



CONFERENCE ON WATER RESOURCES: POLICY AND ASSESSMENT Addis Ababa, Ethiopia, 20-25 March 1995

PAPER NO. 2

# A BRIEF HISTORY OF THE CREATION OF THE ZAMBEZI RIVER AUTHORITY

Prepared
by
M.J. TUMBARE and C.F.G. Mukosa,
ZAMBEZI RIVER AUTHORITY

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#### 1. INTRODUCTION

A method which ensures the most efficient utilisation of the water resources in an international river is a basin-wide approach to the problem, a fact which has long been recognised. It calls for an organisation covering the whole of the basin, through which the necessary surveys, studies and works are carried out. The development of the water resources of the basin therefore requires international co-operation and an inter regional organisation must be created to carry out the tasks of planning and execution, within the limits agreed upon by negotiations between the countries involved. This basin wide approach is the best way to achieve the optimum development of water resources. Figure 1 shows the Zambezi River Basin.

#### 2. INTER-TERRITORIAL POWER COMMISSION

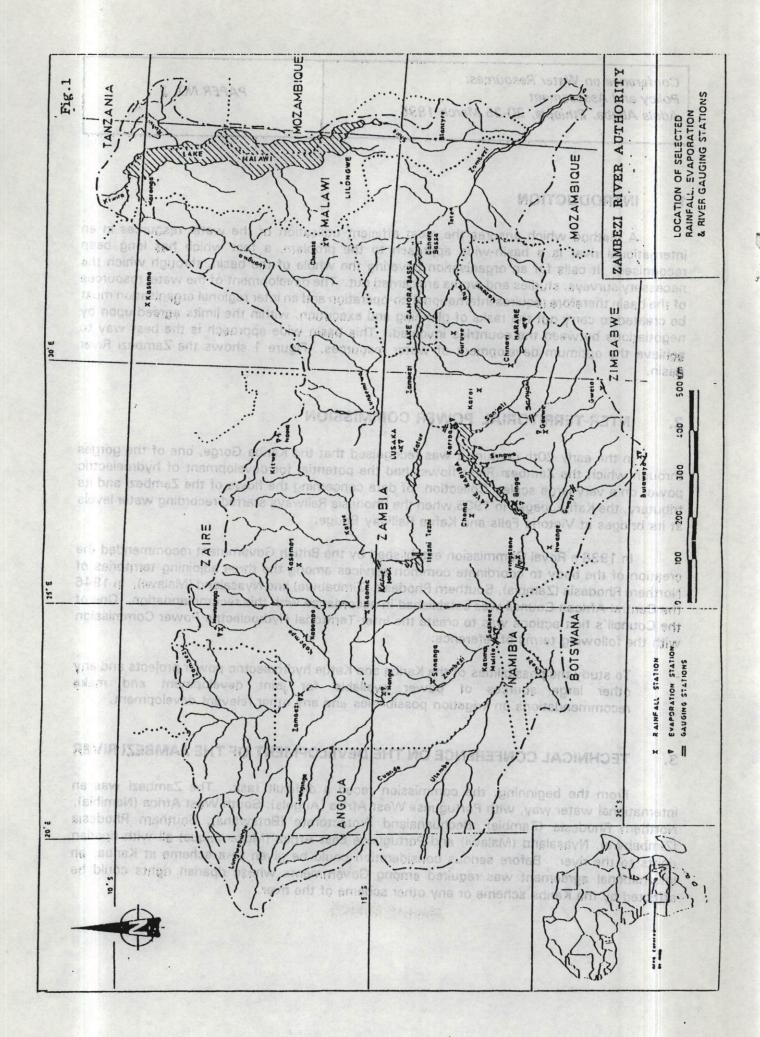
In the early 20th century it was recognised that the Kariba Gorge, one of the gorges through which the Zambezi River flows, had the potential for development of hydroelectric power on a very large scale. Collection of data concerning the flows of the Zambezi and its tributary, the Kafue, began in 1905 when the Rhodesia Railways started recording water levels at its bridges at Victoria Falls and Kafue Railway Bridge.

In 1938 a Royal Commission established by the British Government recommended the creation of the body to coordinate common services among the three adjoining territories of Northern Rhodesia (Zambia), Southern Rhodesia (Zimbabwe) and Nyasaland (Malawi). In 1946 the Central African Council was established in accordance with this recommendation. One of the Council's first actions was to create the Inter-Territorial Hydroelectric Power Commission with the following terms of reference:

To study the possibilities of the Kariba and Kafue hydroelectric power projects and any other large sources of power available for joint development and make recommendations on irrigation possibilities and any other relevant development.

### 3. TECHNICAL CONFERENCE ON THE DEVELOPMENT OF THE ZAMBEZI RIVER

From the beginning, the commission faced a difficult task. The Zambezi was an international water way, with Portuguese West Africa (Angola), South West Africa (Namibia), Northern Rhodesia (Zambia), Bechuanaland Protectorate (Botswana), Southern Rhodesia (Zimbabwe), Nyasaland (Malawi) and Portuguese East Africa (Mozambique) all with riparian rights to the river. Before serious consideration could be given to a scheme at Kariba, an international agreement was required among Governments whose riparian rights could be affected by the Kariba scheme or any other scheme of the river.



An Advisory Panel consisting of two Civil Engineers and two Electrical Engineers was appointed in 1948 by the Central African Council to evaluate the various projects on the Zambezi and Kafue Rivers.

In 1950 a Technical Conference on the Development of the Zambezi River and the use of its waters was held in Salisbury (Harare), Southern Rhodesia (Zimbabwe). It was attended by technical representatives of the Portuguese Government, the three Central African territories and the Commission. A complete agreement was reached during the conference concerning the water requirements, both during the period of construction and during operations of the riparian territories in the event of a dam being constructed at Kariba. Interim arrangements were also made for the collection and exchange of hydrographic information about the river.

### 4. FIRST ATTEMPT TO CREATE ZAMBEZI RIVER AUTHORITY

In 1951, the Power Commission recommended to the Central African Council that the hydrological stations on the Zambezi and Kafue be maintained because hydrological data was essential for design and for international negotiations. It also urged the governments of Northern Rhodesia and Southern Rhodesia to create a ZAMBEZI RIVER AUTHORITY to consider matters affecting the common usage of the river by riparian territories for power production, irrigation, and transport, the accumulation of hydrological data and the determination of measures necessary to preserve and improve the regime of the river. The Authority could not be created because the government of Northern Rhodesia did not want to take part in the Kariba Scheme as proposed by the Power Commission.

### 5. THE FEDERAL HYDRO-ELECTRIC BOARD

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With the creation of the Central African Federation (Northern Rhodesia, Southern Rhodesia and Nyasaland) in August 1953, it was argued that the whole matter should be fully reconsidered particularly in view of the changes which had occurred. By December 1953, the Federation sponsored a loan application for the development of Kafue and to carry out the first stage of the development at Kariba to the World Bank.

In 1954 when the Government of the Federation introduced the Hydro-Electric Power bill, the Federal Hydro-Electric Board was established to co-ordinate the generation and supply of electricity within the then Federation of Rhodesia and Nyasaland. In 1955 the Federal Hydro-Electric Board proceeded with the construction of the Kariba stage one. The construction of the Dam Wall was completed in June 1959 and by the end of that year the first units of power were sent out to the Copperbelt of Northern Rhodesia.

Kariba Hydro-Electric Scheme was officially opened by Her Majesty Queen Elizabeth the Queen Mother on 17 May 1960.

### 6. CENTRAL AFRICAN POWER CORPORATION

With the independence of Nyasaland in 1963, the Federation of Rhodesia and Nyasaland was dissolved. The governments of Northern Rhodesia and Southern Rhodesia created the Central African Power Corporation to succeed the Federal Power Board and Kariba continued to supply power to Northern and Southern Rhodesia.

In 1964 Northern Rhodesia became independent to become Zambia and Southern Rhodesia became Rhodesia. The Central African Power Corporation continued to manage the lake, generate power and distribute power to Zambia and Rhodesia. In 1980, Southern Rhodesia became independent and became Zimbabwe. The Central African Power Corporation continued with its functions.

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The Central African Power Corporation was re-constituted as the Zambezi River Authority (ZRA) under an agreement between the Governments of the Republic of Zambia and the Republic of Zimbabwe concerning the utilization of the Zambezi River (on the common border) and to obtain for the economic, industrial and social development of the two countries, the greatest possible benefit from the natural advantages offered by the waters of the Zambezi River, on the common border and to improve and intensify the utilization of the waters for the production of energy and any other purpose beneficial to the two countries.

The Authority has its Head Office situated in Lusaka, Zambia and has two other offices in Harare, Zimbabwe and Kariba, Zimbabwe. It currently has a staff establishment of two hundred employees drawn from the two countries. Its approved annual budget (recurrent and capital) for 1995 is US\$10million.

In terms of the Zambezi River Authority Act. 1987, the Higher Authority for Power is known as the Council of Ministers. This Council consists of four members, two of whom are Ministers of the Government of the Republic of Zimbabwe and two Ministers of the Government of the Republic of Zambia holding each the portfolio of Energy and the portfolio of Finance. There is also a Board of Directors comprising of three members appointed by the Government of the Republic of Zambia, three members appointed by the Government of the Republic of Zimbabwe and until such time as the loan from Commonwealth Development Corporation (CDC) is fully paid, one member who is appointed by the CDC and acceptable to the Council. This loan is due for final payment at the end of March 1995.

The Board of Directors under the overall direction of the Council, is responsible for the policy and control of the Authority. The Management team consists of a Chief Executive who is approved by the Council and appointed by the Board, a Corporate Secretary/Chief Accountant, Chief Engineer (Planning and Operations) and a Chief Engineer (Projects and Construction).

The primary functions of the Zambezi River Authority are:

- Operate, monitor and maintain the Kariba Dam Complex.
- Investigate the desirability of constructing new dams on the Zambezi River and make recommendations thereon to the Council.

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- 3. Construct, operate, monitor and maintain any other dams on the Zambezi River.
- Collect, accumulate and process hydrological and environmental data of the Zambezi River for the better performance of the functions and for any other purpose beneficial to the Contracting States.

continued to stipply power to Northern and Southern Rhodesia.

- Regulate the water level in the Kariba reservoir and in any other reservoir owned by the Authority.
- 6. Make recommendations as will ensure the effective and efficient use of the waters and other resources of the Zambezi River.
- 7. Liaise with the National Electricity Undertakings in the performance of the functions that may affect the generation and transmission of electricity to the Contracting States.
- 8. Recruit, employ and provide for the training of such staff as may be necessary for the performance of its functions under this Agreement.
- 9. Submit development plans and programmes to the Council for approval.
  - 10. Carry out other functions as are provided for in this Agreement or are incidental or conductive to the better performance of its functions.

The Authority operates a total of 21 telemetry and hydrographic stations on the Zambezi River and its tributaries along the border and within Zambia and Zimbabwe to obtain its hydrological data for management of the river, Lake Kariba, power generation flood control and drought analysis.

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Political considerations play a minor role in the decision making procedure in Zambezi River Authority. Major policy and other major decisions are made during the periodical meetings (at least once a year) of the Council of Ministers, when the Ministers and technocrats of all the two member countries (Zambia and Zimbabwe) are present. Other policy issues are dealt with by the Board of Directors. The Authority has no power to impose its will on the two governments. However its recommendations, through its ZRA Board and the Council of Ministers, can be adopted and carried out by the member countries.

Executive control of all works within the Authority rests with the Authority. The Authority is, through the transitional arrangements, funded by the two Governments through Zimbabwe Electricity Supply Authority (ZESA) and the Zambia Electricity Supply Corporation (ZESCO) who utilise the Kariba waters for Power Generation. Its financial affairs are not subjected to Governmental Audit but its annual accounts, after external auditing, approval by the Board of Directors and ratification by the Council of Ministers are tabled in the Parliaments of the two Governments. Studies on sustainable water tariffs, fees and other charges, raised directly by the Authority to water users and for other services provided by the Authority, are currently underway in order to move away from funding of the Authority by the two Governments.

### CONCLUSION onto you or both housest school out of level rately and attelugal

In order to ensure the most efficient use of the water resources of a river basin, a basin-wide or regional approach to water resources development and management is of paramount importance. Much depends on the earnest desire of the participating countries for cooperation, and a deep understanding that communal effort, rather than a short-sighted changing to direct national interests, leads to better results for all.

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Currently, through the Southern African Development Community, the Zambezi River Action Plan is under consideration which looks at all riparian states of the Zambezi River and their water requirements and usage on the Zambezi River and how to best co-ordinate and manage the activities and usage on a basin-wide basis.

The Authority in the meantime, continues to serve its purpose and to fulfil its mandate given to it by the two Governments and continues to consolidate its functions and Corporate Plans. Recently, the Authority completed a feasibility study in the proposed Batoka Hydro-Electric Scheme on the Zambezi River of which the grant funds for the study were provided by the African Development Bank and the two Governments of Zimbabwe and Zambia.

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