



Fourteenth session

PROGRESS ACHIEVED BY THE NON-SELF-GOVERNING
TERRITORIES IN PURSUANCE OF CHAPTER XI OF
THE CHARTER

MINING

Report prepared by the Secretariat

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NOTE: The following symbols are used:

Three dots (...)	data not available
Dash (-)	magnitude nil or negligible
Slash 1948/1949	crop or financial year
Hyphen 1948-1949	annual average

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INTRODUCTION

1. The Non-Self-Governing Territories possessing mineral resources are generally able to derive from mining substantial benefits for their economic development. The world market offers a ready and generally growing demand - even though fluctuating widely in quantity and price - for mineral products, provided that natural conditions enable their cost to be kept reasonably low. Moreover, foreign private capital can be far more easily obtained for the development of mineral resources - such as metals and particularly oil - to meet export demand, than for industries, especially those whose products are expected to be sold on the still limited domestic market.
2. The development of mining can provide the Territories concerned with a major source of foreign exchange. It also makes, through royalties as well as export and income taxes, a relatively large contribution to their public revenue. Both proceeds of exports and revenue from taxes on mining may be of great importance for economic development; the former may be used for financing equipment imports and the latter for defraying the cost of public development projects.
3. Mining does not always provide opportunities for large-scale employment of indigenous labour. However, in the Belgian Congo and especially in Northern Rhodesia its expansion has had a considerable influence on the increase in the wage income of the indigenous population; On the other hand, the existence in a Territory of mining enterprise, which has usually a modern organization and employs highly mechanized equipment, has a strong stimulating impact on the rest of the economy. This influence is felt even though the ownership and management of the mine are not indigenous and its products exported. It is diffusing technical knowledge and also stimulating diversification of the economy and especially industrialization through the establishment of ancillary facilities. At a later stage, already reached in some Territories (Northern Rhodesia, Belgian Congo), the processing of minerals before export creates a substantial industrial basis, even though the product itself is mainly destined for export and only to a small but gradually increasing extent absorbed by the domestic market.
4. The development of mining will be considered in this study in relation to the efforts made and to the results achieved, in particular as to progress in geological research, legislation and regulations, and progress in mining production.

I. PROGRESS IN GEOLOGICAL RESEARCH

5. Geological research directed towards the location, through surveying and mapping, of mineral deposits is the essential preliminary step to any development of mining production. In the particular circumstances of most of the Territories, the level reached by geological research is a factor of great importance in considering the actual and potential development of mining industries.

6. In the Belgian Congo, geological research was started mainly by private companies at an early period, the discovery and the start of operations in the major copper deposit in the Katanga having occurred before the First World War. In the period under consideration, while private research, mainly by the Union Minière du Haut-Katanga, has continued on a substantial scale, the Geological Service of the Territory, established in 1939 as a government department, has gradually expanded its activity; the mapping of the Territory is being done by the Geographical Institute of the Belgian Congo, which by the end of 1955 had covered about half of the total area; in addition, a total of 1,100 soundings of the subsoil has been made.

7. Public capital expenditure on the Geological Service during the period 1950-1959 under the Ten-Year Development Plan was expected to reach 25.2 million Belgian Congo francs and recurrent expenditure for the same period 222.4 million. In addition, \$1.7 million provided by a loan of the United States Government was spent in 1955 on studies of the subsoil.

8. In the French Territories, geological research is undertaken mainly by public government-sponsored institutions. Directorates of Mines and Geology which exist in French West Africa and French Equatorial Africa, as well as in Madagascar, have the major responsibility for geological research and mapping. Moreover, the Bureau Minier de la France d'Outre-Mer (Mining Bureau for Overseas France) established in 1948 extended its operations to all Territories. It is an autonomous public institution, entrusted with promoting the development of mining by research, prospecting and initiation of mining projects in association with other public or private bodies. Research into and prospecting for petroleum are carried out by a similar specialized institution, the Bureau

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de Recherches de Pétrole (Petroleum Research Bureau), established in 1945. The research of the Mining Bureau, undertaken in many cases in co-operation with mining companies, is financed from metropolitan grants under the General Section of Fonds d'investissement pour le développement économique et social des territoires d'outre-mer (FIDES); the Bureau has established several laboratories and metal-testing stations.

9. Metropolitan funds allocated for mining and petroleum research, surveying and geological prospecting under the second Four-Year Plan amounted to 24,000 million French francs for the period of implementation of the Plan, equivalent to 6.9 per cent of the total planned expenditure.

10. The geological reconnaissance map for French West Africa, which by 1955 covered two-thirds of the total area, was expected to be completed by 1957. In French Equatorial Africa mapping was continuing, while the establishment of a geological map for Madagascar on the scale 1:200,000 was completed in 1952.

11. In the United Kingdom Territories there is usually a government geological survey department whose general functions include mapping, prospecting of areas where mineral deposits are likely to be found, analysis of minerals, advice and assistance. It is financed in many Territories with the assistance of Colonial Development and Welfare Funds.

12. In Northern Rhodesia a Geological Survey Department was established with a Colonial Development and Welfare grant of £67,000 in 1950; total expenditure on geological surveys during 1952-1957 was estimated at £151,636. Mapping is being pursued at an annual rate of 2,500-3,500 square miles; new deposits of coal, ilmenite, monazite and pyrochlore have been discovered and detailed investigations are being undertaken.

13. In Kenya the Mines and Geological Department, established in 1949, has expanded the scope of previous work initiated by the Geological Survey. Finance for survey work has been provided by Colonial Development and Welfare funds - a grant of £116,500, having been made in 1948 for extended geological surveys - and from local Kenya funds. Some assistance, in particular for investigating the possibility of oil deposits, was supplied by the Economic Co-operation Administration of the United States and by private companies. Up to 1956 about 37 per cent of the total area of the colony had been mapped out.

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14. In Uganda the Geological Survey was entrusted in addition to its usual functions in the field of geological mapping, laboratory investigations and assistance in the development of mining resources, with a search for underground water, to which the major part of its resources was allocated. Under the Ten-Year Programme, put into effect in 1948, £282,700 was to be spent for the regular activities of the Survey. In 1955 a Mines Training School was established in co-operation with the mining industry. A structural map for South-West Uganda was completed in 1956.
15. In Nigeria, geological research is divided among three departments: the Survey Department, which is mapping the Territory by aerial photography; the Geological Survey, in charge of geological mapping and investigations; and the Mines Department, which has an ore-dressing plant and operates a technical school.
16. The total proposed recurrent and capital expenditure on geological surveys for the planning period 1955-1960 to be made by the federal and the regional governments of Nigeria has been estimated at £2,458,000. By 1954 more than half of the country had been photographed and detailed geological surveys had been made of several promising areas, for instance, the lead-zinc ore bodies in Agoga province and extensions of the Enugu coal fields. Exploration for oil, carried out in co-operation with an oil company, resulted in 1953 in the establishment of the presence of natural gas and oil.
17. In the Gold Coast, the Geological Survey, considerably expanded since 1946, had a budget for recurrent expenditure which increased from £10,250 in 1947 to £57,500 in 1956. Some additional funds for geological research were provided under the Colonial Development and Welfare Act. A generalized reconnaissance map was completed in 1955 and a start was made on more detailed mapping.
18. In Sierra Leone the research work of the Geological Survey has been financed mainly by Colonial Development and Welfare grants which reached £135,000 from 1949 to 1956. The main activities of the Survey have been the mapping of the Suta mountains and the Kangari Hills. Numerous discoveries of mineral deposits by the Geological Survey have led to increased prospecting. Important minerals discovered include columbite, diamonds, chromite, bauxite, manganese and iron ores.

19. In the Federation of Malaya geological research was conducted mainly by the Geological Survey, to which was attached a Mineral Investigation Drilling Unit, established in 1954, dealing with the prospecting of state lands for the location of new ore deposits. The Tin Research Institute, operating under the control of the International Tin Research and Development Council, also conducted some research. The work of the Geological Survey, mainly financed by Colonial Development and Welfare funds, received an allocation of £325,000 in 1950 under the general development programmes of the Territory. A ten-year programme to complete a topographic map of Malaya was started in 1947; regional maps were made of mining lands, potential mining lands and producing areas. New alluvial tin deposits have been discovered since 1947.

20. The Geological Survey Department of Sarawak, which is also responsible for North Borneo and is financed mainly from Colonial Development and Welfare funds, has made progress with geological mapping. Bauxite, phosphate, coal and kaolin deposits have been discovered in Sarawak and deposits of coal, manganese and antimony in North Borneo.

21. In Jamaica the Geological Survey, established in 1949 and financed by Colonial Development and Welfare funds, has been mainly concerned with a detailed survey of the mineral resources and underground water possibilities of the island. In 1950 a seven-year programme of geological mapping was started. Deposits of gypsum, phosphate, bauxite and iron ores were the main deposits discovered.

22. In Trinidad, geological research and survey work is conducted under the Petroleum Department. Seismographic and gravimetric surveys have been carried out and the southern part of the Territory was mapped geologically in 1955. An aerial survey of the whole Territory has also been completed.

23. In British Guiana, geological research is conducted under the Department of Lands and Mines; prospecting has resulted in the discovery of alluvial gold deposits, columbite and manganese.

II. EVOLUTION OF LEGISLATION AND GOVERNMENT POLICIES CONCERNING MINING

24. In most Territories the subsoil, where mineral deposits are found, is either owned by the government or, at least, the rights of exploration and operation of mines are within its power to concede. As a general rule, the operation of mines is subject to a number of fiscal levies: royalties, export taxes on mineral products, income taxes and in some cases direct participation of the government in profits of mining companies, all of which may reserve for the government a significant share of the proceeds and profits resulting from mining.

25. In the Belgian Congo the subsoil is the property of the government, which grants concessions for the exploration of mines. The government is the recipient of royalties, the rate of which varies according to the ratio of profits to capital invested. Moreover, the government is entitled to subscribe 20 per cent of the initial capital and of all the subsequent capital issues. In several regions special semi-public bodies have been substituted for the Government, in so far as the granting of concessions and participation in the proceeds are concerned. These are the Comité spécial du Katanga, Comité national du Kivu and Compagnie des chemins de fer du Congo supérieur aux Grands Lacs africains. The Territory controls the majority of the capital of these regional bodies.

26. The concessionnaires are under an obligation to pay to the government of the Territory royalties on their profits on a sliding scale from 10 to 15 per cent. There is a further royalty based on the area of mines, and ad valorem export taxes are paid on most mining products at rates which vary from 6 to 25 per cent.

27. In the French Territories, there is a clear distinction between the ownership of the soil and the subsoil; rights of prospecting and exploitation of the subsoil can be conceded only by the government. There is also a distinction between prospecting and mining rights. For the purpose of prospecting rights the total area of the Territories is divided into: (a) zones closed to private prospecting for reasons of public order; (b) zones where ordinary research permits may be granted; and (c) zones where prospecting is subject to special research permits, type A or B. The ordinary permits refer to non-reserved minerals and are granted in the order in which applications have been submitted. The special permits apply to reserved minerals, which include substances

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connected with atomic energy, oil and potassium. In the period under review the special permits type A were awarded by decree of the French Government after consultation with the Territory Assembly. The special permits type B were awarded by the chief of the Territory or of the Federation concerned after approval by the relevant local assembly.

28. Mine exploitation titles are divided in two categories: the exploitation permit and the mining concession. The exploitation permit granted by the Governor-General is for a period of four years and may be subsequently renewed four times. The mining concession may extend for seventy-five years and is also granted by the Governor-General.

29. In addition to general taxes applicable to all commercial enterprises, taxes paid by mining enterprise include a proportional tax on the mineral extracted, the rate of which is established by the Territorial Assembly. Export taxes are also paid on most mineral products. Moreover, in a number of cases the Government has obtained a participation in the profits of the mining company which is determined by the terms of the concession or of the exploitation permit. The share of the Government generally amounts to 20 per cent of profits after payment of a fixed dividend to share holders.

30. In the United Kingdom Territories there are many variations in the legislation and regulations and in the rates of taxes applying to mining.

31. In Northern Rhodesia, mineral rights are owned by the British South Africa Company which, however, pays 20 per cent of the net revenue of these rights to the government. Prospecting licences and concessions are granted by the British South Africa Company. Royalties on most minerals are payable at a rate of 5 per cent of the gross value of mineral produce. On copper, lead and zinc royalties are paid on a sliding scale depending on the price of the metal.

32. In Kenya the property of the mineral is vested in the Crown. Prospecting rights and exploitation permits are granted subject to payment of fixed fees, while mining royalties, in the few cases charged, are at a low rate.

33. In Uganda, mineral rights are vested in the Crown, except in the Kingdom of Buganda. In the latter, rights to minerals found on private estates belong to owners subject to payment of a 10 per cent tax of the value of the minerals extracted to the Government of Uganda. Prospecting licences and mining leases are

granted by the Government. Prospecting for diamonds is permitted only if the applicant acts on behalf of a company already engaged in diamond mining. Prospecting and drilling for oil is covered by special agreements between the Government and the company concerned. A royalty of 5 per cent of profits derived from mining is paid by all mining operations, with some deduction for amortization of capital expenditure.

34. In Nigeria, mineral rights are vested in the Crown, while royalties collected by the Federal Government are allocated to the region where the mineral was extracted. Prospecting rights are issued subject to a fixed fee. Exclusive prospecting licences are renewable for five years; they imply payment of a rent of £5 per square mile per year and carry the obligation of meeting minimum working expenses of £100 per square mile per year. Mining leases may be granted for twenty-one years renewable for a second similar term. They are subject to an area rent of 3 to 5 shillings per acre and to royalties payable on a sliding scale on the value of the mineral extracted. The rate of royalty varied by the end of 1956 from 2 per cent for lead to 5 per cent for wolfram and 10 per cent for gold.

35. In Sierra Leone the main minerals are subject to exclusive prospecting and mining rights granted to: the Sierra Leone Chromite Company for chromite, the Sierra Leone Selection Trust for diamonds (with the exception of alluvial diamonds) and the Sierra Leone Development Company for iron ore. Mining for gold under the alluvial gold-mining scheme of 1948 is open to activities by indigenous miners.

36. In the Gold Coast, rights over minerals were vested in the owner of the land in the "Colony" and in Ashanti, while in the northern territories all mineral rights were vested in the Crown. Mining licences, the limit of which could not exceed twenty square miles, were granted upon payment of nominal fees and subject to a royalty calculated on a sliding scale from 3 per cent for a yield of 40 per cent to 19 per cent for a yield of 70 per cent.

37. In Malaya, mining licences were granted by the Government for a period of twenty-one years, and were subject to renewal. Subleasing was permitted, such subleases being given on the basis of a tribute payable to the lease holder; the rate of the tribute varied between 10 and 30 per cent. Royalties accruing to the State where the mine was located, and not to the Federal Government, were imposed only on coal, gold and iron ore. All other minerals were subject only to

export duty, either ad valorem or specific. Moreover, income taxes on profits derived from mining were to be paid. Tin was also subject to payment of a cess of 80 cents per picul for the benefit of the Tin Research Institute.

38. In Sarawak, exclusive prospecting licences are given which may subsequently be converted into mining leases, local customary rights and the privileges of owners of land held under title being safeguarded. Government revenue derived from mining includes royalties, rents for mining leases, export and income taxes.

39. In Jamaica the ownership of most minerals is vested in the Crown, exceptions being gypsum, phosphate and certain minor minerals. Petroleum mining is subject to special rules; three types of licences may be granted: oil exploration licences, oil prospecting licences and oil mining licences. For all other minerals, prospecting rights, exclusive prospecting licences and mining leases can be granted under the provisions of the general mining law. The grant of a mining lease for bauxite is made only if the company applying for the lease owns the land to be leased; bauxite companies arrange therefore for an option to purchase land while prospecting under prospecting rights. Bauxite mine companies have also entered into agreements with the Government for restoring the land after the termination of mining operations. In accordance with these agreements the companies have begun a long-term programme of agricultural development. Royalties are payable for minerals mined.

40. In Trinidad, surface and mineral rights in the part of the island where rights of the Crown have been alienated are vested in private ownership, while in the rest of the Territory such rights are vested in the Crown. The leasing of Crown oil rights under the oil mining regulations of 1939 and 1945 implies the granting of exploration licences for oil, and mining leases for a period of thirty years. Royalties are paid at the rate of 10 per cent of the agreed open market value to the Crown for leases obtained from it as well as to owners of private oil rights. All oil rights are internally owned.

41. In British Guiana, ownership of the minerals is vested in the Crown. Prospecting and mining rights issued by the Government include: (a) prospecting licences for a year; (b) exclusive permission for the prospecting of bauxite given for a nominal fee; (c) oil exploration licences for petroleum; (d) claim licences, which entitle the holder to start mining; and (e) mine concessions for a period not exceeding twenty-one years.

III. PROGRESS OF MINING PRODUCTION

42. During the period under consideration general progress has been achieved in the development of several mineral resources in a number of Non-Self-Governing Territories, and mining production has increased accordingly. The greatest progress has been achieved in the extraction of metals, and particularly non-ferrous metals, while the mining of fuel, both solid and liquid, has been, at least up to the present, on a minor scale.

43. The extraction of copper was the first large-scale mining activity to be developed in Non-Self-Governing Territories and it has still at present the greatest importance for the economy of the Territories concerned.

44. In the Belgian Congo, where copper was discovered in 1891 and extraction by the Union minière du Haut-Katanga began in 1911 in the Katanga province, there has been a gradual increase in the extraction of the mineral as well as in the proportion of the mineral processed into electrolytic copper. Two copper mines have been closed and two others opened. The latter supplied by the end of the period 80 per cent of the total copper production, which increased from 158,000 tons in 1947 to 250,000 tons in 1956. While there are indications of copper reserves in other provinces of the Territory, mining operations are for the time being restricted to the Katanga province.

45. In Northern Rhodesia there has been a continuous and rapid expansion in copper mining due to substantial capital investment. New copper mines have come into operation, bringing the total of major mines to eight. The capacity of refineries has also been substantially increased so that the share of production represented by electrolytic copper refined in the Territory rose from 29 per cent in 1946 to 59 per cent in 1956. Total copper production more than doubled from 185,200 tons in 1947 to 389,000 tons in 1956.

46. In Cyprus, extraction of cupreous pyrites, which was practically at a standstill during the war, had recovered to prewar levels by 1956 when it reached 32,400 tons in copper content, as against 12,300 tons in 1947.

47. In Uganda, extraction of copper ore on a large scale was started in 1956 with the opening of the new mines at Kilimbi. Part of the mineral extracted is being refined in the smelter established in 1957 in Jinja.

48. Important zinc deposits are found in several African Territories, generally together with copper. Thus, in the Belgian Congo the extraction of zinc ore in the Katanga region has increased with that of copper; part of the metal is exported as zinc concentrates while a gradually increasing part is being refined into electrolytic zinc in a plant in Kolwezi, which started production in 1953. In French Equatorial Africa, several companies established during the period 1950-1954 for the exploration of zinc and lead deposits did not succeed in developing extraction because the deposits were found to be irregular and uneconomic.

49. Tin has been for a long period one of the major export products of several Territories, in particular Malaya and Nigeria. In Malaya the recovery of tin mining, which employed nearly 90 per cent of all the mining labour of the Federation, was slowed down mainly by delays in the delivery of equipment and by the shortage of fuel. Nevertheless production was gradually increased and reached the level of 63,000 tons in 1956, compared with 27,000 tons in 1947 and 84,000 tons in 1940, the last year before the Japanese occupation. In Nigeria, where exploitation of tin deposits was particularly intense during the war period, tin mining slowed down during the period under consideration and remained in 1956 at the same level as in 1947. In the Belgian Congo, the first tin deposits found in Lualaba district were mined for a considerable period of time. Since 1946, however, most of the mineral mined originates from new deposits in the Kivu province. Total extraction increased only slightly in 1956, compared with 1947, and remains smaller than the maximum rate of extraction reached during the Second World War. The relatively limited increase in tin production is due to a great extent to the operation of the International Tin Agreement.

50. The development of bauxite extraction, which has become of great importance to several Non-Self-Governing Territories, is a recent phenomenon.

51. In Jamaica, which in 1956 was the world's greatest producer, the mining of bauxite started only in 1952. Three foreign companies (of which two are from the United States and one from Canada) are extracting, on a rapidly increasing scale, bauxite for export to the American continent. The Canadian company has started facilities for the processing of bauxite into alumina, while the other companies export all the bauxite extracted to the United States. In British Guiana,

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where bauxite mining accounts for 90 per cent of the total mining output of the Territory, production has been also gradually increasing and in 1956 was nearly double that of 1947. Most of the bauxite extracted is processed into alumina before export to Canada.

52. In the African Territories the extraction of bauxite is still in its early stage. In French West Africa a deposit situated in the island of Los has been mined since 1949 by a Canadian company. All its production, which reached 450,000 tons in 1956, is being exported to Canada for processing. In 1957, two considerably larger deposits were in process of being developed in Guinea by international companies. The Canadian company already operating the bauxite mine in the island of Los is preparing the development by mechanized open-pit mining of a large deposit at Boka, where a plant for the processing of bauxite into alumina, a railroad from the mines to the coast and a new harbour for the export of alumina and bauxite are being built. A similar bauxite-alumina project for the exploitation of a deposit estimated to contain about 100 million tons is being implemented at Fria by an international company with the participation of French, British and Swiss capital. Apart from these projects, the establishment of an aluminium plant for the processing of alumina produced at Fria, to which power would be supplied by a hydroelectric plant to be built on the Konkouré River, has also been planned.

53. In the Gold Coast extraction of bauxite was carried out during the period 1946 to 1956 on a relatively limited scale of 100,000 to 150,000 tons. Considerable deposits, estimated at 200 million tons, exist in the region of Kumasi, but the expansion of mining appeared to be conditioned by the implementation of the project for the establishment of an aluminium smelter based on a large hydroelectric plant on the Volta River.

54. In Malaya, bauxite extraction was developed during the war by the Japanese; in 1956 it was being done mainly in the State of Johore.

55. Chrome ore is being mined on a relatively limited scale in Sierra Leone and in Cyprus, as is tungsten in the Belgian Congo and in Uganda.

56. Cobalt is being extracted in significant quantities in several Non-Self-Governing Territories. In the Belgian Congo the extraction of cobalt, which is mined jointly with copper, represents 60 per cent of world production and has more

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than doubled during the period under consideration. In Northern Rhodesia, cobalt also is being produced together with copper, and its extraction has nearly trebled since 1947.

57. Production of manganese in the Gold Coast followed variations in world demand and, after having reached a maximum of 425,000 tons in 1951, declined in 1956 to 307,000 tons, roughly equal to the level of 1947. The Territory is the second producer in the world. In the Belgian Congo, the production of manganese has rapidly grown since 1950, when a new mine was put into operation. A small but growing production of manganese has also developed in Northern Rhodesia. In French Equatorial Africa large deposits of manganese, estimated at 100 million tons, located near Franceville in the Middle Congo, are being developed: a company with the participation of American capital has been established, a funicular and a 250-kilometre railway for the transport of the mineral, connecting the deposit with the Brazzaville-Pointe-Noire railway, were being built; it is expected that production on a scale of 500,000 to 700,000 tons will start by 1961.

58. The extraction of iron ore, vast deposits of which are known to exist in a number of Territories, remains generally at an early stage of development. Malaya, where important deposits were developed before the war by Japanese interest, was the greatest producer during the period under review. Production was completely suspended in the early post-war years and was resumed on a significant scale only after 1950. By 1956, the pre-war level of production of over one million tons had already been exceeded and the opening of new mines in Kelantan and Pahang was in preparation. All the mineral was exported to Japan.

59. In Sierra Leone, the extraction of iron ore increased throughout the period and a new concession for the development of deposits at Tonkolili, granted in 1956, has opened a prospect of further expansion.

60. Considerable deposits of iron ore have been found in French West Africa. A very extensive deposit, estimated at over 100 million tons with 65 per cent iron content, was discovered in Maurétania near Fort Gouraud and another one in the region of Akjoujt. An international company has been established for the development of the Fort Gouraud deposit; implementation is, however, subject to the establishment of a railway from the mine to the coast at Port-Etienne.

61. In French Equatorial Africa extensive iron deposits have been found in the Gabon, particularly in the region of Mekambo. Total reserves are estimated at 700 million tons; a company has been established and construction of a railway planned.
62. Gold mining, which initially supplied one of the major export products in a great number of Territories, has been generally declining. During the period under consideration, owing mainly to the impossibility of compensating by higher prices a steady increase in costs, the production of gold continued to decline and stopped altogether in several Territories, where it had become uneconomic.
63. In the Gold Coast, production was relatively well maintained even though at a slightly lower level than during the immediate pre-war period. The exhaustion of ore reserves led to the closing of four gold mines.
64. In the Belgian Congo, gold production recovered slightly, compared with 1947, but has remained substantially below the pre-war output. The high cost of production and lack of mechanization of the mines have been the main obstacles to an increase in production.
65. In most United Kingdom Territories, gold production has substantially declined; thus, in Kenya it amounted in 1956 to less than half of the 1946 total, the decline since the pre-war period being even larger. In Nigeria, Uganda, Sierra Leone, and Cyprus, production has practically stopped and amounts to only a few kilogrammes per year. Only in British Guiana has the decrease in production been gradual and less drastic.
66. In French Equatorial Africa, where in the early part of the period production had been superior to that in pre-war years, it has gradually declined owing to the exhaustion of the known deposits and the absence of new discoveries; in Madagascar, gold production has also nearly come to an end.
67. The extraction of both gems and industrial diamonds has become a significant sector of mining in several Territories. Most progress has been achieved in the Belgian Congo, which has become the greatest producer of diamonds of all kinds, especially industrial diamonds, accounting for nearly 75 per cent of the world production of the latter. Production of both categories is concentrated in the province of Kasai.

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68. In the Gold Coast the extraction of diamonds, mainly gems, has also been expanded considerably, the share of African diggers in total production having increased in later years. In Sierra Leone, diamond production remained substantial; it is not fully reflected in official figures, in view of operations by illicit diggers.
69. In French West Africa, diamond mining developed in Guinea and in the Ivory Coast, and its expansion has been continuous, even though still on a relatively minor scale. In French Equatorial Africa, diamond mining has also significantly increased, mainly mining for industrial diamonds.
70. Graphite has been for a long time a major mining product in Madagascar, where its production, concentrated in modern open-pit quarries, has followed fluctuations in world demand and prices. It reached about 16,000 tons in 1957 compared with 10,000 in 1949. The production of mica, another major product of Madagascar, has gradually regained its pre-war level of about 800 tons.
71. Coal is mined in significant quantities only in a few Territories. Nigeria is the greatest producer; but its production, while continuously increasing, is still under one million tons. Most of the coal produced in Nigeria comes from three mines in the vicinity of Enugu. A fourth mine in the same area is being developed. Total reserves are estimated at 250 million tons. The coal is mainly used in the Territory for the railways; however, exports to the Gold Coast reached 80,000 tons in 1955. In the Belgian Congo, coal is mined in the province of Katanga at Luena and is used mainly by the heavy industries of the region, in particular by thermic-electric plants. Coal production is insufficient to meet the demand of the domestic market.
72. In Malaya there are several coal deposits but the coal is of low quality and not usable for coking. The only deposit mined was at Selangor, and owing to the fall in demand due to increased competition by imported fuel oil, production steadily declined from over 400,000 tons in 1950 to about 200,000 tons in 1955.
73. In Madagascar there are considerable deposits of coal in the region of Sakoa. Production, initiated in 1951, is on a very small scale - some 5,000 tons - as, owing to difficulties of transport, the markets for mined coal are very limited.
74. Oil mining is a major activity in a few Territories. The search for oil has been pursued in nearly all Territories with, in some cases, promising results, but such production as exists in these latter Territories is still in its early stage.

75. Brunei is at present the greatest oil-producing Territory. After having been interrupted during the Second World War, production was resumed in 1946 and steadily and rapidly increased. It had reached by 1956 a level about ten times higher than that of the pre-war output. In the neighbouring Territory of Sarawak, however, production has been steadily declining, owing to the exhaustion of existing wells. In Trinidad the increase in production has been continuous; off-shore oil production has been started and is now being pursued by two companies.

76. Oil deposits, or at least indices of the existence of oil, have been discovered, as a result of intensive and extensive research, in French West Africa (Ivory Coast), Uganda, Madagascar, the Gold Coast and some other Territories. Actual production has, however, started in only two Territories. In French Equatorial Africa, a sizable deposit of oil has been found near Port-Gentil in the Gabon and operations were started in 1957 by a French company with important government participation. In Nigeria, oil has been discovered at Oloibiri in the Eastern Region and production has started on a small scale.

IV. CONCLUDING NOTE

77. The development of mining production has made a notable impact on the general economic progress of several Non-Self-Governing Territories, in particular Northern Rhodesia, the Belgian Congo, Malaya and Nigeria. Geological research and prospecting have resulted in a number of promising discoveries of valuable mineral deposits, in particular iron ore, manganese and oil, in French Equatorial Africa and French West Africa, as well as in Nigeria, for all of which plans of development are in process of preparation or are actually being implemented.

78. The interest of the governments in mining development has not been discouraged by the fact that the direct contribution of mining to an improvement in the standards of living of the population may not always be substantial, in particular as the number of wage earners employed in mining may be relatively limited compared to total active population. Moreover, in some cases a substantial share of the proceeds of mining is absorbed by the remuneration of the capital obtained from outside the Territory, as well as of management and mainly non-indigenous

skilled labour. Thus in a Territory like Northern Rhodesia, whose money economy offers an extreme case of specialization in mining, the balance of income remitted abroad amounted to 22.3 per cent of the net domestic product in the money economy in 1953, the last year for which such data are available, while wages paid to African miners during the same year amounted only to 4.5 per cent of domestic product.^{1/}

79. The contribution of mining to development of the general economy of the Territories concerned is, however, substantial and is likely to continue so. The importance of mining products in the exports of producing Territories, as a major source of foreign exchange, has been shown in the study of foreign trade found elsewhere in this report. Moreover, mining makes an important contribution to the public revenues through royalties, export taxes on mineral products and income taxes on corporate or personal incomes from mining. While accurate data as to the proportion of public revenues obtained from mining by taxation are scarce, this share amounted for the Belgian Congo in 1956 to 39 per cent and for Northern Rhodesia in 1953 to 60.8 per cent of the total revenue. Finally, it is to be noted that in the case of newly developed mining industries, many Territories secure a further share in the wealth of their mineral resources by means of direct participation in the mining enterprises.

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^{1/} Northern Rhodesia: Mines Department, Annual Report for the Year 1953, p. 12.

MINING PRODUCTS OF NON-SELF-GOVERNING
TERRITORIES

	COPPER ORE (copper content) (thousand metric tons)			PRODUCTION		
	<u>Belgian Congo</u>	<u>Northern Rhodesia</u>	<u>Cyprus</u>	<u>Total NSGT's</u>	<u>Total world</u>	<u>Percentage of NSGT's</u>
1946	143.9	185.2	8.4	338	1,700	19
1951	192.0	314.1	17.7	524	2,370	22
1956	250.0	389.6	32.4	672	3,005	21

	ZINC ORE (zinc content) (thousand metric tons)					
	<u>Belgian Congo</u>	<u>French Equatorial Africa</u>	<u>Northern Rhodesia</u>			
1946	36.3	-	17.5	54	1,550	3.4
1951	88.7	0.52	23.0	112	2,240	5.0
1956	117.5	-	29.4	147	2,750	5.3

	TIN CONCENTRATES (tin content) (metric tons)						
	<u>Belgian Congo</u>	<u>Nigeria</u>	<u>Uganda</u>	<u>Federation of Malaya</u>			
1946	14,470	10,499	198	8,567	33,734	91,100	36
1951	13,888	8,676	118	58,317	80,999	170,200	47
1956	15,145	9,314	34	63,295	87,788	178,500	49

	BAUXITE (thousand metric tons)							
	<u>British Guiana</u>	<u>Jamaica</u>	<u>Gold Coast</u>	<u>French West Africa</u>	<u>Federation of Malaya</u>			
1946	1,134	-	116	-	-	1,250	4,200	29
1951	2,107	-	131	-	-	2,238	10,300	21
1956	2,521	3,603	140	452.0	269	6,985	16,900	38

	COBALT ORE (cobalt content) (thousand metric tons)					
	<u>Belgian Congo</u>	<u>Northern Rhodesia</u>				
1946	2,156	480		2,636	3,900	67
1951	5,715	710		6,425	8,000	80
1956	9,084	1,037		10,121	15,000	67

	MANGANESE ORE (manganese content) (thousand metric tons)					
	<u>Belgian Congo</u>	<u>Northern Rhodesia</u>	<u>Gold Coast</u>			
1946	-	0.3	404	404	1,900	21
1951	35.5	0.5	425	461	4,000	11.5
1955	230.9	8.5	260	499	4,700	10.6

	IRON ORE (iron content) (thousand metric tons)						
	<u>Sierra Leone</u>	<u>French West Africa</u>	<u>Hong Kong</u>	<u>Federation of Malaya</u>			
1946	445	-	-	-	445	725,000	0.61
1951	695	-	73	551	1,319	138,200	0.95
1956	797	426	56	1,392	2,671	187,400	1.40

MINING PRODUCTS OF NON-SELF-GOVERNING TERRITORIES (continued)

GOLD (kilogrammes)	PRODUCTION								
	<u>Northern^{a/} Rhodesia</u>	<u>Federation of Malaya</u>	<u>Belgian Congo</u>	<u>Kenya</u>	<u>French West Africa</u>	<u>Bechuana- land</u>	<u>Total NSGT's</u>	<u>Total World</u>	<u>Percentage of NSGT's</u>
1946	213	13	10,305	930	218	303	33,649	668,000	5.0
1951	27	485	10,958	615	61	15	36,211	735,000	4.9
1956	104	567	11,631	431	14	18	34,413	870,000	4.0
	<u>Gold Coast</u>	<u>Uganda</u>	<u>French Equatorial Africa</u>	<u>Sierra Leone</u>	<u>Swaziland</u>	<u>British Guiana</u>			
1946	18,236	68	2,225	6	153	705			
1951	21,731	6	1,644	101	10	419			
1956	19,844	8	1,266	...	-	467			
	<u>Madagascar</u>	<u>Nigeria</u>	<u>Sarawak</u>						
1946	121	152	1						
1951	61	49	29						
1956	30	14	19						

DIAMONDS (Gems and industrial diamonds) (thousand carats)

	<u>Sierra Leone</u>	<u>French West Africa</u>	<u>French Equatorial Africa</u>	<u>Belgian Congo</u>	<u>Total NSGT's</u>	<u>Total world</u>	<u>Percentage of NSGT's</u>
	1948	465.7	78.0	118.8	5,825	6,525	10,047
1951	475.8	101.2	147.8	10,564	12,693	16,956	75
1956	546.7	380.7	145.8	14,010	17,633	23,130	74
	<u>British Guiana^{b/}</u>	<u>Gold Coast^{c/}</u>					
1948	36.6						
1951	43.3	1,763					
1956	29.8	2,520					

CRUDE PETROLEUM (thousand metric tons)

	<u>Trinidad</u>	<u>Brunel</u>	<u>Sarawak</u>	<u>Total NSGT's</u>	<u>Total world</u>	<u>Percentage of NSGT's</u>
	1946	2,939	290	...	3,226	375,700
1951	3,026	4,971	52	8,049	592,300	1.3
1956	4,139	5,616	72	9,827	839,800	1.1

a/ 1946 figure includes 205 kg. from refinery slimes accumulated during the war

b/ In British Guiana, in recent years industrial diamonds have constituted about 60 per cent of its total diamond production

c/ Exports.