

addition, they process certain substances with a view to exportation.

At Jadotville, a large industrial plant manufactures sulphuric acid, sodium chlorate, hydrolyzed oil and reagents for hydrolysis, industrial glycerine, ferrous and ferric sulphates, copper sulphate, distilled water, hydrochloric acid, caustic soda, and pyresetrol. Two factories produce powder and explosives used in mining, while six enterprises furnish paints and varnishes; others turn out insecticides, and still others, perfumery that is very popular among the natives.

At Bukavu, a specialized plant prepares quinine salts from the bark of the cinchona tree; in Kivu and in the East Province, distilleries extract — for exportation — the essential oils of perfume plants: geraniol, rhodinol, citronelol.

Finally, large concerns have often set up specialized departments which supply them with the products they need: carbonic acid for breweries, acetylene for shipyards, compressed oxygen and industrial glycerine for workshops that manufacture articles made of metal.

D.

Mechanical Industry.

Over 50 shipyards and railroad workshops take care not only of the maintenance and repair of boats and locomotives, but also of assembling machinery, railroad cars, and boats of all kinds.

About 100 workshops assemble and repair bicycles. As for garages — which range from modest repair shops to vast specialized enterprises — there are nearly 500 of them. More than 700,000 bicycles, in addition to 50,000 motor vehicles, assure them of steady business.

Difficulties encountered in securing supplies of cement — which for the most part had to be imported — held back the construction industry for a long time. Today three cement factories, one in the province of Leopoldville and the other two in Katanga, turn out, taken together, more than 1,500 tons of Portland cement every day; a fourth cement factory, in Jadotville, manufactures a metallurgical cement from the slag delivered by the Union Minière. Other cement factories are either under construction or in the planning stage, especially in Kivu and in Eastern Province, and their completion will free the Congo from its dependence on imported cement, at least as far as the kinds commonly used are concerned.

The fibro-cement industry has specialized in the manufacture of plates and tiles. Besides, numerous enterprises produce concrete or cement fittings such as pipes, cranks, and traps, as well as ceramics. However, in this field there is strong foreign competition.

A newly created industry, that of cellular concrete, seems to be headed for success.

Numerous limekilns are in operation, especially near the main cities. The lime produced is used not only for construction, but also in the treatment of certain ores, especially copper.

Around these basic branches of the construction industry, various sideline industries — although still few in number — have sprung up, such as plumbing, ceiling work, painting, etc.

C.

Chemical Industry.

Congolese chemical industries are located chiefly in Katanga and in the vicinity of Leopoldville. They supply factories, and provide the local market with consumer goods; in

the country have a capacity of 30,000 cubic meters ; this amount will soon be raised to 40,000, thus making it possible to preserve 14,000 tons of merchandise.

Hundreds of trades are now part and parcel of the urban centers : printing, the jewelry business, basket-weaving, laundring, multigraphing, and the hotel industry ; to these can be added the plastic product industry which — in Katanga — specializes in insulators, insulating sheaths and cases, hose, and belts.

Besides, there are many small businesses dealing in food : bakeries, confectionary factories, dairies, chocolate, cracker and biscuit, and jam factories ; they easily number more than 350.

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In fact, as can be clearly seen from this enumeration, the Congo has already gone very far in the direction of being self-sufficient ; the results achieved up to now, far from constituting a goal, are merely steps in the evolution of a country that is rapidly coming of age. The future realization of the grandiose project of Inga will bring with it the fullest possible expansion of the country's young industries ; an expansion of such proportions as to justify the hope that it will be possible not only to provision the home market, but also to create around Inga vast industrial units which will work directly for exportation.

Besides, in the course of the last few years, factories producing articles in great demand have come into existence : articles such as nails, copper wire and cables, cans, metal drums and metal trunks, metal containers, garbage cans, aluminium and enamelled iron household articles. The fact that all these are now manufactured in the Congo has made it possible to reduce imports proportionally. Recently, new items have been added to this first list, such as mattresses and metal bedsteads, office furniture, metal frames, and construction materials.

E.

Miscellaneous Industries.

Many other business activities supplement the main branches of industry.

Breweries have been amazingly prosperous, especially since the war : indeed, their annual output exceeds some 32,000,000 gallons. The production of carbonated water and lemon soda trails far behind that of beer ; the 40 establishments that manufacture them hardly exceed one-sixth of the output of beer.

On the other hand, the refrigeration industry has been carefully organized. Big refrigeration concerns have been set up in Katanga, Kivu, and between the ports of the Lower Congo and Upper Katanga ; for this purpose, the carriers utilize holds of ships, freight cars, and trucks that are both isothermal and refrigerated. Ice is generally manufactured in annexes of the breweries, but sometimes also in the fishing centers of Katanga and the Lower Congo. The various cold storage warehouses of

CHAPTER VI
THE SOURCES
OF ENERGY

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1.
Fuel.

The entire exploitation of the natural wealth of the Congo, as well as any improvement in the living conditions of its population, depends largely on the rational utilization of its sources of energy.

A series of closely interwoven factors are at work here. Indeed, the sparse population and the scarcity of technicians call for mechanization, which alone will make possible a policy of high salaries and, consequently, a rise in the standard of living. This mechanization, indispensable for a high return on investments, will encourage the creation of new industries; it will assure, through a high degree of productivity, effective competition with foreign products. But highly developed mechanization requires a general electrification that will furnish the factories and the population with extremely cheap electric current.

At the present time, this last condition is far from being a reality. Thus wood still furnishes about half the energy put at the disposal of the Congolese economy.

It is evident that the importance of wood as a fuel is diminishing every day in favor of other and more economical sources of energy; on the other hand, the protection of ligneous wealth which perhaps tomorrow will be called upon to furnish products and by-products of more definite value, has become stricter with time. But for the moment it must be conceded that wood is the only source of energy at the disposal of a majority of the population for domestic use in the villages of the bush, whether for cooking or for heating the huts. A high percentage of the locomotives and tugboats that serve the railroad lines and waterways of secondary importance still use wood and, in spite of a modernization program that has been going on actively for ten years, as late as 1957 steam traction had been replaced by electric or diesel traction in only half the equipment of the transportation companies.

Other fuels than wood — coal and oil, for example — are used by Congolese industry. But Congolese coal is mediocre in quality, and can serve only local industries; consequently, a part of the coal needed must be imported. As for oil products, they are all imported. Perhaps certain indications point to the existence of oil in the Congolese subsoil, but the first prospecting undertaken has not given the results hoped for. However, a scientific mission has established the existence of methane gas in the deep waters of Lake Kivu, and a pilot factory will make a start on the task of tapping it.

2. Hydro-electric Energy.

Hydro-electric energy will solve the problems involved in industrialization of the country. The Congo seems privileged in this respect: its available potential is estimated at more than 100 million kilowatts, viz., one-sixth of the world's reserves.

However, until now only a very small part of this gigantic energy has been exploited. This situation is chiefly due to the many technical and financial difficulties involved. Indeed, it is not enough to create gigantic power stations. The enormous sums involved must be amortized by a sufficiently large consumption of electricity. Only a great number of important industries can consume that much electricity. But down to the present time, the stage reached in the Congo's industrial development has permitted the setting up of only a few installations which, although they are of vast proportions, are far from representing the real possibilities of the country.

zones not only of Upper Katanga but also of Northern Rhodesia; they represent two-thirds of the power generated in the Belgian Congo. Moreover, Katanga taken as a whole furnishes four-fifths of the electric power produced in the Congo.

It is clear that the two sectors — public and private — supplying electricity in the Congo today share very unequally in its production. This fact is accounted for by the immense needs of metallurgy in Katanga. Producing one ton of tin requires 1,500 kilowatts; producing one ton of copper or zinc, between 4,000 and 5,000 kilowatts. However, various factors may, in the near future, correct the existing disparity between public and private production of electricity and thus appreciably increase its general consumption.

Among these factors should be mentioned the increase in the number of small and medium-sized enterprises throughout the country, and the increased needs of native cities and urban centers, all of which are in the process of expansion. Another factor is the government policy of favoring an increase in salaries; this policy is bound to bring about a demand for a greater supply of electricity at low cost. The problem of the electrification of small centers is one of the important questions of the day. Down to the present time, the small centers have been dependent on the steam generating stations, but the creation of « micro-power stations » which could service certain secondary agglomerations is under consideration; there is even a possibility that some kind of nuclear power station will be installed for the benefit of regions where supplying electric energy would be too costly.

But the chief factor — the one that will certainly cause a complete revolution in the industrial life of the country and will mark the dawn of a new era — is unquestionably the utilization of the enormous latent power resources of the Congo River not far from its mouth, in the region of Inga.

How are these sources of energy utilized today ?

The first hydro-electric power stations were constructed between the two World Wars. They were built by private enterprises primarily to supply their own factories with electric power; incidentally, they also furnished private individuals with electricity. At the same time, the first companies for the distribution of electricity to the public were created: in 1926, the « Colectric » at Leopoldville; in 1930, the « Sogelec » at Elisabethville; in 1939, the « Régideso ».

After the war, within the framework of the Ten Year Plan, a policy was launched with the aim of furnishing cheap electric current to the population as well as to industry, installing power stations in regions favorable to the creation of medium-sized industries, and finally, establishing a certain equilibrium in supplying the various provinces with electricity. This increased the volume of the power provided and assured a better geographical distribution of it.

Thus at the beginning of 1958, about thirty hydro-electric power stations aggregating 525,000 kilowatts were in operation (1). Expansion programs will make it possible to increase this power to 1,250,000 kilowatts in the near future.

The public power stations — located chiefly at Sanga and Zongo for the region of Leopoldville, and at Tshopo for the region of Stanleyville — supply only one-sixth of the electricity consumed in the country. The other five-sixths are provided by the private powers stations, whether it is a question of vast installations like those of the Union Minière or of more modest enterprises not exceeding 10,000 or 5,000 or even 1,000 kilowatts.

At the present time, the production of electricity is concentrated chiefly in Katanga. In that province, four power stations belonging to the group of the Union Minière supply the industrial

(1) To this should be added about 100 steam generating stations with a capacity of approximately 90,000 kilowatts and about 1,000 generating sets.

The work that has been planned for the exploitation of Inga — involving the construction of dams and power stations — will be spread over many years. It is calculated that the investments will exceed 150 billion francs and, when the work is completed, the power stations will have a capacity of 25 million kilowatts. Such a capacity represents an annual power of 240 billion kilowatt-hours; viz., a power equal to one-quarter of the annual output of the United States, and superior to that of Germany, Austria, Belgium, Luxembourg, the Netherlands, France, Italy, Switzerland, Denmark, Greece, Ireland, Iceland, Portugal, and Turkey put together.

Such power is equivalent to the annual consumption of 100 million tons of coal.

In fact, what is going to be created at Inga will be nothing less than the most powerful hydro-electric power station in the world.

Before undertaking such a task, it was necessary to be sure of finding enough consumers. Even before research was begun in earnest, the prospects were reassuring because a rapid increase was already apparent in the consumption of energy in the world, as well as an expansion of the electro-metalurgical and electro-chemical industries. Right now, the chief project concerns the installation near Inga of a vast plant to process aluminium. But other plans are also being worked on : they deal with the production of ferrous alloys, wood pulp, nitrogen, and isotopes.

Inga, in addition to its immense hydro-electric potential, offers another advantage : it is located near the sea ; only about 25 miles as the crow flies separate it from Matadi, the leading Congolese seaport. This will enable the industries that establish themselves in the vicinity to avoid heavy transportation charges which, elsewhere, add to the cost of the products transported over long distances from the moment they leave the factory until they are put on board the ship. This is indeed a tremendous advantage.

3.

Tomorrow : Inga.

At Inga, the Congo River forms an immense bend around projecting rocks ; at that point it rushes headlong in falls that bring about a drop of over 300 feet in the river's level. Thus a gigantic source of energy is created. Indeed, Inga constitutes a spot unique in the world, a spot which offers power reserves that are practically unlimited ; their utilization will make it possible to supply electricity at a lower price than that charged by the other high-powered generating stations.

This spot had attracted attention as early as 1927. Twenty years later, the question was taken up again and studied carefully, and in 1956 the exploitation of this enormous source of energy was decided upon. Realizing the full importance of this decision, King Baudouin took up the subject at his first cabinet meeting after his accession to the throne, and expressly declared : « The undertaking is unusual in its scope... With the exploitation of Inga a new era begins. »

CHAPTER VII TRANSPORTATION

Already, the various stages planned for the carrying out of this gigantic program are becoming clear; of the 25 million kilowatts expected when the work is completed, the first stage in the undertaking will already furnish 1,500,000, and it has been calculated that the first kilowatt-hour will be produced in 1964.

Integrate them into a vast Belgo-Congolese unit. by prohibitive prices in the mother country — and will thus stimulate to Belgian industries — at the present time handicapped zones that are almost deserts today. Finally, it will give a new source of water, — Inga will make possible the irrigation of surrounding an all-inclusive equipment. Furthermore — through the pumping great industrial country offering a wide range of plants having Congo in the space of a few years and convert the latter into a electric power. It will completely transform the economy of the foreign industries attracted by the low cost and the abundance of the world. It will stimulate the establishment in the Congo of This will be the most important achievement of its kind in direct and easy connections with the leading consumer countries. scale utilization of hydro-electric energy and the possibilities of zone will be created that will profit simultaneously by the large- facture of steel and its derivatives. At Inga, an original industrial whose importance has been based especially on the manu- iron have brought about the development of industrial zones, new conception. Until the present time, resources in coal and will be far greater. The whole undertaking is based on an entirely conservative estimate and it is certain that Inga's importance Inga has been called a « Congolese Ruhr »; this is a very

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1.

**The Congolese
Transportation System.**

More than 8,700 miles of navigable waterways served by a commercial flotilla of some 1,500 units, 3,000 miles of railroad tracks on which more than 8,000 cars run, nearly 90,000 miles of roads used by 50,000 vehicles, interior airlines totaling 21,753 miles — such is the Congo's achievement in the field of transportation.

The Congolese transportation system forms a very complex network. Originally, the Congo River and its tributaries seemed an ideal means for carrying both merchandise and passengers.

The Congo possesses a basin which is the second largest in the world. It is located on both sides of the equator and benefits by abundant rainfall; because of its geographical position, the river is assured of a very regular flow of water over the greater part of its course.

However, in several spots, impassable waterfalls and rapids appear. These falls and rapids are found above Stanleyville, and especially below Leopoldville, which they cut off from the sea by spreading out over a distance of 187 miles as far as Matadi. If the gigantic fluvial system of the Congo was to be used in its entirety, the navigable reaches of the river had to be linked by rail.

The Congolese transportation system thus consisted at first of a « water-rail » unit; it was prolonged by railroads leading, on the one hand, to the natural wealth of the Mayumbe, and on the other hand, to the industrial centers of the East.

On this first network, roads have been grafted progressively, covering the country with links that have become more and more closely knit since motor traction made its appearance. Finally, aviation appeared, completing the system with swift connections.

A. Navigable Waterways.

The sum total of the Congolese navigable waterways, which is the starting point and the basis of the Congolese transportation system, represents a low cost factor indispensable to the valorization of numerous products.

Two great companies come very near to monopolizing commercial transportation by water. In the East, it is the Compagnie des Chemins de Fer du Congo Supérieur aux Grands Lacs

Africains (Upper Congo and Great African Lakes Railroad Company) which, over a distance of more than 1,000 miles, operates boats on the navigable reaches of the Congo River above Stanleyville and also on Lake Tanganyika. As for the rest of the country, transportation over some 8,500 miles of waterways is taken care of by the Office d'Exploitation des Transports Coloniaux — otherwise known as Otraco — (Colonial Transportation Office). However, certain transportation services are supplied directly by the Colony; for example, the lines of Lake Moero and the connection between Matadi and the sea.

The Otraco therefore appears to be the principal operator of the navigable waterways. It is an autonomous government agency. Its units run in three leading sectors: the Congo and its tributaries as far as Stanleyville, the Kasai and its tributaries, and Lake Kivu. Furthermore, the Otraco operates the port facilities of Boma, Matadi, Leopoldville, Coquilhatville, etc.

In the course of the last few years, inland navigation in the Congo has undergone great improvements. The ports — with their 130 derricks — have been fitted out, enlarged, and mechanized to an extent rarely found in Europe. Their warehouses have been made more adequate; their installations have been equipped with radar, and luminous beaconing has been installed all along the Congo River and certain tributaries, and also on Lake Tanganyika. Thus, night navigation, which had been impossible up to that time, became a reality; as a result, transportation time has been appreciably reduced. Moreover, the fleet itself has been modernized. Gradually, the old system of the wood-burning boiler, very slow because it necessitated many stops to replenish the wood supply, and, furthermore, destructive of forests, was replaced by the use of diesel engines. Today they furnish half the power of the Otraco and CFL fleets. Finally, the towing of barge trains transporting merchandise in their holds all along the waterways has been considerably improved by new methods based on propulsion and the use of boats of the integrated tow-boat type.

Keeping the inland waterways fit for navigation is a function of the government. The latter sees to it that dredging operations

are performed, as well as beaconing, the marking of navigable channels, and the removal of tree trunks that have fallen in the river. To these tasks a new one has recently been added: the fight against the water hyacinth. This plant has proliferated very rapidly, creating impassable obstructions in certain sectors of the rivers and blocking navigation. All means have been set in motion to check it: the use of powerful herbicides, the opening of new channels, etc.

Maritime access to the Congo is ensured by a reach of 86 miles which takes seagoing ships as far as Matadi. Luminous buoys have been installed on this reach, thus permitting night navigation. Here are found the Congolese seaports: Banana at the very mouth of the river; Boma, which handles the production of the Mayumbe; Ango-Ango, an oil port; and finally, Matadi. Through these ports, nesting in the neck of the river, most of the Congo's commercial traffic passes: that is, two-thirds of the merchandise imported and exported. The balance of the traffic is routed either toward Lobito, which serves Katanga mainly, or toward the ports of the east coast of Africa. (1)

Matadi is — together with Leopoldville — the nerve center of Congolese commerce and transportation. Within the last few years, Leopoldville, which is the terminal of most of the inland navigation lines and also the breaking-off point for most of the transportation going toward the sea or coming from it, has had its port installations considerably enlarged. Matadi, the leading seaport of the Congo, is connected with Leopoldville by a direct railroad line; half the merchandise entering or leaving the Congo utilizes its quays. Here, an expansion program under way will double the port capacity of Matadi and raise it to some four million tons a year; further plans are being considered that would raise this annual capacity to about ten million tons.

(1) By virtue of an Anglo-Belgian agreement concluded in 1921, merchandise leaving and entering the Congo is granted freedom of transit across Tanganyika. This agreement also granted the establishment of Belgian bases at Kigoma, on Lake Tanganyika and at Dar-es-Salaam, a port on the Indian Ocean. The installations of these bases have recently been enlarged.

B. Railroads.

In 1898, the railroad line from Leopoldville to Matadi was completed. It was the Congo's first railroad and opened up the entire country at one and the same time to civilization and economic progress. Bypassing the un navigable cataracts of the river, it made possible the junction between the inland waterways and the sea. Shortly after, another railroad line spanned the distance between Boma and the confines of the Mayumbe, where wood, oil, fruit, and cocoa were produced. Today these two lines are operated by Ottraco.

The Compagnie des Chemins de Fer du Congo Supérieur aux Grands Lacs Africains — the C.F.L. — linked the navigable sections of the river above Stanleyville by rail and prolonged this line by means of a junction with Albertville; thus direct communication between the river and Lake Tanganyika was established and, through the latter, direct connection with the British railroad system serving the ports of the Indian Ocean.

In the Northeast, the Vicicongo Company constructed — on the one hand, with the Congo Basin, and, on the other, with the Sudan and French Equatorial Africa.

But the most important railroad system is operated, in the Southeast of the country, by the Compagnie du Chemin de Fer du Bas-Congo au Katanga (Lower Congo and Katanga Railroad Company), otherwise known as the B.C.K. This railroad system, which is more than 1,500 miles in length, is a complex one: it connects Katanga with the Kasai River by crossing the head of the Congo River at Bukama and also links up Katanga with the Benguela Railways which carry the products of Congolese industry as far as Lobito; at the same time, it provides connections with the railroad systems of South Africa.

The construction of these roads encountered great obstacles from the start: some created by the torrid climate where tor-
rential rains and burning heat attack the surfacing of the roads;
others occasioned by the extremely variable nature of the Congo-
lese soil which prevents the use of a uniform technique.

It was after World War I, with the introduction of motor
traction on a larger and larger scale, that the Congolese road
system began making real progress. Today there are about
87,000 miles of roads, and about one-quarter of this mileage
consists of highways with hard surfacing and easily drained
roadbeds that make them adequate for two-way heavy tonnage
traffic. Several public transportation companies assure service
over some 19,000 miles of these roads.

The end of the last war witnessed a new stage in the develop-
ment of the road network. With the aim of strengthening the eco-
nomic substructure of the country, the Ten Year Plan considered
the building of new highways and side roads intended to serve the
agricultural and industrial regions. After a start had been made,
the initial plan was revised and the total new road mileage was
reduced to 3,100. At the same time it was decided to improve the
existing road network by straightening the layouts of the old
roads, mechanizing the maintenance service, strengthening the
roadbeds, and especially by doing away with ferries and replacing
them by bridges. More than 500 of these have already been
constructed. As a result, inland transportation has been accelera-
ted, thus providing a new source of profit for the country's
general economy.

D.

Airlines.

An air transportation system already existed in the Belgian
Congo as early as 1920; this was a line of hydroplanes skirting
the Congo River from Leopoldville to Lisala. Technical difficul-
ties brought about its rapid disappearance.

Until recently, no junction existed between the lines of the
C.F.L. and those of the B.C.K. In 1956, this gap was filled: the
two railroads were joined between Kamina and Kabalo and now
form a unit of 2,200 miles of railroad tracks. Now it has become
possible — without changing trains — to cover as great a
distance as 20,000 miles on tracks that stretch across the entire
section of Africa situated south of the Sahara; furthermore, the
leading industrial zones of the country are thus kept in touch
with the two oceans. This junction — passing through Belgian
Congo — connects directly Lobito, on the Atlantic, with Dar-es-
Salaam, on the Indian Ocean, Lake Tanganyika constituting the
only break.

Like the river fleet, the railroad materiel has been
thoroughly modernized. The adoption of one and the same gauge
has made it possible to standardize the railroad systems of the
Southeast; on the B.C.K., more than 300 miles have been
almost completely equipped with diesel engines. Two facts will
show the importance of the development of railroad trans-
portation during these last few years: within a period of ten
years, from 1946 to 1955 inclusive, the tonnage of merchandise
transported has more than doubled, and in a little more than
fifteen years the number of passengers who have used the rail-
roads rose from less than 300,000 before the war to more than
one and a half million.

Roads.

C.

Railroads and navigable waterways constitute the backbone
of Congolese transportation. On this basic outline, rigorous by its
very nature, a network of roads has been grafted. Adaptable and
branching out very freely, this network is made up of roads
linking waterways and railroad lines, serving remote regions,
and weaving a more and more closely knit pattern from frontier
to frontier.

From 1923 on, the Belgian airline known as the Sabena gradually expanded its activities in the transportation field, and as early as 1930, it linked Belgium and the Congo by a regular air service. Later on, other Belgian and foreign airlines were to fill in the network.

At present, there are three international airfields in the Congo: D.C.7s are able to land at Leopoldville, and D.C.6s at Stanleyville. Eventually, these airfields may be transformed so that heavy jet-planes will also be able to land. From these fields a number of interior airlines branch out: 26 radiate from Leopoldville, 10 from Stanleyville, and 4 use Elisabethville as their base. Leopoldville is the turn-table of both the interior and the international air traffic; as of today, its airport possesses the longest civilian runway in the world.

The Congolese interior air network is the longest in Africa; it totals about 22,000 miles. It affords fast transportation not only for passengers and mail, but also for fresh food which, after being taken out of cold storage, can now be shipped directly to the most remote regions of the country. This tremendous expansion of aviation has brought the Congo a considerable improvement in living conditions, whether it is a question of almost daily contact with Europe or of provisioning isolated posts. Supplementing transportation by rail, roads, and water-ways, aviation completes the work undertaken.

The Transportation Policy.

2.

The organization of Congolese transportation is based essentially on close co-operation between the government and private enterprise.

Private companies, as concessionaires, are entrusted with the task of creating and exploiting transportation networks, and are generally given certain guarantees and advances of capital. These companies have accumulated investments valued at 20 billion francs, to which can be added 12 billion through the provisions of the Ten Year Plan. Otraco alone accounts for half the total sum invested.

These companies have been set up in various ways, according to a policy characterized by flexibility and adaptability. Thus Otraco has been established as a « personalized » government agency whose entire capital belongs to the government. The

products, the basic rate applied varies according to a sliding scale which goes hand in hand with the prices obtained in the world markets.

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Various organizations take a hand in formulating transportation policies.

The Commission des Transports Intérieurs (Commission for Inland Transportation) operates at Leopoldville. It is composed of civil servants, and of representatives of the public and also of the local heads of transportation companies; it studies problems of a practical nature and co-ordinates the services of the networks.

At Brussels, the different companies have set up a Comité des Transporteurs au Congo Belge (Committee of Carriers in the Belgian Congo), where problems of common interest are discussed. Likewise at Brussels the Conseil Supérieur des Transports (Superior Transportation Council) has been set up; this is a decentralized government agency which affords an opportunity for exchanges of views among representatives of the government, the public, and the transportation organizations.

The extent of the effort made by the carriers with the government's aid appears clearly if we compare statistics of the past few years. The number of passengers carried has sextupled, increasing from fewer than 350,000 in 1939 to about 2,000,000 some fifteen years later. Commercial traffic has quadrupled in the same period, rising from less than 5,000,000 to about 20,000,000 tons.

In order to cope with such an increase, the carriers have had to see to it that both the quality and the quantity of the material required were satisfactory, and that the rates fixed were expedient. In order to do this, they have had to speed up the

B.C.K. operates railroads that have been built by concessionary companies which were, besides itself, the Compagnie du Chemin de Fer du Katanga (Katanga Railroad Company) and the Société des Chemins de Fer Leopoldville-Katanga-Diolo (Leopoldville-Katanga-Diolo Railroad Company). As a matter of fact, every case is in a class by itself and is treated individually.

But considering the direct influence of transportation on the general economy of the country, the government has reserved for itself the right to control transportation rates.

A transportation rate policy has been worked out with the aim of assuring the public of the best service at the most reasonable rates, and of making the different regions of the Congo participate harmoniously in the commercial currents. This policy was put into concrete form in 1951, in an important reform which has unified all categories of merchandise for all the Congolese carriers.

The principles that have inspired this reform are the following:

- Luxury products must pay for products of low unit value;
- Rates must not exceed what the product can bear;
- A given product must not be charged higher rates for local transportation than for exportation;
- Transportation rates must take tolls into consideration;
- The sum total of the receipts must furnish the carriers with the financial resources they need.

The transportation rate policy thus created divides merchandise into thirteen categories according to value, essential utility for the country, and transportation difficulties.

The rates are applicable throughout the entire transportation system and follow a gradually diminishing scale according to the distance. A special inter-regional rate schedule is sometimes granted to certain regional manufactures. As for agricultural

«turn about» of all their conveyances, mechanize their entire equipment, and employ the most modern methods of organization, while at the same time maintaining the stability of their companies and guaranteeing dividends to their stockholders.

The Tourist Industry.

3.

Roads, railroads, waterways, and airlines now make traveling easy anywhere in the Congo. This transportation network has given rise to a new activity that seems destined to assume vast proportions : the tourist industry.

It is already adding more than half a billion francs to the country's economy every year. According to estimates, foreign tourists alone bring in a quarter of a billion francs.

This industry starts off with favorable factors. The most important one is precisely the network of organized transportation. Today it is easy to make a complete tour of the Congo in public conveyances ; already more and more travel agencies are offering a wide range of excursions for lump sums. The second favorable factor is the great interest aroused by the country itself, its population, and its natural scenery. This natural scenery presents many aspects : equatorial forests, volcanic regions, savannas, great mountain lakes, the snowy peaks of Ruwenzori, and national parks where wild animals live. Finally, there is a third factor, acting as a connecting link between the first two : the existence of a hotel industry which, after having been conducted for a long time in a hit or miss fashion, has recently made real progress, not only in regard to the number of rooms available but also from the point of view of comfort and courtesy. Right now, the Congolese hotel industry has more than 7,000 beds to offer in some 300 hotels.

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tion et des Relations Publiques pour le Congo Belge et le Ruanda-Urundi (Information and Public Relations Office for the Belgian Congo and Ruanda-Urundi) — a government-sponsored organization — takes care of everything that concerns Congolese tourism : organizing foreign propaganda, making the most of the natural scenery, establishing relations with agencies and with the authorities, keeping in touch with big international organizations, etc. It has a local office at Leopoldville. A Conseil consultatif du Tourisme (Advisory Tourist Council), made up of experts, is attached to the Information and Public Relations Office. Aside from this Council, in the Congo there are also a government bureau dealing with administrative matters, and a Conseil Supérieur du Tourisme (Superior Tourist Council) which gives its opinions to the governor general.

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It seems that within the next few years the authorities will have to concern themselves with improving the Congo's hotel industry. For a long time, the establishment of a chain of first-class hotels has been considered — at least in the regions of the Northeast — and also the setting up of a hotel school to train native personnel. Indeed, considering the wealth of natural scenery, the constant improvement in the roads, the regularity and the quality of transportation facilities, the interest aroused to the point of bringing more and more international travelers from Europe and America, it is evident that there ought to be a hotel industry of good quality to handle the tourist situation ; otherwise, an industry which already occupies the twelfth place in the economy of the Congo will be doomed to stagnation. Financial help is a prerequisite factor in the new stimulus needed by the hotel industry, and this aspect of the problem is being studied right now.

No doubt there is still room for improvement, and the success of the young tourist industry depends entirely on the judicious utilization of the factors mentioned.

As far as transportation is concerned, it seems that the road network has the chief claim to attention. At the present time, it can be considered that if the eastern and the northeastern parts of the country possess satisfactory roads, a great deal of work remains to be done in the other regions ; the carrying out of the road building program laid down by the Ten Year Plan will bring about notable improvements in this field.

The task of making the most of the principal beauty spots has already begun and is being carried on with the help of local organizations such as the Touring-club of the Congo, the automobile clubs, and the tourists' information bureaus. But if remarkable attractions for tourists can be found in all parts of the country, the eastern part seems best adapted to the development of tourism ; there one can not only find the greatest variety of scenery within an area that is both comparatively small and conveniently visited, but the fairly temperate climate of the region offers the tourist a pleasanter stay and makes traveling possible at any time of the year.

This difference between the two sections of the country is reflected in the facilities that are offered to tourists : it is especially in the East that the travel agencies have organized services and arranged convenient excursions ; it is also mainly there that the hotels offer the comfort that the visitor has a right to expect. Furthermore, the increasing rush of tourists in the East could quickly exceed the present lodging capacity of the region and this would impose an accelerated rhythm on the expansion of the Congolese hotel industry. One simple fact will show the growth of tourism : partial statistics reveal that there was a total of more than 11,000 visitors for 1956 (the actual figures are even larger) ; half of these visitors, who generally remain in the Congo about two weeks, came purely for sightseeing.

Gradually the authorities turned their attention to supporting this budding tourist industry. In Brussels, the Office d'Informa-

CHAPTER VIII
THE WATER SUPPLY

Problems and Solutions.

Whether it is a question of industrial or domestic needs, water supply in the tropics constitutes an important problem which is both economic and social.

Water needs — strongly influenced by the country's climate — are much more extensive than would appear at first sight. Human consumption of water for drinking purposes and hygiene, which amounts to some 20 quarts a day in the temperate zones, goes as high as 50 and sometimes even 200 quarts a day in the Congo. The smallest establishment — a school, an office, or a dispensary — has daily water needs that exceed 25 cubic meters. Cattle drink as much as 50 quarts per head a day. In the industrial sphere, it may take 10 cubic meters of water to process one gram of gold or one kilogram of tin; every kilogram of raw materials put to use in the textile industry requires from 50 to 8,000 quarts; beer, oil, rubber, tanned hides, and many other