which the Paramount Chief and his Khotla (Judicial and Deliberative Assembly) preserved under the concessions which he granted to the Chartered Company.

The Ordinance empowers the Governor to appoint in specified areas Native Authorities, consisting of one or more chiefs or other natives, to be responsible for the performance of the obligations imposed upon them by the Ordinance and for the maintenance of order and good government in the area. The Governor also has the power to suspend or dismiss members of such Native Authorities. The duties of the Authorities are clearly defined in the Ordinance which confers upon them power to make rules for certain objects. It is the duty of all natives to assist such Authorities in the work of administration. This system has, during the short time it has been in operation, worked satisfactorily, and there is no reason to doubt its ultimate success.

Native Treasuries have not yet been established, but steps are being taken to educate the Native Authorities in the matter of finance and the administration of public funds.

# CHAPTER III.

# POPULATION.

The first census of the territory took place on 7th May, 1911, prior to the amalgamation in the same year of North-Eastern and North-Western Rhodesia under the title Northern Rhodesia; the second was held on 3rd May, 1921, and the third on 5th May, 1931.

The following table shows the increase of population since 1911 (the figures for European population are census figures whilst those for native population are taken from the reports of the Secretary for Native Affairs):

	Year.	Europeans.	Increase per cent.	Natives.	Increase per cent.	Proportion of Africans to one European
1911		 1,497		821,063		548.47
1921		 3,634	143	979,704	19	$269 \cdot 59$
1931		 13,846	381	1,331,229	36	96.14

The increase in the number of Europeans between 1921 and 1931 is due to the influx which took place during the development of the copper mines in the Ndola District between 1927 and 1931. The mines had nearly completed construction towards the end of the year and a considerable number of Europeans left the territory as a consequence.

The numbers of Asiatics and non-native coloured persons in the territory at the 1931 census amounted to 176 and 425 respectively.

The native population is now 1,372,235 which shows an increase of 41,004 or  $3 \cdot 1$  per cent. over the previous year, and its average density throughout the territory is  $4 \cdot 8$  to the square mile.

The average native birth-rate throughout the territory was 59.6 per thousand, and the percentage of infantile mortality was 18.9.

The European population at 13,846 shows an increase of 1,846 or  $15 \cdot 4$  per cent. over the previous year, while the death-rate is  $15 \cdot 16$  as compared with  $13 \cdot 58$  in 1930 and  $9 \cdot 32$  in 1929.

These figures are based on the official census taken in May. Since that date, however, a number of the copper mines have been shut down, and considerable retrenchment has been effected on those still in operation. The unemployment consequent on these conditions has adversely affected both the morbidity and mortality rates, though unquestionably this is only a temporary phase. Under the circumstances the increase in the death-rate should cause no alarm.

	Vita	I Statistics.			
Number of deaths	1927. 72	1928. 97	1929. 93	1930. 163	1931. 210
Death-rate per 1,000 Deaths of infants under	9.89 18	$12 \cdot 87$ 15	$9.32 \\ 21$	$13.58 \\ 28$	$15 \cdot 16$ 28
1 year of age. Death-rate per 1,000 of births.	125	76.92	99.52	$102 \cdot 56$	84.08
Birth					

167 males. 166 females.

333 total.

The crude birth-rate was 24.05 per 1,000 as compared with 22.75 last year.

# Immigration.

Immigrants into Northern Rhodesia in 1931 exclusive of natives, numbered 1,702 of whom 1,477 were British subjects. Of the 225 foreign subjects, 78 were citizens of the United States of America. The following comparative figures of immigrations, exclusive of visitors, are indicative of the progress of the territory :—

1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
438	474	756	1,038	1,066	1,861	3,651	1,702

Ninety-nine persons were deported, fourteen being criminals and the remainder either indigent or illiterate. No figures of emigrants are available.

One hundred and fifty-seven destitute persons were repatriated at Government expense to neighbouring territories and overseas.

# CHAPTER IV.

# HEALTH.

The Government maintains European hospitals at Livingstone, Lusaka, Broken Hill, Bwana Mkubwa, Fort Jameson, Kasama, and Mongu, together with native hospitals at these stations and also at Abercorn, Choma, Mazabuka, Solwezi, Fort Rosebery, and Balovale.

In addition to the above, many Mission doctors, hospitals and dispensaries receive annual subsidies from the Government for medical work in native areas.

During the year, 1,525 Europeans and 8,603 natives were admitted to Government hospitals, and there were 44 European and 436 native deaths in these hospitals. There were 2,538 European and 131,247 native out-patient attendances during the year at Government hospitals and dispensaries.

The different forms of pneumonia still head the list of causes of death in the mining areas, though, of course, these diseases are not confined to the mines.

Year.	European Population.	Malarial Cases.	Deaths.	Blackwater fever cases.	Deaths.
1927	 7,275	272	6	20	5
1928	 7,536	304	2	17	5
1929	 9,981	330	1	5	1
1930	 12,000	383	5	9	3
1931	 13,846	500	3	15	5

Malaria and Blackwater—The following table gives the number of persons admitted to Government hospitals suffering from malaria and blackwater during the last five years :—

The malarial incidence during the year shows an increase, but contributing causes have undoubtedly been the large amount of unemployment in the territory during the latter part of the year. This has resulted in a lowering of the standard of living for a large section of the population in the mining areas, with a corresponding increased liability to disease.

Provided the usual precautions are taken against infection by mosquitoes (the use of a mosquito net, mosquito boots, etc.), and a daily dose of quinine is taken, there is no part of Northern Rhodesia in which this disease need alarm the intending settler or his family.

Smallpox is well under control throughout the territory, though a few isolated cases occur from time to time.

Sleeping Sickness.—The position presents no change and may be regarded as satisfactory.

Cerebro-spinal Meningitis.—Two European and 17 native cases were notified and treated in Government hospitals. They appeared as sporadic cases and no epidemic occurred.

*Rabies.*—The position as regards rabies cannot be regarded as satisfactory. The number of dogs in certain portions of the country is very large, and as they are practically uncontrolled they form a very real danger.

Native Labour.—The Health and Mortality Returns submitted by the various mining companies show that a labour force averaging 23,357 was employed on the various mines and concessions throughout the territory; there were 449 deaths in mines, giving a deathrate of 24.6 per thousand.

During the year Dr. Kauntze, Deputy Director of Laboratory Services, Kenya Colony, visited this territory and drew up a comprehensive scheme for the establishment of a Laboratory Service. This will prove of the utmost value when the financial position permits of it being carried out.

The sanitation branch of the Health Department was organized during the year, and at present consists of a Deputy Director of Sanitary Services, three Health Officers, and three Health Inspectors. A great amount of work has already been accomplished in towns on the railway line, particularly in the mining area, and it is confidently expected that a marked improvement in the health of these communities will be noticeable in the very near future.

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At Livingstone, a new Nurses' Home was built and occupied, and improvements effected at the European hospital by the provision of an operation and X-ray block. The foundations of the new native hospital were also laid, and this, when completed, will materially augment the medical facilities of the town.

The equipment of other hospitals, both European and native, throughout the territory, was also improved.

# CHAPTER V.

### HOUSING.

# European Government Housing.

During the period under review considerable progress was made with the Government Housing Scheme. In Ndola nine new houses, two hospitals, and constables' quarters, etc., were completed, while fourteen other houses were nearing completion. In Livingstone twelve houses, seven bachelors' quarters, and a Nursing Sisters' Home were completed and occupied, while in many of the other large centres, notably Lusaka and Luanshya, considerable progress was made. In all cases the type of house now being constructed represents a distinct advance on anything yet attempted in the territory, and compares very favourably with that of other Colonies.

## European non-Government Housing.

The situation varied very much throughout the year. In the earlier months during the "boom" period, the demand for housing, particularly in the north, was heavy. The situation in Ndola, where the rate of expansion had been too fast to enable the local authorities to exercise control, was deplorable. Most unsatisfactory types of more or less temporary quarters, defective in lighting, ventilation, and sanitary accommodation, and, in the majority of instances, definitely over-crowded, had sprung up everywhere, and, in certain parts of the town where speculative flats had been erected, slum areas were beginning to establish themselves. Towards the end of the year, and as a result of the fall in population following the closure of some of the mines, the situation showed a marked change and conditions of over-crowding were to a great extent mitigated, while numerous insanitary premises were evacuated and demolished.

The various mining companies made great progress with their housing schemes, most of which were up to schedule at the end of the year. Their European employees are now in a particularly happy position regarding housing and sanitary accommodation. Generally speaking, the same remarks apply to the housing of railway employees in the larger centres, though much remains to be done at some of the smaller railway centres on the line. By far the worst conditions of European housing were established by contractors, particularly in the copper belt area. The houses which they provide are usually of a temporary nature with a defective sanitary accommodation, but the majority will disappear when contracts are completed.

The control of development in housing has been a matter of considerable concern to Government, and legislation in the nature of building regulations has already been provided and will shortly be applied to the larger centres. Local Councils and Municipalities exercise a certain amount of control and, with the assistance of the legislation referred to, will ensure that development proceeds on the right lines. In the larger centres inspection work is also carried out by the Health Department which, by using the powers conferred upon it by the Public Health Ordinance, has done much to improve the situation. Numerous insanitary premises have been demolished and improvements effected in the more permanent types of buildings.

# Native Housing.

During the year housing schemes for Government African employees were completed in certain of the larger towns, notably Ndola and Luanshya. Servants' quarters of a very satisfactory type were also provided for the officials' houses.

The mining companies have made great progress with housing in compounds. Generally speaking, the African employees on the mines are now extremely well accommodated. Apart from this, however, little has been done and the housing for natives in compounds in the larger towns remains mostly defective and insanitary, though certain improvements have been effected in the majority of these compounds during the year.

The local authorities in some of the larger towns, notably Livingstone, Ndola, and Broken Hill, are now proceeding with schemes to construct new permanent native compounds on sites chosen by the town planning authorities. These compounds will be provided with sanitary accommodation of a more modern type and work on them will, it is hoped, be proceeded with in 1932.

The railway authorities have done much to improve their compounds in the larger areas, but the general economic depression during the latter part of the year prevented any major schemes being carried out.

The policy of the Government is to improve progressively native housing conditions, particularly in urban areas, and plans of compounds showing layouts, types of housing proposed, and sanitary accommodation have to be submitted to Government for approval. In rural areas the situation remains very much the same and the African is still more or less restricted to the round hut, though there is already evidence that the more educated Africans are beginning to appreciate the advantages of a better and more sanitary type of house.

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# CHAPTER VI.

# PRODUCTION.

# Land and Agriculture.

Of the total approximate area of the territory of 184,576,000 acres, the North Charterland Exploration Company holds a concession over 6,400,040 acres, subject to the assignment of native reserves amounting to 2,148,440 acres. The British South Africa Company owns, subject to the assignment of native reserves of 1,094,475 acres, three freehold areas in the Tanganyika Province, comprising 2,758,400 acres. 2,786,352 acres have been otherwise alienated for purposes of European settlement, not including 84,420 acres of land leased without option to purchase. The total area of alienated land is, therefore, 12,029,212 acres, about  $6\frac{1}{2}$  per cent. of the whole territory. Most of the alienated land is used for grazing, some of it is cultivated, but a large area is unsuitable for either grazing or cultivation owing to the absence of water. The following table gives a comparative idea of the acreage of the various staple crops under cultivation in the seven previous seasons.

Season.	Maize. acres.	Tobacco. acres.	Wheat. acres.	Total under cultivation. acres.
1923-24	 42,377	2,462	1,250	52,243
1924-25	 35,568	4,323	2,633	61,712
1925-26	 36,470	4,939	3,387	60,297
1926-27	 44,837	6,719	2,780	69,837
1927-28	 43,889	7,339	1,819	62,928
1928-29	 39,215	3,232	2,698	67,207
1929-30	 47,085	3,487	2,299	66,429
1930-31	 42,974	2,328	1,594	76,092

Included in the last column are smaller areas planted with cotton, fodder crops, groundnuts, potatoes, kaffir corn, oats, etc., which are considered minor crops.

Although the rains were somewhat late in starting, preparation and planting were carried out, and completed in the majority of cases, in good time. Somewhat late plantings were necessary in some cases owing to the lateness of the rains in particular districts. A very severe drought in February caused much uneasiness and it was thought at one time that very poor yields would be received. Rainfall was ample from the end of February onwards, and, although the crops were not as heavy as had been wished, they may be described as moderate in amount and good in quality.

The area under maize was decreased by some 4,000 acres in comparison with the previous year. The yield in bags was

Year ending 31st Decembe		Area in thousands of acres.	Average yield per acre.	Yield in thousands of bags.	Farm con- sumption in thousands of bags.	Surplus available for sale in thousands
Decembe	Stat.	oj acres.			of ougs.	of bags.
1921		29	4.88	145	18	127
1922		25	$3 \cdot 49$	99	18	81
1923		38	5.18	199	32	167
1924		35	3.08	129	28	101
1925		36	2.67	95	23	72
1926		36	4.87	177	37	140
1927		44	5.50	250	36	214
1928		44	4.59	183	32	151
1929		39	5.50	201 -	33	168
1930		47	4.30	202	37	165
1931		43	4.50	194	32	161

approximately 8,000 less than in the previous year. The following table gives the maize statistics from 1921 onwards.

The area under irrigated wheat was 1,594 acres being 501 less than the previous season. The yield was  $3 \cdot 6$  bags per acre and the total production 5,627 bags. Two factors are responsible for the lowering of the acreage planted to wheat. The two previous seasons, in which the rainfall had been somewhat scanty, had caused a serious diminution in the water available for storage in dams and the acreage has had, to a great extent, to be limited to that for which water is available. Secondly, some of the wheat growers did not plant up to maximum capacity because of the difficulty in finding markets for the produce. Comparative figures of wheat production for the past six years are as follows :—

Year.	А	creage Planted.	Yield in Bags of 200 lb. net.
1925	 	2,633	9,895
1926	 	3,387	11,687
1927	 	2,780	10,586
1928	 	1,819	8,754
1929	 	2,698	12,141
1930	 	2,299	9,583
1931	 	1,594	5,627

2,328 acres of virginia tobacco were planted, representing a decrease of 1,159 acres from the previous season. The reason for this is the unsatisfactory state of the market in the United Kingdom and the difficulty of disposing of those stocks which have been accumulated in the bonded warehouses. The total yield was 951,259 lb.

Cotton growing was confined to the experimental work which is being carried out at the Central Research Station, under the supervision of the officer seconded by the Empire Cotton Growing Corporation, and to experimental crops grown for the station by selected farmers. Although a variety of cotton entirely suited to local conditions has not yet been evolved, the progress made is most

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satisfactory and the experimental work which has been carried out will be continued. The proved value of cotton as a rotation crop for maize has caused the experiments which are being carried out to be of considerable value to all engaged in agriculture.

The area under groundnuts again fell, only 879 acres being planted. One of the principal reasons for this is the low price at which groundnuts imported from Portuguese Africa are being landed in the territory.

It is gratifying to record that considerably more attention is being paid to the growth of leguminous crops for green manure and forage. Sunnhemp is still most popular, there being 3,924 acres planted to this crop during the year, an increase of 2,546 acres over the previous year and 3,651 acres over that produced, and ploughed in, during 1929, when the advantages of this crop first began to be realized. In certain districts, half the arable land has been laid down to a green crop and the yield of the succeeding maize crop is, in the opinion of those concerned, sufficient to encourage them in this practice.

Those engaged in all branches of agriculture in Northern Rhodesia still experience many difficulties. For the past two or three years climatic conditions have been somewhat difficult and competition from other sources has been very great. For example, maize meal was offered from without the territory, and large quantities imported, at a price below 6s. per bag of 183 lb. A very considerable amount of the maize produced in the territory remained unsold, even though a large contract was entered into with the mining companies, when the outbreak of foot and mouth disease in Southern Rhodesia necessitated the imposition of restrictions upon all animals and agricultural produce from that territory. A trade immediately sprang up with the Union of South Africa at equally low prices, and eventually Government approached the Union authorities in the matter. As a result, Government imposed a tariff duty of 2s. per 100 lb. maize meal and 3s. per 100 lb. maize if imported from the Union. Thus the onus of supplying the requirements of the territory fell upon local producers and it is most gratifying to be able to record that no unfair advantage has been taken of the position by those engaged in distributing and selling agricultural produce. Prices have remained at or about those obtaining during former years.

There is evidence that more and more farmers are realizing the benefits of smaller acreages, well cultivated, and substituting these for large acreages which cannot receive adequate treatment. There is still room for improvement in this respect but it is obvious that more forethought is being given to the general programme to be followed.

During the past few years, increased and increasing markets have been the rule. The very great development in the copper areas in the north of the territory opened out demands which had not been anticipated and increased acreages, together with increased settlement in the near future, appeared to be certain and justified. The Government, however, still continued its policy of refraining from organizing a settlement scheme, or offering land for sale, until the value and extent of the arable properties in the neighbourhood of the railway line had been investigated, and also until the economic position of the industry in relation to markets had been verified. An Agricultural Survey Commission commenced in 1929 to inspect all the unalienated Crown land in the vicinity of the railway line, and, by the end of the year 1931, had been able to make reports on the majority of districts in the areas inspected. These reports showed that the unalienated land comprises many areas suitable for ranching on a big scale but fewer and smaller areas suitable for arable farming. Details concerning those areas which are suitable for cultivation as well as of all other areas, are now available. During the year, Mr. Milligan, late Agricultural Adviser to the Government of India, conducted an economic survey of the settled areas adjoining the railway line and of the markets in the western portion of the territory, particularly those in the mining areas. At that time, several of the mines which were under development were nearing the production stage, and the closing down of some, which followed towards the end of the year, was not anticipated. Mr. Milligan, however, came to the conclusion that the local markets were insufficient to justify any extensive endeavour being made to proceed with a larger settlement scheme and advocated that Government should postpone such a programme and depend, for the time being, upon those settlers who come of their own accord to commence farming operations in the territory. Soon afterwards, general world conditions and the decreasing demand for copper caused the closing down of several of the properties and, at the end of the year, only the Roan Antelope and Nkana Mines remained operating to produce the amount of copper which has been allotted under the quota arrangements. The markets, therefore, ceased to expand, and, for the time being no justification There exists for any considerable extension of arable farming. is still, however, a great shortage in the territory of dairy produce, bacon, pork, hams and other general farm produce and an increase in the home production of such commodities, preceded by the erection of a well equipped and well financed creamery, is not only justified but essential. Negotiations are proceeding which it is hoped will result in the starting of an up-to-date creamery at Lusaka which it is confidently expected will be of the greatest advantage to the farmers of the territory in general.

As regards meat, it is more than doubtful whether the animals available for slaughter in the territory would have been sufficient to meet the demand had it continued to increase. The present easing in demand has given breathing space to ranchers and cattleowners during which every endeavour will be made to get the

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cattle industry upon a more satisfactory basis. The greatest difficulty has in the past lain in ensuring the supply of fat cattle towards the end of the dry season when grazing conditions are poor and pasturage bad. Very little attention has been paid to the provision of extra foodstuffs in the form of crop leavings, cheap ensilage, and veld hay for the maintenance and betterment of the condition of animals destined for sale during the dry season. The necessity for this has, however, now been realized and increased efforts in this direction are being made in all districts. A Live Stock Co-operative Society has been established for the sale of cattle more especially slaughter cattle belonging to members. Government is erecting weighbridges at four centres upon the railway line and it is hoped that sale by weight, instead of the less satisfactory sale by lots at auctions, will result in a better price being realized by producers and greater satisfaction being experienced by consumers.

Despite the general depression caused by the restriction of mining activities, there would appear still to be markets sufficient to absorb a very considerable amount of the produce and cattle available.

Government funds are available for loans to settlers for specific objects in connexion with the agricultural industry, but a number of farmers have been unable to give the security necessary before loans of this type could be made.

The diminution in labour demands in the mining areas has caused much more labour to be available for general farming purposes in all districts, and upon those farms where adequate pay and suitable conditions are given no difficulties have been experienced in finding sufficient labour.

For the first time since European settlement took place a large invasion of locusts has been experienced. The swarms comprise both Redwing and the tropical phase of the migratory varieties. Although every attempt was made to destroy hoppers hatched in Tanganyika, the area covered was so vast that in many districts it became impossible and the resultant swarms invaded Northern Rhodesia and laid eggs in the districts adjoining the northern borders. Some of the swarms proceeding in a S.S.W. direction, invaded Barotseland and oviposition commenced there. At the end of the year, a very extensive campaign of hopper destruction was in progress but the vastness of the area covered and the difficult climatic conditions caused by the heavy rains were proving obstacles of considerable magnitude. A small amount of damage has been done to native gardens in less settled areas but no damage whatsoever has yet been done in the settled areas.

Difficulties are still being experienced by tobacco growers in the Fort Jameson district. The leaf which they have produced in the past, mostly bright, has been of good quality and has found favour in the English and other markets. Abnormal accumulation, however, of colonial grown leaf on the home market has, for the time being, caused such an unsettled state of affairs and such a fall in price, that extension of the acreage planted to tobacco cannot yet be justified. Government has continued its assistance to those planters who were financially unable to continue operations, and only that portion of the leaf produced which was of good quality and likely to find favour with buyers has been exported. Considering general world conditions as regards tobacco, the planters in Fort Jameson have done as well as can be expected, and so soon as the present slump is over steady progress will be possible in this very important branch of the agricultural industry.

Considerably increased acreages are being devoted to coffee in the Abercorn district. Some of the bushes are just coming into bearing and their numbers will increase year by year. The coffee exported from the original plantations has realized most satisfactory prices upon the home market, and there is every reason to believe that an expansion of the coffee-growing industry in the area mentioned, will be of advantage to the district and to the territory in general.

The territory continues to be free from the major diseases of stock, pleuropneumonia in Barotseland being the one exception. Extension of that disease is guarded against by the maintenance of a strong police cordon along the borders. Loss from such diseases as quarter evil and anthrax has been lessened to a very great extent by prophylactic inoculation and the incidence of these diseases is becoming, year by year, of less economic importance. Practically the whole of the European-owned stock in the settled areas is regularly dipped, and this practice is now being extended to native reserves by the provision by Government of dipping tanks in certain areas. The practice has been received with greater enthusiasm than was at first anticipated, and there can be no doubt that it will be followed by a very great improvement in the general condition of native-owned stock. Natives who have regularly brought their cattle to be dipped have been presented by the Government with slightly improved bulls for work in the herds. As time goes on, still further improved animals will be available but a general improvement in cattle mastership is essential before any marked progress can be The Dipping Inspectors at the various tanks are doing all made. possible to instil better principles and it is anticipated that considerable improvement will follow the elimination from breeding herds of old cows and immature heifers, and from the castration of undesirable males. The native-owned cattle in the territory are of enormous potential value, in that they not only contribute about 50 per cent. of the stock slaughtered in the territory but also form the foundation of European-owned herds in the more settled areas.

One of the greatest difficulties experienced by stockmen, both European and native, is the destruction of grazing by grass fires which are started towards the end of the dry season. This destruction of very valuable grazing is one which it is most difficult to combat.

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Every endeavour is being made to instil into the minds of natives the evils which may follow extensive grass burning, but it is certain that more and more dependence must be placed upon paddocking and closer grazing of the areas upon which the greater number of the cattle feed at present. During the year under review, the rainfall was insufficient to promote good pasturage in all districts and also adequately to fill the small streams, pools, and water holes from which the animals regularly drink during the dry season. It became essential, therefore, to remove to the flats adjoining the Kafue river large numbers of animals which, under normal conditions, would have remained in their usual grazing grounds. Although severe mortality occurred amongst some native-owned herds, it was not nearly so great as would have been the case had the areas referred to not been available.

Upon the whole, it may be said that, in spite of the difficult conditions experienced during the year under discussion, the period has by no means been so difficult for farmers in Northern Rhodesia as for their neighbours in other territories.

### Mining.

# PRODUCING MINES.

Roan Antelope Mine.—The Roan Antelope Mine went into active commission late in May according to programme. Before the end of the year the plant had proved capable of treating considerably more than its rated capacity and all underground preparations were found ample to meet any demand likely to be made. Concentrates were exported until the smelter was completed.

The "sub-level" method for the underground mining of this wide deposit in fairly weak ground has proved adequate.

The "all-in" electrolytic costs of the copper to date have been so low as to show that early estimates were very conservative. It is, therefore, to be presumed that the property is one of the cheapest copper producers in the world. Electrolytic costs even at present are down to £30 per ton of copper and costs are lower still on the basis of fire-refined output, a good demand for which is expected.

As from 1st January, 1932, this producer will be restricted under the copper quota arrangements to a monthly copper output of 2,320 long tons.

At the end of the year 562 Europeans and 3,815 natives were employed.

Nkana Mine.—Preparations for stoping above the 450 foot level were vigorously prosecuted along the whole of the north ore body and underground haulage was installed on the 450 level. 600 foot level preliminary development was completed for a long distance. The central shaft, which will be the main hoisting shaft at this end, attained a depth of 1,002 feet and was equipped with large winding engines. In December stopes were opened. The concentrator, smelter, and power plant, were practically built and equipped during the year.

Of the numerous further activities at this mine may be mentioned the construction of a large modern European hospital, twentyseven additional family residences, native quarters for 300 married natives, central cooking kitchen for unmarried natives, waterborne sewerage for the native compound, and a large pumping plant with four miles of water main.

Broken Hill Mine.—The mining of zinc silicate ore for the production of electrolytic zinc was in progress at Nos. 1, 2 and 3 Kopjes and E outcrop whence 16,850 tons were mined averaging 27 per cent. zinc and 1 per cent. vanadium oxide; these operations were suspended from July until the market for zinc becomes favourable.

From January the production of fused oxide of vanadium became an established new industry of the company, production having been maintained throughout the year.

As the result of highly important disclosures in the occurrences of vanadium bearing laterites on the property, the opening up, mining and milling of such laterites were conducted continuously throughout the last six months for the marketing of both fused vanadic oxide and vanadium concentrates.

Power output amounted to approximately 50 million kilowatt hours as compared with over 107 million the previous year when zinc production was continuous.

The labour force was reduced until at the end of the year it was only about half at its commencement, the closing figures being 94 Europeans and 761 natives.

Bwana Mkubwa Mine ceased mining operations on 31st January. Treatment plant and smelter operations were continued during February and March, whilst in April the refinery was experimenting with Nkana concentrates. Much mining and treatment plant was transferred to Nkana Mine.

The residual staff were active in mining limestone; their foundry was busy producing castings throughout the year.

Luiri Gold Areas Limited.—At Matala Mine, difficulty has been experienced in mining the higher grade portions of the ore body, dilution having been found excessive. Underground work was suspended in June.

At *Dunrobin Mine* the present programme consists of mining as nearly as possible 1,000 tons of ore per month at 25 dwt. and adding about 2,000 tons per month to the reserves. Second and third level results are encouraging.

New Jessie Mine (Jessie D.B. location). Under the new company the New Jessie Gold Mining (Prop.) Limited was thoroughly overhauled below and above ground to restart operations. For the first time the underground stoping and development of this small mine have been carried out on model principles and are in good conditions for progress laterally and in depth.

Sasare.—Some gold has been won from extensions of the old Sasare Mine working in the Petauke district.

# DEVELOPING MINES.

Mufulira Mine.—Important advances were made as soon as it was resolved to tap the hanging wall of the second ore body by means of collared holes with casings and valves. This precaution, together with the installation of adequate pumping facilities, soon demonstrated that the water problem was not serious; the pumping peak was reached in November and the water table has been lowered to a gratifying extent over 4,000 feet of strike which are making no more than 2,500 gallons per minute.

The opening up of high grade stoping blocks and adequate reserves on the first and second levels has placed the mine on a sound operating basis for several years to come.

The extensive programme of surface construction was completed and the plant of 1,500 tons a day rated capacity was ready to begin producing concentrates in December so that both mine development and mills, together with the necessary shops and housing, are now complete. Power house and shops are on a larger scale for 6,000 to 7,000 tons of ore daily; other foundations are also complete for the larger scale plant.

Under copper quota arrangements this mine was temporarily closed down; full precautions were taken, prior to allowing the underground workings to flood, that subsequent mine de-watering procedure should be as quick and simple as possible.

Chambishi Mine (Mufulira Copper Mines, Ltd.). Operations were suspended in June after approximately 600 feet of shaft sinking had been completed through difficult ground.

Kansanshi Mine.—The development work carried out during the year consisted of the sinking and timbering of the south main shaft to the 550 foot level and the sinking and timbering of the north main shaft to the 300 foot level.

Work in both was stopped in June, at which date the footage sunk and timbered in each for the year was respectively 125 and 100.

With the stoppage of development work, a drilling programme was resorted to and seven drilling shifts were put on. The total footage

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drilled for the year was 8,241. At the end of the year there were 11 Europeans and 123 natives employed at the mine.

Nchanga Mine.—Nchanga Mine commenced this year with very active development in the Chingola Special Grant Area but the scale of operations was slowly reduced and all activities ceased shortly after the flooding of No. 1 shaft working in September. The extremely rich ore body was reached by No. 1 shaft cross-cut.

# PROSPECTING.

# Rhokana Corporation Limited.

(a) *Rhodesian Congo Border Concessions.*—An average of twenty geologists was maintained in the field and 9,108 square miles were traversed and mapped during the year. Thirty-two mineral occurrences were recorded, twenty-one of copper, nine of gold, and two of iron and manganese. 27,951 linear feet of potholing, thirty-seven feet of cross-cutting from potholes, and 73,015 cubic feet of trenching was done. This intensive work followed on previous geological traversing and was for the purpose of obtaining more detailed information of mineral occurrences and horizons. 2,506 feet of diamond drilling was done to test deposits at depth. A manganese occurrence at Luano East was opened up and about 877 tons of ore were mined for experimental purposes.

(b) Nkana Concessions.—During April and May, three geologists systematically prospected 228 square miles.

Loangwa Concessions.—An average of thirty geologists, each with a complement of about twenty natives, systematically traversed and geologically mapped 12,662 square miles. At the end of the year, the field staff had been diminished to twenty-three geologists to meet a somewhat reduced programme for 1932.

Discoveries included occurrences of gold, copper, manganese, coal, and iron. Very intensive prospecting was done in the vicinity of certain discoveries of gold to the east and south of Mulungushi. Trenching and potholing operations are still in progress within that area.

*Rhodesia Minerals Concessions.*—From six to nine geologists have been prospecting by traversing or else have been trenching, potholing, and sampling ore discovered on prospects and occurrences of copper, lead, zinc, gold, or silver.

Encouragement is derived from the widespread character of the occurrences of economic minerals.

On the King Edward Mine, nine diamond drill holes involving 5,885 feet of drilling have disclosed the presence of over 5,000,000

tons of cupriferous pyrite carrying about one and a-half per cent. copper and 20 per cent. of sulphur. Along the strike to the northwest there is possibility of extension of this deposit.

Kafue Copper Development Company, Limited.—Geological mapping of the Sable Antelope, Silver King, Crystal Jacket, and Hippo properties were completed, forty square miles thus being mapped on a scale of eight inches to the mile by means of parallel traverses at 220 yard intervals; some diamond drilling and potholing were also carried out.

Four Europeans and two drill operators were employed and the work was completed in September.

Kasonso Syndicate (copper), Star Zinc (now Stella Mines, Limited). —Zinc and all coal prospecting operations were at a standstill during the year.

A copper deposit in the Mumbwa district called "Garenda" has been found well worth investigating in detail but no news is to hand of any further prospecting results by individual holders of ordinary prospecting licences.

#### GENERAL.

Fusion of copper interests was effected in time to guide the industry throughout this perilous year; it provided for cessation of work on some backward properties and for the full development of the three more advanced properties, Roan Antelope, Nkana, and Mufulira. Even though prices were low when the Roan Antelope commenced output, their most gratifying costs figure pointed clearly to the probability that this territory's copper producers will always be amongst the cheapest producers in the world.

In spite of the general slump, it could be said that in the mineral industry activity had continued unabated throughout the year, although its earlier rate of rapid growth had not been maintained. Successful exploration of vanadium-bearing ground at Broken Hill was a considerable off-set to the fall in zinc prices, since it showed the Rhodesia Broken Hill Development Company that ground hitherto deemed mere overburden on zinc minerals was itself highly remunerative upon treatment for the recovery of vanadium.

The two small gold producers were more active and in better shape, whilst the geological prospecting work throughout the territory was prosecuted on the usual important scale.

The mines labour force decreased from 3,307 Europeans and 29,689 natives in December, 1930, to 1,943 and 13,261 respectively in December, 1931.

**Mineral Production.** 1931. 1930. £ £ s. d. s. d. Gold ... ... 7.513.78 oz. 31.903 13 0 9.364.10 oz. 39,776 3 0 Silver ... 548.49 oz. 32 11 0 637 · 27 oz. 46 5 0 8,927.27 tons 346,277 12 0 6,269.02 tons 343,767 0 0 Copper ... 24,110.28 tons 459,194 9 0 Copper Concentrates. 3,215.10 tons 8,182 16 0 Copper, other Zine ... ... 20,015.08 tons 339,825 6 0 6,927.37 tons 81,766 15 0 ... 335,971 lb. 225,661 16 0 Vanadium 122,577 lb. 87,320 10 0 Vanadium 703.32 tons 94,424 4 0 Concentrates. 2,200 14 0 872.68 tons 1,309 0 0 1,467 · 19 tons Manganese Ore 4 14 0 379 10 0 9.54 tons Iron Ore ... 759.00 tons 2.238 10 0 3,098 lb. 774 10 0 8,954 lb. Mica ... ... £1,258,671 0 0 £806,414 18 0

The following table shows the mineral production during 1931 compared with that for 1930 :---

# CHAPTER VII.

### COMMERCE.

The combined value of trade imports and exports for the year 1931 amounted to  $\pounds 6,288,841$ , as compared with  $\pounds 5,748,698$  in 1930, an increase of  $\pounds 540,143$  or  $9 \cdot 4$  per cent.

The value of merchandise imported during the year under review amounted to  $\pounds 5,105,440$ , as against  $\pounds 4,862,722$  in 1930, an increase of  $\pounds 242,718$  or  $4 \cdot 9$  per cent.

In addition, Government stores to the value of  $\pounds 214,559$  and specie to the value of  $\pounds 12,315$  were imported.

The total exports were valued at £1,183,401 as compared with £885,976 in 1930, an increase of £297,425 or  $33 \cdot 5$  per cent.

From the above figures it will be seen that the year as a whole can be recorded as entirely satisfactory. The territory did not until November last begin to feel the economic depression which has been felt so severely since the end of 1930 by practically all other countries, and the prosperous state of its trade was undoubtedly due to the development in the mining area, which continued until towards the end of the year.

Importation of plant, mining machinery, and structural steelwork again account for a large proportion of imports, but capital goods of this nature cannot be expected to continue to arrive during 1932 as the production stage has been reached by the Nkana and Roan Antelope mines and development of the remaining sites has now been curtailed. The export trade is almost entirely dependent upon minerals and the increase in the value of exports in 1931 reflects the increase in copper produced. It can be anticipated that in 1932 exports will be more than doubled.

The trade balance of imports over exports amounts to £3,922,039 as compared with £3,976,746 in 1930, and is accounted for by large importations in connexion with the mining industry during development.

The following figures show the value of imports of merchandise and the value of exports—excluding specie—for the past ten years :—

Year.	Imports.	Exports.
	£	£
1922	 474,290	599,371
1923	 502,002	461,807
1924	 662,642	454,057
1925	 1,284,025	432,997
1926	 1,667,584	484,382
1927	 1,957,138	755,525
1928	 2,366,317	847,068
1929	 3,602,417	899,736
1930	 4,862,722	885,976
1931	 5,105,440	1,183,401

The following summary furnishes a comparison of the value of imported merchandise which originated from British and from foreign countries during the years 1929 to 1931 :—

Imports from :			1931	1930	1929
			£	£	£
Union of South Africa			729,286	357,303	327,893
Southern Rhodesia*			642,263	856,069	534,366
United Kingdom and ot	her Br	itish			
Possessions			2,404,565	2,199,789	1,679,000
Total British Empire			3,776,114	3,413,161	2,541,259
Foreign Countries			1,329,326	1,449,561	1,061,158
Total Merchandise			£5,105,440	£4,862,722	£3,602,417

For the purpose of illustrating the routes of trade, the following table shows the value of merchandise received from the Union of South Africa, from Southern Rhodesia, and directly from overseas during the years 1929 to 1931:—

2,193,304 419,464

\* Includes produce of the Union removed from Southern Rhodesia.

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The second secon		0 .		
	1931	1930	1929	1928
	£	£	£	£
Animals (living)	68,315	71,032	27,668	28,965
Foodstuffs, etc	466,348	457,870	302,675	200,722
Ales, Spirits, Wines,				
etc. (potable)	145,407	174,504	108,888	86,160
Spirits (non-potable)	3,601	2,032	1,344	867
Tobacco	91,956	88,203	59,336	44,624
Tobacco Textiles, Apparel,		and the second second	A Contraction of the second	and the local day in the second
Yarns, Fibres	570,130	609,741	592,442	471,114
Metals, Metal Manu-				
factures, Machinery				
and Vehicles	2,485,883	2,206,841	1,595,084	902,110
Minerals, Earthen-				
ware, Glasses and				
Cement	257,204	304,207	205,014	161,993
Oils, Waxes, Resins,	A CONTRACTOR OF THE		Internet of the second	
Paints, and Var-				
nishes	235,605	286,951	184,021	102,982
Drugs, Chemicals and			A MARINE A	
Fertilizers	91,207	87,920	80,256	89,396
Leather, Rubber and		the state of	a state in the second	March
manufactures				
thereof	116,580	117,628	87,907	53,825
Wood, Cane, Wicker				
and manufactures				
thereof	151,785	208,427	152,851	82,311
Books, Paper, and	CORP. OFL	01	THE REAL PROPERTY OF STREET	IDEL PERSENTED
Stationery	70,945	62,415	52,967	33,940
Jewellery, Time-		104/h and and		
pieces, Fancy Goods,				
etc		63,546	49,959	42,027
Miscellaneous		121,405	102,005	65,281
	Landa City	Contraction of the		
Tatal imports	05 105 440	£4 989 799	£9 809 417	£2,366,317
Total imports	10,100,440	£4,862,722	£3,602,417	12,300,317

The following table illustrates the comparative value of the principal classes of imports during the years 1928 to 1931 :---

The following summary furnishes a comparison of the value of exports to British Possessions and to foreign countries during the years 1929 to 1931 (excluding articles exported through the post and specie):—

308.0030 AT 522			1931	1930	1929
			£	£	£
Union of South Africa			131,212	70,689	84,454
Southern Rhodesia			111,171	85,788	79,426
United Kingdom and ot	her Br	ritish			
Possessions			332,526	556,709	470,058
Total British Empire	000		574,909	713,186	633,938
Foreign Countries			605,448	163,809	260,895
Total			E1,180,357	£876,995	£894,833

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The following summary furnishes a comparison of the value of exports to the Union, to Southern Rhodesia, to the United Kingdom, and to other British Possessions, and to foreign countries, distinguishing domestic exports and imported goods re-exported, during the years 1929 to 1931 (excluding articles exported through the post and specie) :—

Domestic Export	8.		1931	1930	1929	
			£	£	£	
Union of South Africa			57,527	54,230	71,676	
Southern Rhodesia			30,182	19,112	35,904	
United Kingdom and ot	her Br	ritish				
Possessions			324,690	539,705	460,665	
Foreign Countries			576,848	155,801	250,882	
Imported Goods Re-Ex	ported.					
Union of South Africa			73,685	16,459	12,778	
Southern Rhodesia			80,989	66,676	43,522	
United Kingdom and ot	her B	ritish				
Possessions			7,836	17,004	9,393	
Foreign Countries			28,600	8,008	10,013	
Total			£1,180,357	£876,995	£894,833	
		-				-

The following table illustrates the comparative value of the principal items of domestic exports for the years 1928 to 1931 :---

		1931	1930	1929	1928
		£	£	£	£
Animals (living)		18,913	2,458	8,928	22,456
Hides, Skins and Horns		19,807	13,486	39,165	44,898
Ivory		3,309	3,883	8,922	9,911
Butter		434	76	551	431
Wheat		1,451	2,870	13,855	9,218
Maize, including other		-,	-,		
cereals in the grain		18,004	16,545	25,567	29,964
Maize meal		6,185	4,818	17,781	23,488
D 1		211	667	1,040	185
Tobacco (unmanufactured)		33,346	57,163	70,310	100,848
A		00,010	5	158	238
		505,204	226,382	236,716	240,367
Copper (all kinds)		000,201	220,002	37,729	71,103
Lead		17.071	94 710	16,389	3,457
Vanadium		17,871	24,710		
Other ores		000 077	14,352	34,904	13,277
Zine		200,675	341,660	262,611	* 166 866
Other metals					100,000
Gold		35,390	26,511	3,441	1,815
Silver		58	48	12	23
Lime		866	930	940	948
Wood, manufactured and	partly				10 Jan grand
manufactured		29,937	17,053	20,316	26,037

\* Approximately 90 per cent. of this value consisted of zinc.

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The following are the ports of entry into and exit from Northern Rhodesia :----Ndola, Livingstone, Mokambo, Fort Jameson, Broken Hill (free warehousing ports) ; Abercorn, Kansanshi, Fort Rosebery, Nchanga, Kawambwa, Mpika, Balovale, Mwinilunga, Isoka, Chiengi, Feira, Kazungula.

# CHAPTER VIII.

# WAGES AND COST OF LIVING.

During the year 1931 there have been great changes in the labour position. At the beginning of the year there was employment for every native who desired it but in the latter months when economic depression had set in the supply exceeded the demand and unemployed were searching far and wide in the industrial areas for work. The average number in employment during the year was approximately 79,000 but by December the number actually employed was less than it had been for some time past.

Larger numbers than in previous years found employment in Government work on roads and aerodromes, in the building trade, and in domestic service but, as was to be expected, there was a great decline in the amount of employment available on the mines where the number employed fell from 28,974 in January to 13,261 in December. In agriculture, too, there was a decrease in the demand for labour and during the year there have been no complaints of scarcity of labour from the farming areas.

It will be a cause of great regret among the native population if, as appears probable, there is to be comparatively little employment available on the mines for some little time. The mining companies have justly acquired a very desirable reputation as employers. Wages are high, hours of work are reasonable, rations are good, varied in quality and generous in quantity, the health of employees is carefully supervised and ample recreational facilities are provided. Unfortunately accident rates and sickness rates are still too high, but with a more rigorous inspection of mines and in the more stable conditions attending the completion of construction work there is every reason to believe that there will be a marked improvement in this regard.

On the whole there has been little evidence of any tendency on the part of employers to take advantage of the present situation to the detriment of their employees by reducing wages. The more usual policy, the wisdom of which is clearly apparent, has been to weed out the unsatisfactory and inefficient and retain the services of the more experienced type of employee.

As the years go on and experience is obtained it becomes more possible to assess the reaction of industrial employment upon the social life of the people and upon the tribal system. It has been

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observed that the flow of labour is seasonal and the supply fluctuates on parallel lines from month to month; the greater number turn out in the lean months when the food supply in the villages is running low, and return in the months of plenty.

Wages of Africans are as follows :---

Clerks from £2 to £7 per month.

Artizans from £2 to £6 per month.

Labourers, Mines, from 17s. 6d. to 22s. 6d. per month, surface.

Labourers, Mines, from 30s. to 37s. 6d. per month, underground.

Labourers, Agricultural, 10s. to 17s. 6d. per month.

Labourers, Railways, 12s. 6d. to £1 per month.

Labourers, Roads, 12s. 6d. to £1 per month.

In addition liberal food rations are supplied by employers in accordance with a scale laid down by law. The staple food of Africans is meal obtained from cereals. The cost of the minimum monthly ration, i.e., 60 lb. is (a) in towns 4s. 6d. to 5s. 6d., (b) in country districts 3s. to 4s. A ration of meat and vegetables is provided and costs about 4s. per month per head.

The cost of living for Europeans is governed mainly by the cost of transport. Transport charges, even in the case of places on the railway, add considerably to the price of commodities. When transport by motor or other means is necessary, as it is in the case of places off the line of rail, the average price is still further increased.

The average price of various commodities is as follows :---

Average. s. d. 8 Bread, per lb. loaf ... ... ... 73 Local flour (1st grade), per lb. ... ... ... 7 Patna rice, per lb. ... ... ... ... ... 3 11 Mazawattee tea, per lb. ... ... ... ... 73 Sugar (white granulated), per lb. ... ... 2 7 Coffee (av. loose and tinned), per lb. ... ... 3 0 Butter, per lb. ... ... ... ... ... 2 7 Bacon, per lb. ... ... ... ... ... 2 8 Eggs (European farms), per doz. ... ... ... 1 0 Eggs (native), per doz. ... ... .... ... 4 .... Milk, per pint ... ... ... ... 91 Beef, per lb. ... ... ... ... 2 3 Soap (Sunlight), per packet ... ... ... 17 5 ... Kerosene, tin of 4 gallons ... ... ... 3 0 Motor spirit (Shell), per gallon ... ... ...

The cost of clothing is approximately 75 per cent. higher than European prices.

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# CHAPTER IX.

# EDUCATION AND WELFARE INSTITUTIONS.

For the education of European children there were in 1931 controlled schools at Livingstone, Choma, Mazabuka, Lusaka, Broken Hill, Bwana Mkubwa, Ndola, Luanshya, Nkana, and Mufulira offering primary education up to Standard VII, with the additional subjects Latin, French, Algebra in Standards VI and VII and Geometry in Standard VII. There were schools at Machili, Tara, Kafue, Silver Rest, Chilongolo, Nchanga, Kansanshi, and Fort Jameson offering primary education up to Standard V. All these schools were under Government management, the tuition fees varying from 7s. 6d. to £1 17s. 6d. per quarter. The Convent School, Broken Hill, offering education up to the standard of the Southern Rhodesian Junior Certificate Examination and Chiposa School, Fort Jameson, offering primary education up to Standard V were controlled schools but under private management. A number of small uncontrolled schools were also open during the year.

Boarding accommodation was available for girls at the Beit School, Choma, and for boys at the Codrington School, Mazabuka, both under Government management, the boarding fees being £12 10s. per quarter, and at the Convent School, Broken Hill, and Chiposa School, Fort Jameson, both under private management.

Sixty-four teachers were employed in the controlled schools under Government management, the enrolment at the end of 1931 being 1,008, an increase of 234 or 30 per cent. over the 1930 figures and the largest so far recorded. In addition, 90 children were attending controlled schools under private management.

The number of children being educated outside the territory was much higher than previously supposed, the figure obtained from census returns in May, 1931, being 313. New schools were completed at Broken Hill and Luanshya and considerable progress was made with the Beit Hostel at Lusaka, the cost of the latter being met from money generously provided by the Beit Railway Trust.

Education for natives in Northern Rhodesia is still mainly provided through the agency of Mission Societies. These, however, are year by year receiving increased financial support from Government and professional guidance from the inspecting officers of the Native Education Department.

Sixteen of the Mission Societies operating in the country maintain village elementary schools, boys' and girls' boarding schools, and teacher training institutions recognized as eligible for Government grants. A total sum of £15,472 was directly distributed amongst them during the financial year 1931–2. This amount included a grant of £1,000 from the Beit Railway Trustees, £150 from the Carnegie Corporation, and £1,870 from the Barotse National Fund the latter grant being distributed among three societies carrying on educational work in Barotseland.

T	
 21,340	
 2,000	
 900	
 7,855	
 £32,095	
	2,000 900 7,855

Estimated recurrent expenditure on native education during the financial year 1931-2 amounted to :---

Capital non-recurrent expenditure on departmental buildings completed during the year is estimated at £10,850 of which £4,000 represents a grant from the Beit Railway Trust towards the establishment of the Jeanes and Agricultural Schools. Including the sum of £4,000 mentioned above a total sum of over £12,000 from the Beit Trust has been expended in the establishment of these schools. A further sum of £2,100 was granted to Mission Societies to assist in the erection of buildings for educational purposes.

Owing to the recent increase in the European personnel of the Department it is becoming possible to carry out regular inspections and to ensure that the monies being paid by Government are being utilized satisfactorily and that a steady improvement in the standard of education is being maintained.

Twenty African teachers (two of whom are women) passed the written part of the Government Certificate Examination during the year. There are now 302 natives holding these certificates provisionally and the work of confirming them after inspection of their practical teaching work is now well in hand.

Three hundred and fifty-five youths are now attending teacher training courses in Mission normal schools, or are in middle schools preparatory to entering definite training courses.

Annual returns, however, shew that Mission Societies employed on 31st December, 1931, some 2,500 teachers in 2,171 schools and sub-grade schools. The majority of these teachers must be classed as catechists or evangelists in charge of so-called "bush" schools and have never had an adequate course of professional training or even passed Standard II of the village school course.

Two hundred and eighty-one certificated teachers were in the service of Missions at the end of the year and qualified for the Government grant-in-aid.

One hundred and twenty-four European teachers and thirty-one European technical instructors were engaged in native education in Missions during the year.

Sixteen Europeans and twenty-two African teachers and instructors, including the staff of the Barotse National School, comprised the staff of the Native Education Department.

Returns, which must be regarded as approximate, shew that 11,370 boys and 5,350 girls attended "recognized" schools, while

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roughly 24,000 boys and 25,000 girls attended "sub-grade" schools. Three hundred pupils are at present attending Government elementary and middle schools including the Barotse National School which is maintained entirely by the Barotse National Trust Fund. It is estimated that there are about 265,000 children of school age in Northern Rhodesia.

The foregoing figures give some idea of the magnitude of the task of improving the standard of village elementary education to which Government and Mission Societies are devoting themselves. It is hoped that the Jeanes Training School established by Government at Mazabuka will be an important and effective agent in the work. At present there are twenty-two selected Mission Teachers being trained as "Jeanes" teachers. Their wives also receive training in hygiene, child-welfare, and domestic subjects such as cooking, sewing, etc.

At Mbereshi (London Missionary Society) women teachers are being trained along "Jeanes" lines. A grant of £500 per year is given towards the cost of this training; half being borne by Government and half by the Carnegie Corporation.

There are sixteen boarding girls' schools subsidized by Government, with an enrolment of 432 pupils. Domestic and vocational training is an important feature of the curricula of these girls' schools.

Boys receive training as carpenters, masons, and bricklayers at the Barotse National School, at Mbereshi (London Missionary Society) and, to a lesser degree, at several other Mission stations. Eight native agricultural assistants are being trained at the Government Agricultural School at Mazabuka. It is the intention of Government to establish a Trades School for the training of carpenters, masons, and bricklayers at the proposed new capital.

Government has also established an elementary and middle boarding school for boys at Mazabuka and an elementary mixed school at Ndola.

The proportion of expenditure on native education to total expenditure of the territory was  $2 \cdot 34$  per cent.; the amount spent per head of native population on native education was approximately  $3\frac{1}{2}d$ .

# CHAPTER X.

# COMMUNICATIONS AND TRANSPORT.

#### Railways.

The railway from Southern Rhodesia via the Victoria Falls to the Belgian Congo passes through north-western Rhodesia. Two mail trains, to which dining cars are attached, run each week in each direction. There is, in addition, one train per day, Mondays excepted, in each direction between Livingstone and Ndola. No dining car is attached to this train, but it stops at certain places sufficiently long for passengers to take a meal at the local hotel. Second-class accommodation only is provided on this train. All mail trains carry first- and second-class passengers and sleeping accommodation is provided.

Transport to stations in the Barotse Valley is by barge along the Zambezi River, but for rapid transport light aeroplanes are now being used to Mongu, where there is a Government aerodrome. There is no sleeping accommodation on the barges which are tied for the night whilst travellers camp on land.

# Roads.

With the exception of that portion of the Great North Road lying between the Victoria Falls railway bridge and Livingstone, a distance of seven miles, and the private road of the Broken Hill Mining and Development Company leading from their plant and mine to the hydro-electric power station on the Mulungushi River, some thirty-six miles away, there are no macadamized roads in the territory, and these two alone, excluding, of course, roads in the township areas, can be described as "all weather" roads. The remainder are earth roads and until the commencement of the present year, the rivers which they cross were generally bridged by bush timber structures and occasionally by light bridges on steel rail foundations. Where the roads cross low-lying and marshy country, embankments or drainage have usually been provided, but traffic is liable to interruption during at least February and March, that is, the latter part of the rainy season.

The extensive bridging and culverting programme which was entered into during the last year should, however, effect an immediate improvement. Rapid progress in the programme has been made and arrangements have been completed for still more rapid developments in the ensuing year. Provision has also been arranged for reconditioning the arterial roads and this work, following upon detailed survey for suitable deviations and the bridging and culverting programme, should materially improve the road system of the territory.

A tendency towards the use of heavier vehicles became very noticeable as progressive improvements were made in the condition of roads during recent years, transport contractors naturally being anxious to carry maximum possible loads. The weights of vehicles consequently had to be restricted, particularly during the rainy season when the unsurfaced roads are particularly liable to suffer serious damage.

The Great North Road from Victoria Falls via Livingstone, Lusaka, Broken Hill, Kapiri Mposhi, Mpika, and Kasama to Abercorn and Mpulungu Harbour on Lake Tanganyika, where the Lake Steamer connects with Kigoma on the Tanganyika Railway, was kept open to traffic throughout the year, as was also the Congo Border Road which leaves the Great North Road near Kapiri Mposhi and runs via Ndola and Solwezi to Kasempa, and there joins the Mumbwa-Kasempa loop road which rejoins the Great North Road south of Broken Hill. The Great East Road which runs from Lusaka to Fort Jameson and connects with the Nyasaland road system was open to traffic, the movement of which was severely restricted over the central portion during the rainy season. This central portion which crossed two large rivers, the Lunsenfwa and the Luangwa, has been deviated to a point on the Luangwa River below its confluence with the Lunsenfwa, and a bridge is now in course of construction there, the expenditure being met by the Beit Railway Trust.

Communication has been maintained with Fort Rosebery in the Mweru-Luapula Province by a road from Ndola which continues through the Awemba Province to rejoin the Great North Road.

Another road of importance constructed during the year is that running from Fort Jameson through Lundazi to Isoka, forming a direct link with Nyasaland and Southern Rhodesia on the south and Tanganyika on the north. A track opened from Mazabuka on the railway line to the Zambezi River has also provided direct access to Salisbury, and has been employed by travellers, though no very comprehensive construction was entered into.

# Postal.

Statistics of correspondence are estimated on the basis of a fourteen days' count, multiplied by 26. For 1931,<sup>\*</sup> the count was taken early in October, but the peak volume occurred about June. It is possible, therefore, that the volume for the calendar year is underestimated.

The following statistical table shows a triennial comparison of correspondence dealt with.

			Received.		
			1931	1930	1929
Letters			3,472,612	3,413,164	2,235,272
Post Cards			83,554	50,792	35,620
Newspapers			916,764	884,416	688,792
Bookpackets			831,376	680,132	514,254
Parcels			67,184	91,208	66,560
Registered articles			91,676	85,072	67,964
		ident"	5,463,166	5,204,784	3,608,462
			Despatche	d.	
Letters			3,292,220	3,117,984	2,383,264
Post Cards			80,500	53,600	40,716
Newspapers			169,728	117,156	160,420
Bookpackets			416,052	227,064	272,558
Parcels	· · · ·		19,760	17,940	15,132
Registered articles			123,604	121,420	68,302
			4,101,864	3,655,164	2,940,392
			AND IN COLUMN TWO IS NOT THE OWNER.	And and a state of the state of	and and a second division of the local divis

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The volume of undelivered correspondence dealt with in the Returned Letter Office was 29,237 compared with 23,924 in 1930.

The value of postage stamps sold was less than in the preceding year, which may be attributed to the reduction in rates of postage which came into force during August, 1930.

		1931.	1930.	1929.
Stamps sold	 	22,723	24,397	21,980

Money Order and Postal Order issues increased slightly, but payments increased considerably.

	1931.	1930.	1929.
	£	£	£
Money Orders issued	. 74,967	82,298	62,693
Postal Orders issued	47 715	39,453	22,224
	122,682	121,751	84,917
Money Orders paid	. 31,409	22,380	28,444
Postal Orders paid	. 16,330	14,240	10,863
	47,739	36,620	39,307
TOTAL	. 170,421	158,371	124,224

"Cash-on-delivery" parcels also increased considerably.

			1931.	1930.
Number			 8,436	5,502
Value			 £22,904	£17,442
Average v	alue per	parcel	 £2.7	£3·1

#### Telegraphs.

The main telegraph route lies alongside the railway from the Victoria Falls Bridge to the Congo Border, with branches from Ndola to Luanshya and to Nchanga, and from Nkana to Mufulira. Fort Jameson is connected with the Nyasaland system, Kasama and Abercorn with the Nyasaland and Tanganyika systems.

The volume and value of traffic handled was as follows :----

	1931.	1930.	1929.
Forwarded—			
Paid telegrams	 103,495	99,489	73,098
Official telegrams	 23,218	15,473	12,776
Number of words	 $\cdot 1,648,791$	1,689,142	_
Delivered	 110,800	99,196	74,802
Re-transmissions	 400,726	324,546	227,372
Nett revenue	 £16,084	£17,110	£14,378

The decrease in revenue, 6 per cent. less than in 1930, is due to a reduction in the volume of cable traffic from and to offices in the "copper belt," and the decrease in the average number of words per telegram handed in (11.7 per cent.) less than in 1930).

#### Telephones.

An automatic telephone exchange, equipped for 200 subscribers, was opened at Ndola in October. Work on a similar exchange at Livingstone was well advanced at the end of the year and was opened for service on 14th March, 1932. Licensed exchanges are operated at the Roan Antelope, Nkana, Bwana Mkubwa, and Broken Hill Mines by the respective mining companies. The three first named are connected with the Post Office trunk system linking the following places, Ndola, Bwana Mkubwa, Luanshya, Nkana, Nchanga, and Mufulira, while Broken Hill will shortly be included. Work on the trunk route between Broken Hill and Livingstone is expected to be completed about the end of June, 1932. Apparatus for affording through communication between the southern zone (Broken Hill—Livingstone) and the copperbelt zone (north of Broken Hill) will not be available before the end of 1932.

#### Revenue. 1931. 1930. 1929. £ £ £ 705 Exchange rentals 1,521 920 .... Call office and trunk fees 277 127 122 £827 £1,798 £1,047

#### Wireless.

#### (a) Aeronautical Services.

Aeronautical wireless stations have been installed at Mpika and Broken Hill for radio-electrical services in connexion with the Imperial Airways Cape to Cairo Air Route. The former was equipped for point to point communication only, by means of short-wave emissions, and the latter for communication with aircraft in flight, on a wavelength of 900 meters, as well as for point to point communication on short wave. The region surrounding these stations is subject to extraordinary atmospheric disturbances, and arrangements are being made for equipment for communication with aircraft in flight to be installed temporarily at Mpika.

#### (b) Internal and International Services.

In addition to aeronautical radio-electrical services, Broken Hill and Mpika maintain a public service, as Mpika is otherwise isolated. A licensed station at Kansanshi is open for restricted public service, and communicates with Broken Hill. Short-wave equipment is being installed at Mongu and Fort Jameson, while the Livingstone installation was completed and opened in March, 1932. Ndola station was in operation for a few months during 1931–2, after which the equipment was transferred to Broken Hill,

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which is the central wireless station for all purposes. International communication is maintained by Broken Hill with the contiguous territories of Tanganyika, Southern Rhodesia, and the Union of South Africa.

Revenue is included in telegraph revenue.

#### Aircraft.

At the end of 1931, the Cape to Cairo service of the Imperial Airways Limited had not yet been opened as far as Northern Rhodesia, but the aerodromes at Mpika and Broken Hill were fully equipped and in readiness. The service was inaugurated early in 1932.

Northern Aviation Limited, the only company at present operating in the territory, continues to run passengers and mails between Ndola and the coppermines, and to fly passengers to other aerodromes as and when required.

The usual number of machines have passed over the territory during the year, but it cannot be said that there has been any increase in air traffic.

During the holiday seasons it is usual for a light aeroplane or two to come up to Livingstone from Southern Rhodesia to take tourists and others for short flights over the Falls and vicinity.

### CHAPTER XI.

#### BANKING, CURRENCY, AND WEIGHTS AND MEASURES.

The Standard Bank of South Africa Limited and Barclays Bank (Dominion, Colonial, and Overseas) operate in the territory with branches or agencies at the more important centres. The total deposits at these banks at 31st December, 1931, amounted to  $\pounds1,095,258$  compared with  $\pounds1,282,812$  at the end of the previous year, a decrease of over 14 per cent. The Post Office Savings Bank continues to expand, the total deposits amounting to  $\pounds13,386$  at 31st March, 1932, compared with  $\pounds11,207$  and  $\pounds7,682$  at the close of 1930–31 and 1929–30 respectively, an increase of nearly 20 per cent. during the year. There is no Land or Agricultural Bank in the territory.

The Bank Notes and Coinage Ordinance 1931 prescribes as legal tender at par throughout the territory (a) Bank of England Notes, (b) Bank Notes issued by the Standard Bank of South Africa Limited and Barclays Bank (Dominion, Colonial and Overseas) at their offices at Salisbury, Southern Rhodesia, and (c) the standard coinage in use in England. The enactment of this Ordinance on 12th October, 1931, marked the departure of Northern Rhodesia from the Gold Standard of currency. At the same time the export of gold or silver coin was prohibited except as personal cash not exceeding £5 in gold and £2 in silver.

The English standards of weights and measures are in force. The enactment of a local law is under consideration.

# CHAPTER XII.

# PUBLIC WORKS.

With the extension of the loan programme the work of the Department has continued to increase. The following is a brief summary of the major works completed and undertaken during the year.

Broken Hill.—A European school, bonded warehouse, school teachers' quarters, meteorological station, and a wireless station were completed.

Fort Jameson.-Construction of a wireless station was undertaken.

Livingstone.—The Post Office completed last year was extended and in addition a Nursing Sisters' home, a Customs warehouse and an operating and X-ray block at the European hospital were completed. A native hospital, a wireless station, and alterations and extensions to the existing European hospital were commenced

Luanshya.—Houses, Police camp, offices, and cells, Post Office, Court and rest houses and a European school were completed.

Lusaka.—Gaol, Police mess, and a native compound were completed.

Mazabuka.—A meteorological station and a normal school were completed.

Mongu.—An office and Court house and a grain store were finished, and a wireless station was commenced.

Mpika.—A wireless station was completed.

*Ndola.*—A European school, a wireless station, Police quarters, mess and lines were completed, together with a native school.

In addition, houses, hostels, bungalows and quarters, etc., were completed at various places, and work commenced on the native hospital at Livingstone, native compounds at Ndola, Lusaka, and Senanga, and a native dispensary at Petauke.

The majority of the work on the railway line was carried out under contract, and arrangements had been completed for the extension of the building programme to the provinces lying away from the more settled area of the territory, when the general economic situation made it advisable to suspend a considerable portion of the programme which is, at present, restricted to works actually in hand at the commencement of the year.

The Great North Road was extended through Livingstone whilst the deviations between Chisamba and Broken Hill and those between Kapiri Mposhi and Serenje were completed. A new route from Abercorn to Mpulungu on Lake Tanganyika is being constructed. On the Great East Road the central deviation is well advanced and the bridging of the Luangwa River has commenced. Improvements to the Congo Border and Mumbwa-Kasempa loop roads continue. The survey of roads to serve the western area was completed. The bridging and culverting programme was commenced and twenty-two bridges and one hundred and thirty-six culverts had been erected on the arterial roads by the end of the year. The European staff of the Public Works Department consists of a Director, a Deputy Director, an Architect, three Executive Engineers, two Accountants, six Inspectors of Works, four Road Foremen, and five clerks.

In addition a large staff is employed on works financed from loan funds. The roads staff numbers twenty-three Europeans of whom ten are executive officers. The building staff numbers twenty-seven Europeans, of whom three have special qualifications. Some of the persons included in building staff have been seconded from the Department proper.

### CHAPTER XIII.

#### JUSTICE AND POLICE.

#### Justice.

Justice is administered by the High Court of Northern Rhodesia and by the Magistrates' and Native Commissioners' Courts subject to appeal to and review by the High Court. During the year the High Court dealt with 173 civil matters as against 225 in the preceding year and heard 9 actions and 7 appeals. Fifteen petitions in bankruptcy were presented. Sessions were held at Mazabuka, Ndola, Broken Hill, and Lusaka in May, and at Ndola in December.

Thirty-two criminal cases came before the Court exclusive of reviews of judgments in the lower Courts : these latter numbered 365, of which 293 were confirmed, 24 quashed, 25 altered, 4 referred back and subsequently approved ; in the remaining 19 cases the accused were bound over.

#### Native Courts.

The Native Courts Ordinance was passed at the same time as the Native Authority Ordinance and was, like the latter Ordinance, applied to all the territory with the exception of Barotseland as from 1st April, 1930.

Native Courts are established and constituted by the Governor and are of two grades. In addition to administering native law and custom in so far as such is not repugnant to natural justice and morality, they are given power under the Native Court Rules to try certain offences against the laws of the territory. Their power to inflict punishment is strictly limited and the Magistrates' and Native Commissioners' Courts have power to revise and review their judgments, and in certain instances to order the retrial of a case. District Officers may sit as assessors in such Courts.

The Governor has the power to suspend and dismiss members and the Provincial Commissioner has similar power, subject to a report being made to the Governor on each occasion that it is exercised.

During the short period which has elapsed since their inception, these Courts have functioned satisfactorily, have proved generally acceptable to, and well adapted to the condition of, the people.

#### Police.

The total number of cases dealt with by the Police during 1931 was 8,645, an increase of 3,658 on the figures for 1930, made up as follows :—

Increase of	offences by	Europeans.
Common Law.		Statute Law.
66		335

Increase of offences by natives.

Common Law. Statute Law. 500 2,757

The figures quoted below will indicate the number of more serious cases dealt with as compared with 1930.

Crime.			E	uropeans.	Natives.	Total		
						1931.	1930.	
Murder				_	15	15	19	
Attempted murder				1	3	4		
Manslaughter					22	22	11	
Rape				1	20	21	20	
Indecent Assault				3	31	34	9	
Incest					-		2	
Housebreaking and	Burglan	y		6	137	143	74	
Larceny, all forms				58	978	1,036	674	
Assault				48	151	199	179	
Assault o.a.b.h.				18	69	87	128	
Arson				-	13	13	13	
Forgery and Utterin	ng			20	44	64	35	
Unlawful wounding				8	18	26	11	
Embezzlement				- 1	9	9	10	
Receiving stolen pro	operty			1	75	76	36	
Affray					80	80	121	
False Imprisonment	t			-			15	
Fraud				10	9	19	14	
Malicious damage to	o proper	rty		3	20	23	34	
Falsification of acco	ounts			3		3	1	
Assault on Police O	fficer			4	24	28	20	
Attempted suicide					4	4	3	
Attempted Sodomy				-			1	
Extortion				- 11	1	1	1	
Public Indecency				-	1	1	1	
Riot					58	58	24	

It will be seen that there has been a large increase in cases of housebreaking, burglary, and larceny which is undoubtedly due to the influx of Europeans and natives to the mining area in the early part of 1931, and to the subsequent closing down of Bwana Mkubwa Mine coupled with retrenchment on other mines in that area. The figures quoted do not include those cases heard at stations where no Police are available.

#### Prisons.

There are five Central Prisons in the territory situated at Livingstone, Broken Hill, Kasama, Mongu, and Fort Jameson. Committals to the Central Prisons during the year totalled 1,445 as compared with 993 in 1930. The figures for individual prisons are as follows :----

			C	ommitted
Livingstone				488
Broken Hill				544
Kasama				55
Mongu				246
Fort Jameso			112	
	ſ	fotal		1,445

The daily average number of prisoners was  $421 \cdot 2$  as compared with 321 for the year 1930. The average sick was  $21 \cdot 7$  compared with  $14 \cdot 68$  for the year 1930.

Three natives were executed during the year. There were eight deaths from natural causes as against four for the year 1930.

#### CHAPTER XIV.

#### LEGISLATION.

During the year under review three Sessions of the Legisla'tive Council were held in March, July, and October respectively. The latter Session was an urgent meeting summoned to pass legislation concerning the Gold Standard and was adjourned until 13th November, for which date the Council had already previously been summoned.

At these Sessions the 40 Ordinances enumerated below were passed, of which no less than 24 were amendments of the existing law.

#### Ordinances.

Appropriation Ordinance (No. 17). Bank Notes and Coinage Ordinance (No. 23). Boy Scouts and Girl Guides Associations Ordinance (No. 3). Chambishi-Mufulira Branch Railway Ordinance (No. 4). Chastell Pension Ordinance (No. 2). Cigarette Excise and Surtax Ordinance (No. 19). Companies (Amendment) Ordinance (No. 6). Customs and Excise Duties Ordinance (No. 18). Customs and Excise Duties (Amendment) Ordinance (No. 32). Customs Management (Amendment) Ordinance (No. 38). Electric Light and Power Ordinance (No. 40). Explosives (Amendment) Ordinance (No. 30). European Officers' Pensions (Amendment) Ordinance (No. 35). General Loan and Inscribed Stock Ordinance (No. 15). Income Tax (Amendment) Ordinance (No. 14). Liquor Licensing (Amendment) Ordinance (No. 7). Liquor Licensing (Amendment) (No. 2), Ordinance (No. 39). Loan Ordinance (No. 21). Municipal Corporations (Amendment) Ordinance (No. 27). Northern Rhodesia Police (Amendment) Ordinance (No. 33). Penal Code (Amendment) Ordinance (No. 28). Plant Pests and Diseases Ordinance (No. 16). Plant Pests and Diseases (Amendment) Ordinance (No. 25).

Police Magistrates (Amendment) Ordinance (No. 10). Prisons (Amendment) Ordinance (No. 20). Public Health (Amendment) Ordinance (No. 1). Quit Rent Redemption and Apportionment Ordinance (No. 34). Railways (Deviations) Ordinance (No. 22). Railways (Deviations) (Amendment) Ordinance (No. 24). Registration of Business Names Ordinance (No. 29). Registration of Mining Titles (Amendment) Ordinance (No. 8). Registration of Mining Titles (Amendment) (No. 2) Ordinance (No. 26).

Revised Edition of the Laws (Amendment) Ordinance (No. 9).

Revised Edition of the Laws (Supplemental) Ordinance (No. 31).

Stamp Duty (Amendment) Ordinance (No. 11).

Supplementary Appropriation Ordinance (No. 37).

Town Planning (Amendment) Ordinance (No. 12).

Townships (Amendment) Ordinance (No. 13).

Trustee Investment in Northern Rhodesia Government Securities Ordinance (No. 36). rinary Surgeons (Amendment) Ordinance (No. 5).

Of the substantive Ordinances passed six dealt with financial matters, the more important being the General Loan and Inscribed Stock Ordinance followed by the Loan Ordinance, authorizing the borrowing of a loan of £2,250,000, The Trustee Investment in Northern Rhodesia Government Securities Ordinance, and the Bank Notes and Coinage Ordinance under which Northern Rhodesia abandoned the Gold Standard simultaneously with Southern Rhodesia.

The Customs and Excise Duties were consolidated and amended by the Customs and Excise Duties Ordinance and the Cigarette Excise and Surtax Ordinance.

As regards railways, legislative sanction was given to construct a branch line from Chambishi to Mufulira, and statutory authority was given by the Railways (Deviations) Ordinance to railways to make deviations in existing lines and acquire, compulsorily, land necessary for this purpose.

The Plant Pests and Diseases Ordinance provided powers for the control of plants imported or already within the territory.

Provision was made by the Quit Rent Redemption and Apportionment Ordinance for the redemption of quit rents payable on land in respect of which final title had been issued.

The Registration of Business Names Ordinance provides for the registration of firms which do not disclose the true names of the persons trading under a firm name.

The activities of Boy Scouts and Girl Guides Associations were controlled and their interests protected by the Boy Scouts and Girl Guides Associations Ordinance.

One of the more important Ordinances was the Electric Light and Power Ordinance which was passed after full consideration in Select Committee. Except as regards one or two points, the Ordinance was practically in a form agreed with those more particularly concerned. It is hoped to bring the Ordinance into force at an 16746 A 7

#### COLONIAL REPORTS-ANNUAL.

early date and as soon as the necessary regulations have been published.

Various Ordinances were amended in certain particulars the more important being the Veterinary Surgeons (Amendment) Ordinance whereby other than members of the Royal College of Veterinary Surgeons can be admitted to practise, the Municipal Corporations (Amendment) Ordinance under which the provisions in regard to the amount of rates were altered and more detailed procedure laid down for the imposition of a special rate, and the Customs Management (Amendment) Ordinance whereby provision was made for the introduction of the triptique system.

The subsidiary legislation issued was as follows :--

#### **Government** Notices.

Air Navigation (Colonies, Protectorates and Mandated Territories) Order in Council, 1927—

Customs Aerodromes (No. 35).

Arms and Ammunition Ordinance-

Arms and Ammunition (Amendment) Rules (No. 66).

Arms and Ammunition (Amendment) (No. 2) Rules (No. 80).

Brands Ordinance-

Brands Regulations (No. 50).

Brands Regulations amended (No. 76).

Cattle Diseases Ordinance-

Authority to Veterinary Officers and Stock Inspectors under section 4 (No. 42). Cattle Diseases (Prohibited Imports) Rules (No. 54).

Cattle Diseases (Prohibited Imports) Rules amended (No. 100).

Cattle Diseases Regulations (No. 69).

Tsetse Fly (Control of Traffic) Regulations (No. 115).

Civil Service Proclamation-

Civil Servants (Native Employees) Rules (No. 84).

Civil Servants (Native Employees) Rules amended (No. 117).

Clubs Registration Ordinance-

Clubs Liquor Regulations (No. 64).

Customs and Excise Duties Ordinance-

Amendment of Agreement with the Union of South Africa (No. 22).

Amendment of Annexure of Agreement (No. 145).

Customs and Excise Duties (Manufacture of Explosives) Regulations (No. 14).

Customs and Excise Duties (Materials for Extraction of Minerals) Regulations (No. 73).

Customs and Excise Duties (Air Service Rebate) Regulations (No. 81).

Customs and Excise Duties (Soap Manufacture) Regulations (No. 89).

Customs and Excise Duties (Soap Manufacture) Regulations (Amendment) (No. 116).

Customs and Excise Duties (Settlers Effects) Regulations (No. 99).

Customs Management Ordinance-

Customs Management (Amendment) Regulations (No. 9).

Customs Management (Amendment) Regulations (No. 144).

Dairies and Dairy Produce Ordinance-

Date of commencement (No. 16).

Dairies and Dairy Produce Regulations (No. 32).

Dangerous Drugs Ordinance-

Habit-Forming Drugs (Amendment) Regulations (No. 37).

Employment of Natives Ordinance-Employment of Natives Regulations (No. 13). Employment of Natives Regulations amended (No. 136). Europeans Officers' Pensions Ordinance-List of Pensionable Offices (No. 104). Explosives Ordinance-Explosives Regulations (No. 150). Appointment of Inspector of Explosives (No. 161). Exportation of Gold and Silver Ordinance— Gold and Silver Restriction Regulations (No. 132). Extradition and Fugitive Offenders Ordinance-Application to Foreign States (No. 124). Application to Principality of Monaco (No. 129). Application to Republic of Colombia (No. 21). Forests Ordinance-Demarcated Forest-Luansia River Area (No. 65). Game Ordinance-Game Regulations (No. 147). Shooting of Buffalo in Native Reserves (No. 140). High Court Ordinance-Admission of Legal Practitioners Rules (No. 62). Articled Clerks Rules (No. 61). Sessions of the High Court (No. 60). High Court Rules (No. 56). High Court (District Registry) Rules (No. 57). High Court District Registry, Ndola and Fort Jameson (No. 58). Judicial Committee Rules (No. 92). Under-Sheriffs (No. 59). Immigration Ordinance-Immigrants (Amendment) Regulations (Repealed) (No. 24). Immigration Regulations (No. 110). Income-tax Ordinance-Income Tax (Mining) Rules (No. 133). Interpretation Ordinance-Delegation of powers conferred by the Native Courts Ordinance (No. 149). Lands and Deeds Registry Ordinance-Lands and Deeds Registry (Amendment) Regulations (No. 29). Lands and Deeds Registry (Amendment) Regulations (No. 79). Liquor Licensing Ordinance-Liquor Licensing (Amendment) Regulations (No. 28). Liquor Licensing (Amendment) (No. 2) Regulations (No. 43). Liquor Licensing (Amendment) (No. 3) Regulations (No. 138). Liquor Licensing (Amendment) (No. 4) Regulations (No. 167). Lunacy Ordinance-Central Prisons as places of confinement (No. 114). Magistrates' Courts Ordinance-Magistrates' Courts Rules (No. 90). Magisterial Districts and Courts (No. 91). Motor Traffic Ordinance— Examining Officers (No. 7). Motor Traffic (Amendment) Regulations (No. 23). Motor Traffic (Amendment) (No. 2) Regulations (No. 44). Medical Practitioners and Dentists Ordinance-Medical Practitioners and Dentists-Return of as at 1st January, 1931 (No. 3). Mining Proclamation-

Mines (Health and Mortality Returns) Regulations (No. 142). Labour Returns (No. 141).

Mining (Amendment) Regulations (No. 49).

Mining (Amendment) (No. 2) Regulations (No. 72).

Mining (Amendment) (No. 3) Regulations (No. 139).

Mining (Inspection and Regulation) (Amendment) Regulations (No. 77).

Mining (Inspection and Regulation) (No. 2) (Amendment) Regulations (No. 108). Reserved Area (No. 68).

Registration of Mining Titles Ordinance-

Registration of Mining Titles (Amendment) Rules (No. 30).

Municipal Corporations Ordinance-

Livingstone Native Location Bye-Laws (No. 106).

Livingstone Travelling Fairs Regulations (No. 105).

Livingstone Petroleum (Amendment) Regulations (No. 86).

Livingstone Street Collections Bye-Laws (No. 130).

Livingstone Traffic Bye-Laws (No. 63).

Livingstone Traffic (Amendment) Bye-Laws (No. 131).

Native Beer Ordinance-

Native Beer Regulations (No. 119).

Native Commissioners' Courts Ordinance-

Native Commissioners' Courts (Criminal Appeal) Rules (No. 123).

Native Courts Ordinance-

Delegation of powers to Provincial Commissioners and District Commissioners (No. 149).

Native Grain Trading Ordinance-

Prohibition withdrawn in Kalabo District (No. 41).

Native Registration Ordinance-

Native Registration (Amendment) Rules (No. 20).

Northern Rhodesia (Crown Land and Native Reserves) Order in Council-

Northern Rhodesia (Native Reserves) (Amendment) Order in Council (No. 78). Northern Rhodesia (Native Reserves) (Amendment) (No. 2) Order in Council (No. 156).

Native Reserves (Amendment) Regulations (No. 6).

Native Reserves (Amendment) (No. 2) Regulations (No. 17).

Northern Rhodesia Order in Council-

Northern Rhodesia (Amendment) Order in Council (No. 128).

Change of name of Chilanga District to Lusaka District (No. 70). Change of name of Nalolo District to Senanga District (No. 121).

Colonial Stock Acts Extension (Northern Rhodesia) Order-

Copyright (Federated Malay States) Order, 1931 (No. 103).

Convention concerning Forced or Compulsory Labour (Application to Northern Rhodesia) (No. 127).

Ordinances, Non-Disallowance of-

Nos. 20, 26, 27, 29, 30, 31, 32, 33, 34, 35 of 1930 (No. 22).

Nos. 17, 18, 21, 22, 23, 36, 37, 39 of 1930 (No. 31).

Nos. 19, 24, 25, 28 and 40 of 1930 (No. 38).

Nos. 38 of 1930, 1, 4, 5 and 11 of 1931 (No. 82).

Nos. 6, 7, 8, 9, 10, 16, 19 and 20 of 1931 (No. 88).

Nos. 2, 3, 12, 18 and 22 of 1931 (No. 96).

Nos. 15, 17 and 21 of 1931 (No. 102).

No. 13 of 1931 (No. 109).

No. 14 of 1931 (No. 112).

No. 23 of 1931 (No. 166).

Penal Code-

Date of commencement (No. 118).

Plant Pests and Diseases Ordinance-

Plant Pests and Diseases (Tobacco) Regulations (No. 67).

45 NORTHERN RHODESIA, 1931. Police Magistrates Ordinance-Declaration of Areas of Jurisdiction of Police Magistrates (No. 48). Public Health Ordinance-Application of section 74 to Livingstone (No. 101). Application of section 74 to all townships (No. 93). Central Board of Public Health Regulations (No. 27). Public Health (Infectious Diseases) Regulations (No. 143). Public Pounds and Trespass Ordinance-Establishment of a pound at Choma (No. 152). Establishment of a pound at Livingstone (No. 160). Railways-Chambishi-Mufulira Branch Railway Ordinance-Date of commencement (No. 83). Registration of Business Names Ordinance-Division of Territory and places of Registration (No. 168). Registration of Business Names Regulations (No. 169). Roads and Vehicles Ordinance-Restriction on use of certain pontoons (No. 15). Restrictions on use of roads not to apply to Congo Border Roads No. 3Ka, etc. (No. 46). Restriction of Traffic on Great East Road (No. 154). Restriction of Traffic on Great East Road (No. 74). Restriction of Traffic on District Road 187/Lu (No. 107). Restriction of Traffic on Branch Road 205/E.Lu (No. 162). Branch Roads-Batoka Province (No. 2). Branch Roads—East Luangwa Province (No. 163). Main District and Branch Roads-Mweru-Luapula Province (No. 158). District Roads-Tanganyika Province (No. 4). Sessions of the High Court (No. 60). Telegraphs Ordinance-Telegraph Regulations (No. 75). Telegraph Regulations Schedule cancelled and republished (No. 98). Telephone Regulations, Schedule amended (No. 111). Theatres and Cinematograph Exhibition Ordinance-Films Censorship (Amendment) Regulations (No. 85). Townships Ordinance-Broken Hill Township-(Amendment) Regulations (No. 52). Application of Assessment Regulations (No. 151). (Rating) Regulations (No. 164). Broken Hill Mine Township-(Amendment) Regulations (No. 51). Bwana Mkubwa Mine Township-Declaration and application of rules (No. 34). Board of Management (No. 39). Early Closing Day (No. 113). Chilanga-Revocation as a township (No. 71). Choma Township-(Amendment) Regulations (No. 146). Fort Jameson Township-(Amendment) Regulations (No. 12). Kafue Township-Temporary suspension of Rule 1 (36) (No. 97). Nalolo-Revocation as a Township (No. 120).

Townships Ordinance-cont.

Ndola Township—

(Amendment) Regulations (No. 10).

(Amendment) (No. 2) Regulations (No. 11).

(Amendment) (No. 3) Regulations (No. 155).

Inclusion of Cemetery within Township (No. 135).

Temporary suspension of Rule 6 (34) (No. 159).

Application of Assessment Regulations (No. 151).

Petauke Township (Description of Area) (No. 53).

Townships (Assessment) Regulations (No. 126).

Townships (Assessment) Regulations, application to Ndola and Broken Hill (No. 151).

Townships (General) Regulations, 1930-

Composition of Boards : Ndola, Mazabuka, Lusaka (No. 33).

Composition of Boards : Fort Jameson, Kasama (No. 40).

Townships (Petroleum) Regulations, 1930-

Townships (Petroleum) (Amendment) Regulations (No. 47).

Townships (Travelling Fairs) Regulations (No. 87).

Walamba Township-

Revocation as a Township (No. 55).

Under-Sheriffs (No. 59).

Visiting Justices (No. 134).

Visiting Justices Livingstone Prison (No. 148).

Volunteer Force Ordinance—

Repeal of Regulations (No. 45).

#### CHAPTER XV.

#### PUBLIC FINANCE AND TAXATION.

		nevenue.	f f	Extraorainary.	Expenditure.
1000 07		421,035	421,584	33.867	455,451
1926 - 27	 			A part of some of the second sec	and the second second second
1927 - 28	 	474,683	475,175	43,631	518,806
1928-29	 	541,606	496,399	28,769	525,168
1929-30	 	672,289	532,367	22,160	554,527
1930-31	 	830,254	668,083	36,903	704,986
1931-32	 	856,376	793,798	26,258	820,056

These figures exclude repayments to the Imperial Exchequer of grants-in-aid received in 1924–5 and 1925–6.

Loan expenditure on capital development, which amounted to  $\pm 566,801$  at 31st March, 1931, reached a total of  $\pm 1,216,681$  at 31st March, 1932, an increase of  $\pm 649,880$  during the year.

The public debt, represented by inscribed stock issued early in 1932 under the Northern Rhodesia 5 per cent. Loan 1950/70, amounted to £1,250,000 at 31st March, 1932.

The assets of the territory as at 31st March, 1932, consisted of :--

Cash							249,840
Investme	nts						19,304
Advances		the rec	eipt of	further	loan f	unds	53,623
Advances	pending	the re	ceipt of	f approv	red gra	nts	12,249
Sundry de							20,001
Stores							36,408

£391,425

£

#### NORTHERN RHODESIA, 1931.

Earmarked to meet the following liabilities :--

	£
Unexpended balance of Loan	31,224
Due to Savings Bank depositors	13,586
Due to various Postal Administrations	11,243
Due to Native Reserves Fund	7,727
Due to sundry creditors	26,077
to an	89,857
Surplus assets	£301,568

The main heads of taxation and yields during 1931–32 were as follows :—

				t	
1.	Customs and I	Excise d	luties	 342,017	
2.	Licences			 34,045	
3.	Native tax			 148,263	
4.	Income-tax			 126,567	
5.	Stamp duties			 14,259	
3. 4.	Native tax Income-tax	 		 $148,263 \\ 126,567$	

#### £665,151

For Customs purposes Northern Rhodesia is divided into two zones known as the Congo and Zambezi Basins. The Congo Basin can roughly be taken to be all the territory north of a line drawn on a map of Northern Rhodesia in a south-westerly direction from Fife in the north-east, to the border where the territory joins the southeast corner of the Belgian Congo. The remainder of the territory to the west and the south constitutes the Zambezi Basin. The Zambezi Basin is by far the more important part of the territory industrially, and more than 90 per cent. of the total trade is transacted in this area.

The Zambezi Basin area is subject to Customs Agreements with Southern Rhodesia, the Union of South Africa, and with the British Bechuanaland Protectorate, Basutoland, and Swaziland. The Agreements provide in general for considerable rebates upon interchange of local manufactures, and for the free interchange of raw products with limitations in regard to leaf tobacco.

Under the terms of the Agreement with the Union of South Africa, Northern Rhodesia receives actual duty at Union tariff rates on imported goods ex open stocks, except on certain commodities where the duties are higher in Northern Rhodesia, and upon South African manufactures the Union Government pays the Northern Rhodesia Government 12 per cent. of the export value of foodstuffs and 6 per cent. of the export value of all other manufactures excepting cigarettes, tobacco, ales and beers, wines and spirits. The latter articles are directly taxed at Northern Rhodesia tariff rates subject to the following rebates :—Cigarettes and tobacco manufactures 75 per cent., ales, beers and wines 50 per cent., and spirits 25 per cent. Free interchange of raw products, except maize and maize meal, is provided for, but Northern Rhodesia leaf tobacco exported to the Union is limited to 400,000 lb. per annum free of duty, and similarly Union leaf tobacco exported to Northern Rhodesia is limited to 50,000 lb. per annum free of duty.

Under the provisions of the Agreement with Southern Rhodesia a uniform tariff, as far as possible, is agreed upon, and actual import duty is paid upon removal of imported goods. Free interchange of raw products and manufactures is provided for, except in the case of ales, beers, wines, and spirits, which are taxed at import rates subject to the following rebates—ales, beers, and wines 50 per cent., spirits 25 per cent., cigarettes and tobacco of Southern Rhodesia or Northern Rhodesia manufacture are not liable to import rates upon removal from one territory to the other but are subject to a transferred payment of the appropriate excise duties.

On Union manufactures and imported goods removed from the Union of South Africa to Southern Rhodesia, and which are subsequently removed to Northern Rhodesia, the amount originally received by Southern Rhodesia from the Union Government is paid over to Northern Rhodesia, except on such articles of South African manufacture as are detailed above on which the receiving territory is responsible for collecting the duty.

The Congo Basin part of the territory is within the area defined by the Berlin Conference of 1885, and under the terms of the Convention revising the General Act of Berlin of 26th February, 1885, and the General Act and Declaration of Brussels, 2nd July, 1890, signed at St. Germain-en-Laye, 10th September, 1919, commercial equality within this area must be granted to nationals of the Signatory Powers and those of States Members of the League of Nations which adhere to the Convention; this part of the territory is therefore excluded from the terms of the Customs Agreements mentioned in the preceding paragraph.

British preference is given in the case of the following classes of goods, which are mainly liable to *ad valorem* rates of duty; clothing, blankets, and rugs, cotton piece-goods and all articles mainly imported for household and native use, the duty on British products being 9 per cent. and the duty on foreign products varying from 15 to 25 per cent.; agricultural, electrical, mining and other industrial machinery, pipes and piping, metals and metal manufactures imported for industrial purposes if of British manufacture are free of duty, but if of foreign origin are subject to an *ad valorem* duty of 5 per cent.

Specific rates of duty apply to practically all imported foodstuffs, spirituous liquors, wines, beers, and tobacco. Upon most of the food-stuffs varying rates of British preference from 9 per cent. to 30 per cent. are provided, upon the liquors and tobaccos no preference is provided except under the terms of the Customs Agreements with the neighbouring territories in the south. The Customs Tariff contains four scales of duty :--

Scale A.—In respect of goods not entitled to preferential treatment.

Scale B.—In respect of goods from the United Kingdom and British Possessions which grant reciprocal privileges provided proof of country of origin is furnished.

Scale C.—In respect of goods from British Colonies, Protectorates, and Possessions which do not reciprocate, subject to proof of origin.

Scale D.—Congo Basin duties :—the tariff of the Congo Basin is limited by the terms of the Congo Basin Treaties. The area comprises all the regions watered by the Congo and its affluents including Lake Tanganyika.

Licence fees are principally derived from trading vehicles, arms, the shooting of game, the sale of liquor, and prospecting of minerals. The native tax rates and the yields in 1931–32 are as follows :—

native tax rates and the yields in 1951-52 at	C as I	tonows
Barotse Province (excluding Balovale		£
District)—12s. 6d Barotse Province, Balovale District—7s. 6d.	}	33,957
Eastern Provinces—10s		59,468
Western Provinces-12s. 6d		52,229
Alien Natives—7s 6d., 10s. or 12s. 6d.		2,609
		£148,263

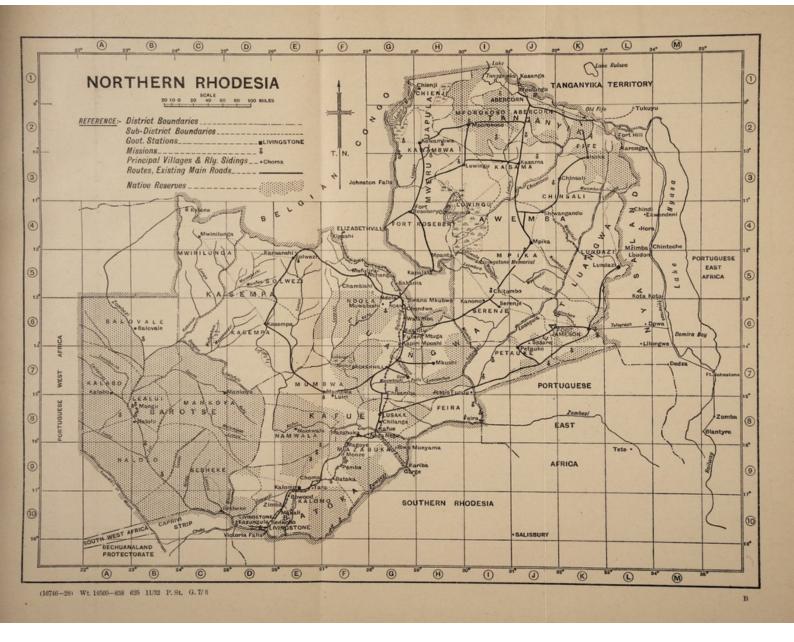
The tax is increased automatically by 1s. if not paid within nine months of the date on which it is due. All male natives are liable to pay one tax annually if they have reached eighteen years of age and are not indigent by reason of age, disease, or such other cause as the District Officer may accept. Women and children are not liable and there is no tax on additional huts or on plural wives. Reciprocal arrangements have been made with adjoining British Dependencies whereby natives are exempt from the tax if they have paid an equivalent tax elsewhere for the same year. The persons liable to tax are recorded in registers compiled under the supervision of District Officers. Collection is direct by officials of the Government and not by Native Authorities. Recovery for default is by distress through the Courts. The tax may be accepted in grain or stock at the discretion of the District Officer but the practice is rare. The law does not impose labour in lieu of tax. Thirty per cent. of the Barotse tax is paid to a Trust Fund and applied directly to expenditure on native interests in the Barotse area.

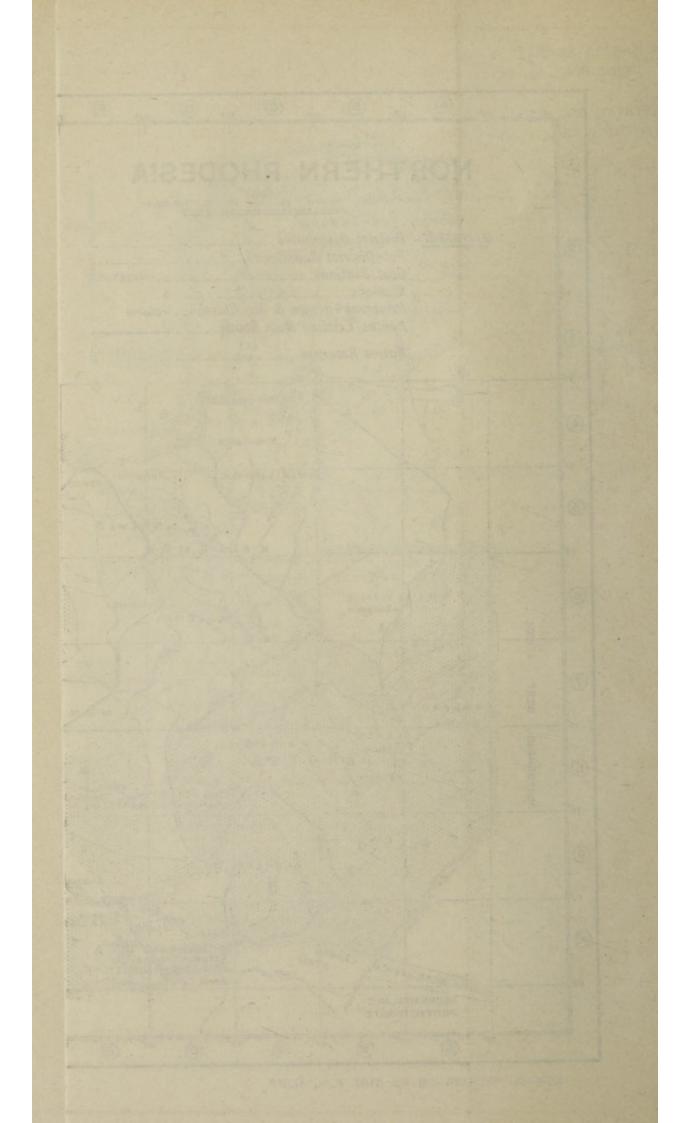
Income-tax on individuals is on a graduated scale commencing at 6d. in the  $\pounds$  for the first  $\pounds 100$  of chargeable income and rising to 3s. in each  $\pounds$  in excess of  $\pounds 500$ . Deductions are allowed of 10 per cent. of earned income (maximum  $\pounds 200$ );  $\pounds 300$  personal;  $\pounds 600$  for a wife;  $\pounds 90$  for the first and  $\pounds 60$  for other children;  $\pounds 50$  for each dependent, life insurance premiums not exceeding one-sixth of chargeable income. An individual who is a non-resident or not a British subject is eligible for the personal allowance of £300 only.

Company income-tax is at the rate of 3s. in the £.

Stamp duties, denoted by adhesive revenue stamps, are payable on all documents executed or received in the territory. The principal duties are :---

				£	s.	a.
Agreements						6
Bills of Exchange—						-
Not exceeding £50						6
Exceeding £50 and not exceeding	£100				1	0
Every additional £100					1	0
Cheques						1
Land Grants—						
Not exceeding 10 acres					10	0
Rising to not exceeding 3,000 acr	es			4	0	
Every additional 1,000 acres				1	0	0
Equitable Mortgages—						
Every £100					2	0
Receipts when the sum exceeds £1						1
Conveyances—						
Every £50 of value of property sol	d or co	nveyed	ł		10	0





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