UNITED
NATIONS

A

United Nations Conference
on New and Renewable Sources
of Energy

Nairobi, Kenya
10-21 August 1981

Distr.
GENERAL

A/CONF.100/NR/41 (SUMMARY)
30 June 1981

ORIGINAL: ENGLISH

SUMMARY OF THE NATIONAL REPORT SUBMITTED BY EGYPT*

* 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.

The national report of Egypt is divided into five sections. Section 1 reviews the country's basic data, including those on the balance of payments, the five-year plan, public revenues and expenditures, and population and area.

Section 2 highlights energy demand and supply. Current domestic consumption of commercial energy is nearly 17 million tons of oil equivalent (TOE) of which 80 per cent is oil and natural gas, and the remaining 20 per cent is hydro-electricity. Non-commercial energy is roughly estimated at 15 per cent of total energy consumption. The most alarming trend in recent years has been the fast-growing commercial energy consumption whose annual rate averaged 12 per cent during the period 1975-1981. Total projected demand for primary commercial energy by the year 2000 is expected to reach nearly 65 million TOE at a growth rate of 7.5 per cent per annum. Nearly half of that amount will be in the form of electricity and half in direct oil consumption.

The most important sources of energy available in Egypt are oil, natural gas, hydropower, solar energy, biomass, coal and wind. Since Egypt is currently heavily dependent on oil, a great deal of effort, both nationally and internationally, has to be made to develop and widely utilize new and renewable energy sources.

Section 3 reviews some of the institutional changes introduced in order to enhance Egypt's capabilities in the analysis, assessment and programming of energy. The most important are the establishment of the Supreme Council of Energy and the regrouping of several ministries, producers and consumers of energy, in a production sector, both under the chairmanship of the Deputy Prime Minister for Production and Minister of Petroleum.

Section 4 discusses in detail current and planned activities in various areas of new and renewable sources of energy. They include solar, hydropower, biomass and wind. Several areas with good prospects have been identified for fast development and utilization.

Heavy emphasis is directed towards the utilization of solar energy in water heating, industrial process heat, desalination, remote application, passive solar architecture for new settlements, refrigeration and cooling.

A national plan for rural and urban utilization of biogas techniques is under way. The main goals of the plan are to enhance social and sanitary levels in rural areas, provide a new and more efficient source of energy, save crop residues currently burned at very low efficiency - feed animal stocks and provide larger quantities of organic fertilizer.

Hydropower potential in Egypt has already been utilized up to two thirds, with an energy output of nearly 10 billion kwh. The remainder is to be utilized by the year 2000, with an anticipated energy output of 5,000 billion kwh. However, total hydropower will cover only 15 per cent of total electricity demand by 2000, or nearly 7 per cent of total energy demand.

Wind energy is receiving increasing emphasis in certain areas and applications, and geothermal activities in Egypt are being explored for potential utilization.

Section 5 covers the major constraints and policy measures. Most wages and prices in Egypt are controlled by the Government in order to combat inflation and ensure social justice. Heavy subsidies are therefore provided both in necessities and fuel prices, which are difficult to change without seriously affecting the overall social balance. Subsidized prices of conventional energy products are becoming an obstacle to the commercialization and wide application of new and renewable sources of energy. That, in turn, is causing an imbalance between the rate of growth in research and development, on the one hand, and that of utilization on the other. A second obstacle is the lack of adequate, reliable and suitable equipment and appliances that can be widely commercialized. Social adjustability to the use of new and renewable sources of energy, particularly in rural areas, is a third obstacle.

While intensive government actions are now tackling the questions of restructuring fuel prices, competitiveness among energy sources, and human adjustability, a great deal of supportive effort rests with the international community, to help accelerate research and development and to enhance local capacity for adaptation and manufacture of required capital goods, equipment and related services.
