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REQUEST FOR THE INCLUSION OF AN ITEM ENTITLED "PLAN FOR THE PRODUCTION OF LOW-COST POTABLE WATER" IN THE PROVISIONAL AGENDA FOR THE THIRTY-THIRD REGULAR SESSION OF THE GENERAL CONFERENCE

Explanatory memorandum submitted by the Libyan Arab Jamahiriya

Although water covers three quarters of the earth's surface, the available amount of potable water hardly accounts for 0.4%. The salt water of the seas and oceans constitutes 97% of the total water on earth, the remaining 3% being potable water found in the form of lakes, rivers, icebergs and underground water.

There is already a shortage of water for drinking and for the development of several parts of the world due to world social and industrial changes, and there is an increasing need for water consumption for various purposes, such as agriculture, industry and daily living. This is detrimental to the world's stocks of underground water.

In recent years there has been a big shortfall in the recharging of underground water reservoirs due to a decrease in precipitation - hence the extension of arid areas and desertification.

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The only alternative is the desalination of sea water and the purification of underground water. This alternative, however, is barred by two main obstacles: the economic factor, exemplified by the high costs of desalinated water, and technology, which is still monopolized. Moreover, this issue has not been given due importance owing to the abundance of potable water in the technically developed countries, where desalination technology has concentrated on the utilization of heat released as a by-product of electricity generation and other industrial processes.

Serious consideration of and a radical solution to the problem of supplying the present and future generations with fresh water require a decision by the countries concerned - namely, Arab, African, Asian and other countries - to take collective action, with worldwide support, for the production of low-cost potable water.

The scientific, technical, human and material research potential of the technically developed world is currently directed towards the solution of the immediate problems of their societies, and the supply of potable water is not among those problems.

Although some individual countries have taken measures to solve the problem of water shortages, the problem has wider dimensions, and the responsibility for solving it remains largely international.

The desalination process requires thermal energy to produce steam; the thermal energy can be provided - inter alia - from solar or nuclear energy, by means of sophisticated systems. When nuclear power was envisaged for industrial purposes, it required huge investments which were viewed at the time as unreasonable. However, the results were remarkable and the economic returns great. Nuclear power plants were introduced and their economics constantly improved.

A similar situation has emerged concerning the utilization of solar energy for the production of low-cost potable water. In simplified terms, if

even a small fraction of the amounts spent in the past on nuclear power development were allocated to the development of solar and nuclear desalination systems, the result would be the development of a full-fledged technology for the production of low-cost potable water.

The method currently used for the production of a still inadequate amount of potable water in the countries concerned is to burn the precious oil resources which are considered a common heritage of future generations.

Given the need for an economic supply of water and the need to preserve oil, it is imperative to mobilize research and development efforts and to develop a unified water resources programme through a special fund for international water resources. The government of the countries concerned, African development agencies, the World Bank, the International Atomic Energy Agency (IAEA) and other organizations and specialized agencies could support research and development and implement a long-term technical programme for the economic desalination of sea water by the use of solar, nuclear and oil energy in order to meet the water requirements of the present and future generations. In this connection, the following plan of action is proposed:

1. To entrust the IAEA with the task of implementing such a programme, which should have high priority among the peaceful applications of nuclear energy supported by the Agency.

2. To establish a consortium of countries using desalination technology with the aim of developing a programme for the effective participation of industrialized countries in the designing and marketing of optimum economic systems for water desalination.

3A. To request those countries in need of water which have sufficient financial resources to finance parts of the programme;

3B. To encourage the international development agencies to sponsor the programme as a matter of priority.