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STATEMENT BY THE REPRESENTATIVE OF THE
ATOMIC ENERGY AGENCY (IAEA)

Thank you, Mr. Chairman,

May I convey the greetings and congratulations of the Director General of the International Atomic Energy Agency to the Chairman and officers of this session of the Commission, to the Government of Kenya for its kindness and hospitality and to the Executive Secretary of ECA. This statement will be very brief since delegates may have seen the information paper (E/CN/14/332) entitled "Atomic Energy in Africa" which has been distributed.

I would refer only to three technological services of direct interest to African conditions.

Firstly, work is progressing on a number of different techniques for converting sea or brackish water into fresh water. It is anticipated that during the next decade the cost of desalted water could be brought down to half or a third of the present price, permitting certain types of agriculture such as the cultivation of vegetables. Such a result would be obtained by improving the desalting techniques, by scaling up the size of desalting plants and by using cheaper energy. Most of the present desalting plants have been constructed in the last 10 years and progress in desalting technology is likely to be rapid, regardless of the source of energy. At present, however, nuclear energy can only be considered when the demand for fresh water for domestic and industrial electricity justifies a large plant. In other words, it can only

be considered for a reasonably large urban or industrial complex.

Secondly, with the expansion of nuclear power production in the developed countries the need for increased fuel is apparent. Africa produces about 20 per cent of the world's uranium which is at the moment in over-supply, but this situation is transient and will certainly change within the period which will be required to locate and develop nuclear minerals in those countries which possess them. In some African countries they will only prove interesting as a potential source of export income. In others they may have a more direct value because of the lack of natural fuels and conventional sources of power generation. In such countries uranium, for example, might well be essential for the long-term power development of these countries, and other minerals such as thorium, which is relatively abundant in Africa, can have significance if present research on new types of reactors achieves the expected success.

Finally, there have been considerable advances in radiation techniques used in food preservation and for disinfection by destroying pests in stored grain and other foods. With regard to food preservation the pilot plant rather than the research stage has been reached in many applications, and in disinfection the time is also ripe to proceed from the laboratory through the pilot plant stage to commercial operation. Some of the techniques employed offer great promise for developing countries especially in tropical areas where refrigeration is difficult, spoilage is rapid and insect pests are rife. The obstacles to application are a general lack of knowledge, initial preparation and packaging techniques, and a shortage of specialist personnel. The radiation facilities themselves are becoming more easily and cheaply available. It should be pointed out that radiation can only be used for disinfection when the grain is handled in bulk. A panel of experts which met recently has recommended the establishment of food irradiation research centres in certain developing areas, where investigations could be undertaken on an international basis by local specialists in food technology, with the

co-operation of radiation specialists from developed countries, on urgent problems that show promise of solution by the use of ionising radiation. The topics to be investigated include the preservation of fish and marine products, disinfection of fruits and vegetables. These topics are of direct concern to African conditions and production, and the Agency would welcome expressions of interest in a preliminary study, or survey, designed to ascertain the desirability and feasibility of establishing radiation facilities on a regional or sub-regional basis for, say, fish and perishable commodities, by countries engaged in their production and in the export trade.

I take this opportunity to announce the establishment of the joint IAEA/FAO Division of Atomic Energy in Agriculture, which permits the development of a single joint atomic energy programme on behalf of both organizations and ensures that the technical services of both are brought fully into any joint operation.