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Cohn, Hans

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Technical Evolution, the Key to the Future

by Dr Hans Cohn, Port Elizabeth

Between the frontiers of Rhodesia, Zambia and Malawi there is the Portuguese territory of Cabora Bassa, part of Northern Mocambique. It is a mountainous region, full of virgin bush and scenic beauty, situated on both banks of the Zambesi river. It appears rather peaceful and secluded from the rest of the world—and yet it is the theatre of one of the most ambitious development schemes on the African Continent, the "Cabora Bassa Dam Scheme".

A Most Ambitious Hydro-electric Scheme

This massive hydro-electric scheme is only a part of a huge plan for the development of agriculture, commerce and industry of Central Mocambique. Besides this it is of inter-African importance, as this 800-mile network of high-voltage power could supply electricity to Rhodesia, Malawi and Zambia thus being the foundation of a common market. Last not least, one must not forget that the European common market commenced with the sharing of electric power. Could it not be possible that a similar development takes place on the African Continent?

What actually is planned is the following: A 1,000-foot long wall with a minimum thickness of 16 feet, five inches and a maximum thickness of 70 feet, four inches will be built to push the waters of the Zambesia back some 160 to 170 miles. An artificial lake will be formed which in some parts will have a width of 15 miles. The Zambesi has at this point a depth of between 65 and 85 feet and sometimes—at peak flow—130 feet.

Cabora Bassa is however only a beginning. Three more dams will be built lower down the river. These additional dams are meant to regulate the flow of water in the Zambesi thus making it navigable to its mouth hundreds of miles away. Further power-producing plants will be built later on at Mepanda Uncua, Boroma, and Lupata. After completion of these dams the river may be navigated by flat-bottomed tugs.

Creation of Another "Ruhrgebiet"

Purpose of the whole scheme is to open up the mineral wealth of Mocambique, for the area is rich in iron, titanium, coal, manganese, copper, fluor-spar and even gold, silver and nickel. This mineral wealth is practically untapped and offers tremendous prospects for future development. The Portuguese Ministry of Overseas Affairs has spent large sums just on researching the area around Cabora Bassa, which comprises 85,000 square miles or one quarter of Mocambique, and considers the dam a starting point of a vast interlocking development scheme, including a network of mines, factories, farms and forests. Experts see a possibility of settling 1 Million European immigrants in Cabora Bassa and creating another "Ruhrgebiet" in the very heart of Africa. The scheme will be financed by the "Zamco" consortium, led by the Anglo-American Corporation (Mr Harry Oppenheimer) and the Portuguese Government. The first phase will be completed in 1974, when the amount of 1,200 megawatts will be generated.

Political Background

South Africa has emerged as the first customer of the new power plant, although the South African "ESCOM" has refused to buy in 1975 any more than 8 per cent of its total power needs from Cabora Bassa. The reason is that the electric power supplied by Cabora Bassa may turn out to be more expensive than anticipated. South Africa's reasons for being very much in favour of the project are mostly political, as the prospect of settling masses of European immigrants in Northern Mocambique could mean the possibility of creating a white buffer state against Zambia and Tanzania. Without South Africa's decision to draw power from Cabora Bassa right from the very beginning, the whole scheme would most likely have been delayed for 10 years or longer, a development which wouldn't have been in the interest of Pretoria. The Portuguese can in any case expect only very little return on their investment till at least the 1990s, but they have to do something quickly to make up for their lack of interest in the territory in the centuries of the past, thus safeguarding their future on the African Continent.

INTERECONOMICS, No. 1, 1969

So far the collapse of Dr Salazar and the installation of Professor Caetano as his successor haven't brought about any changes in Portuguese politics. Professor Caetano has assured his people that everything in Africa would remain as it is and most likely has given a similar assurance to the South African Government. Yet Professor Caetano has not stressed Portuguese presence in Africa as a "sacred dogma", as Dr Salazar used to do, and this has given food for thoughts. But even if the Portuguese should decide one day to withdraw from the black Continent, this will most definitely not happen in the foreseeable future and not without a timely warning. There will be always a Mocambique Government to complete the Cabora Bassa project, except if there would be a Congolese-type anarchy. Mocambique "freedom fighters", the Frelimos, have threatened to sabotage the whole scheme, but their threats are not taken too seriously.

Yet the "freedom fighters" know very well why they are opposing this peaceful development and why they are boasting that the Cabora Bassa dam "will never be built". The completion of the scheme would mean the end of their activities. not because of the presence of masses of white settlers, but mostly on account of the absence of their most powerful helper: poverty. Cabora Bassa means new roads, new settlements, new progress especially for the poverty striken African population, and this is not the ground on which a subversive propaganda can be cultivated. In this respect Cabora Bassa has become a symbol for the whole of Africa. The future of the vast continent can only be safeguarded by technical evolution which makes the African a shareholder in prosperity.

Water Power Projects All Over Africa

A development like this has taken place all over Africa. In Uganda President Obote has switched on the tenth generator at the Owen Falls Dam in July 1968 in a ceremony which marked the completion of the Owen Falls Scheme. It has been forecast, however, that the Dam's capacity will be outstripped by rising demand for power by 1972 and to combat this the Uganda Government has authorised the Board to prepare a scheme for a new power station at Murchison Falls to produce at least 600,000 kilowatts, that means four times more than Owen Falls.

In Zambia President Kaunda has announced his decision to proceed with the development of power facilities on the North bank of the Kariba Dam. Discussions have been in progress in respect of the whole range of planned power development, including the Victoria Falls power station, "Kafue-Stage 1", "Kariba-Stage 2" and the construction of an upstream dam at Kafue,

together with the second stage of development at Kafue.

In South Africa the gigantic "Orange River Scheme", which will turn a 1,000-mile stretch of South Africa's most arid land into a garden, is well under way. Approximately 360,000 acres will be irrigated, while water and hydro-electric power will become available for industrial purposes in areas rich of minerals. This is the largest water supply project tackled so far on the Continent of Africa and will be carried out over a period of 30 years at a total cost of approximately R 450 mn.

Much Progress in Roadbuilding and Infrastructure

Much progress has been made in respect of roadbuilding and infrastructure. Following recent studies, the "Economist Intelligence Unit" of London is to submit recommendations in November regarding the co-ordination of various means of surface transport in Kenya, Tanzania and Uganda. The survey, started in October 1967, is being financed by a loan from the International Bank for Reconstruction and Development and the United Nation Development Programme. Both bodies and the East African Governments provided the means. The aim is to eliminate duplication of transport facilities and reduce congestion of East African ports. Furthermore, discussions have been held in Nairobi between the Chief Administrator of the Imperial Highway Authority in Ethiopia and the Kenya Ministry of Works, concerning the construction of a highway linking Kenya and Ethiopia.

In Cameroon projects to extend the country's tele-communications network are to be undertaken with the aid of funds made available by the French Aid and Co-operation Fund and the United States Export-Import Bank. These prospects consist of a micro-wave link between Yaoundé, Douala and Buea, an exchange and underground cable network at Douala and exchanges at Yaoundé and seven other towns. An American firm is to make preparatory studies for a link between Youndé and the Northern town of Fort Foureau.

Enormous changes are under way in Malawi. End of March Dr Hastings Banda announced in Parliament that the time had come for concrete, practical and tangible action regarding the plan to move the Malawi capital from Zomba to Lilongwe, asking the House to approve and endorse this decision and enable the Government to raise finance. Furthermore, the Malawi Minister of Finance and the German Charge d'Affairs in Malawi signed an agreement during April for the provision of technical assistance by the West German Government for the Salima Agricultural Development project.

In Nigeria the International Bank for Reconstruction and Development is to undertake a survey of roads with a view to assessing future needs and evaluating the present development programme for the period 1968-1974.

As far as Ghana is concerned, the sum of 10 mn Cedi has been allocated to the Electricity Corporation to enable it to start work on the first phase of the nation-wide rural electrification scheme. In addition to this a large sum is to be spent on special projects to provide good drinking water for some 44,000 people.

Rapidly Growing Industrialisation

In addition to schemes like these, there are various industries spreading all over the African Continent. In Kenya-for instance-the Japanese and Kenya Governments have signed an agreement under which Japan will continue until 1970 to provide technical and financial assistance for the training and research centre for small-scale industries, established at Nakuru three years ago .-The South African Wool Board has decided to spend a vast sum during the next five years on technical aid and the promotion of the wool industry in Lesotho.-In Cameroon an agreement has been signed between the Cameroon Federal Government and the Cameroon Glass Company (SOCAVER) for the establishment of a new crude glass factory at Douala.-In Kenya the "Textile Industries Limited of Togo" is to build a textile factory in Nakuru with an estimated output of ten million yards of printed cotton and five million yards of polyester-cotton blends per year. Another textile factory will be established in Eldoret (Kenya) by Maurer Textiles of Geneva with an initial production of 14.5 mn yards of cloth a year.-Directors of the South African "Frame Group of Industrial Organisations" visited Malawi to make final arrangements for the registration of a company to manufacture blankets.

These are only a few examples for the rapidly growing industrialisation of the "Black Continent". Since the end of World War II this technical evolution has made tremendous headways and will keep on progressing at the same pace. More and more the African bush will be pushed backward to make place for modern civilisation-and this development will be reflected in the minds of the African population. The more the African native gets used to living with modern technique, the more he adapts himself to the new conditions of life, the greater will be his value for the future of the African Continent. It must be one of the principal tasks of European industrialists in Africa to make the African shareholder in prosperity. As soon as poverty has been eliminated, civil wars and unrest will be reduced to a minimum.

Training of Native Managers

But there is still a further consideration. Practically all of the newly established industries are managed by Europeans and inspired by European "know-how". There is most definitely no "neocolonialism", as the governments of the "Black States" through their industrial development organisation are shareholders in most of the new schemes and factories, yet this state of affairs cannot last for ever. In other words: The African must be trained for managerial positions, where ever it is possible. It will take many years to come, till the Native will be able to do the job of the European, but it will come as a result of technical evolution—an evolution taking place in reality and minds.



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