

# Nuclear Science and Technology in Food and Agriculture

At the 20th session of the General Conference of the International Atomic Energy Agency, which was held in Rio de Janeiro, Brazil, the afternoon of 23 September 1976 was devoted to various aspects of the use of nuclear science and technology in food and agriculture.

*Opening Address  
by the IAEA Director General,  
Dr. Sigvard Eklund*

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"Scientific afternoons" have become a tradition of our General Conference. In the past, scientific lectures covered selected aspects of nuclear power. This year we thought it appropriate to devote the theme to food and agriculture. I need not emphasize the necessity for research and development directed at improving crop productivity and achieving more effective methods for food preservation. Part of this research is carried on in Member States with the use of various nuclear techniques.

The seven speakers we have invited will tell us about the present status and potential of these nuclear techniques. The last speaker will talk about the Piracicaba Centre of Nuclear Energy in Agriculture, which represents an excellent example of collaborative efforts in which the most modern nuclear techniques are applied to increasing the production of food and fibre and preserving these products against spoilage and insect damage.

*Introductory Remarks  
by Dr. Hellmut Glubrecht,  
Deputy Director General,  
IAEA Department of Research  
and Isotopes*

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The application of nuclear techniques in agriculture is a part of IAEA's programme. It is run by a division which is organized jointly with the Food and Agriculture Organization (FAO), thus giving the guarantee that the programme items are those of highest and actual importance for the agricultural development of member states.

The application of nuclear methods in agriculture is a strongly expanding field and by no means only a collection of routine methods. New and improved techniques are developed continuously and numerous problems still exist which might be solved in the future by further progress in agricultural isotope and radiation technology.

It should also be kept in mind that nuclear techniques in agriculture are not just a very refined and highly specialized tool. But they are sometimes unique to tackle very basic problems, like fertilizer efficiency or animal feeding. Beyond this they help in many cases to accelerate progress in bringing agriculture to a modern and highly efficient status and to shorten the time within which results are obtained.