

## UNITED NATIONS





## **United Nations Conference** on New and Renewable Sources of Energy

UN LIBRARY

Distr. GENERAL

Nairobi, Kenya 10-21 August 1981

JUL 7 - 1981

A/CONF.100/NR/38 (SUMMARY) 24 June 1981

UN/SA COLLECTION

ORIGINAL: ENGLISH

SUMMARY OF THE NATIONAL REPORT SUBMITTED BY SIERRA LEONE\*

<sup>\*</sup> The designations employed, the presentation of material and the views expressed in this paper are those of the submitting Government and do not necessarily reflect the practices and views of the Secretariat of the United Nations in any of these respects.

A/CONF.100/NR/38 (SUMMARY) English Page 2

In Sierra Leone, a small country with a population of 3.3 million, the present main sources of energy are petroleum products, fuelwood and charcoal.

The expenditure on crude oil amounted in 1980 to 20 per cent of the national income or 30 per cent of the foreign exchange budget.

The Government recognizes the need to develop alternative sources of energy, with a preference for using renewable sources.

A national energy committee has been formed, which will define a national policy and create a controlling body to implement the policy.

Various sources of energy are in use at present or are envisaged.

Oil and petroleum products, which at the moment dominate the energy scene in Sierra Leone, greatly influence its economy. These are the main sources of electric power production and transportation. Future use will depend on the development of hydroelectric power, the improvement of roads and the introduction of more fuel efficient bulk transportation systems.

The total hydroelectric potential of the Sierra Leone river is about 2,000 megawatts, which is 100 times the present electric power generated. It is envisaged that 1,100 megawatts could be harnessed and immediate plans are well advanced to construct the Bumbuna Scheme on the Seli River, which will have an installed capacity of 60 megawatts on line by 1986. The fully developed capacity will be 305 megawatts.

Another scheme is being investigated on the Mano River, which would supply about 120 megawatts of electric power to Sierra Leone and Liberia. Other small schemes are under investigation.

Biomass sources of energy are widely used. The biggest use is of fuelwood and charcoal for domestic cooking. Efforts to maintain these sources are centred on a forestry project and the development of village wood lots. The forestry project will concentrate on reforestation, the production of fuelwood and charcoal, the use of efficient stoves and the training and organization of forestry workers. The use of agricultural wastes is being investigated and the use of alcohol, a by-product of sugar-cane, is under consideration.

Other sources such as biogas, solar and wind energy, are being studied but are not in wide use at present. Some development is anticipated in the future.

Lignite deposits have been found and used to a limited degree in the past. These require further investigation to establish their extent and possible future use.

The constraints on the development of new and renewable sources of energy are not insurmountable. The actions required to overcome these constraints, are: the formulation of a national policy, the collection of data, the carrying out of studies, the securing of foreign funds, the training of technical personnel and education of the population by the mass media.

A/CONF.100/NR/38 (SUMMARY) English Page 3

6

Sierra Leone is co-operating in regional energy development activities and till keep in contact with all regional and international bodies dealing with energy evelopment.

444) West and 2014 1976