

50 YEARS OF SUCCESSFUL PARTNERSHIP: THE JOINT FAO/IAEA DIVISION

October 2014 will mark the long lasting 50 years of partnership between the Food and Agriculture Organization of the United Nations (FAO) and its partner in the UN system, the IAEA. Established in 1964, the objective of the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture was to use the talents and resources of both organizations to broaden cooperation between their member countries in applying nuclear technology and related biotechnologies to develop improved strategies for sustainable agricultural development and food security.

From research laboratories to global agrarian systems, nuclear techniques play a vital and distinct role in agricultural research and advancement. They are used in a wide range of applications, from food preservation to crop production and from soil management to animal disease control.

The collaborative work of the Joint Division has over the years helped countries solve practical, as well as costly, problems in a variety of areas. The work addresses the application of isotopes and radiation technology in areas such as soil fertility, irrigation, and crop production; plant breeding and genetics; animal production and health; insect pest control; the control of food contaminants and other food safety issues; and food preservation. These activities are executed only once they have been reviewed and endorsed by the IAEA's and FAO's governing bodies.

From the beginning, the FAO/IAEA Agriculture and Biotechnology Laboratories, situated in Seibersdorf near Vienna, have been central to the Joint Division's work and impact. Some of its most successful activities have relied on the innovative and distinctive work done in these laboratories. Their role has been to support research, develop, test and transfer techniques and applications to Member States; pursue new lines of methodology; provide support to capacity building for Member States; offer analytical services; and perform essential backup for coordinated research activities and other field programmes. They specialize in research, development and the transfer of nuclear and related methods in soil science, plant breeding, animal production and health, insect pest control and food safety.

Among their broad range of work, the laboratories also provide training for scientists through individual fellowships and interregional and group training courses in various disciplines. The scientists receive training and engage in applied research and development to develop, adapt and transfer technologies for local needs and specific environments. The laboratories also provide sample analysis services for Member States that lack the capabilities to conduct such analyses on their own, and typically analyse hundreds of samples annually.

Various mechanisms such as coordinated research projects (CRPs) further facilitate the Joint Division's work to support developing countries in solving practical problems of economic significance by providing technical and advisory services as well as equipment, expert advice and training. CRPs are an important delivery mechanism for enabling national agricultural research institutions to achieve specific research objectives consistent with the FAO's and IAEA's programme of work.

The joint partnership has witnessed numerous successes in various problem areas, which if not addressed would have had disastrous worldwide implications. These successes include:

- Global freedom from rinderpest
- The use of mutation induction to develop crop varieties with resistance to the wheat rust disease Ug99
- The eradication of the tsetse fly in Zanzibar Island, Tanzania
- The establishment of the regional analytical laboratory network for food safety
- Water-saving agriculture in seven African countries

For almost five decades, the activities supported by the Joint FAO/IAEA Division worldwide have contributed prominently to Member States by helping them to sustainably increase agricultural production, food security and food safety. This model of cooperation within the UN system will undoubtedly continue to produce successes in the years to come.

Aabha Dixit, IAEA Office of Public Information and Communication



IAEA Director General Yukiya Amano and FAO Director-General José Graziano da Silva sign the Revised Arrangements regarding the work of the Joint FAO/IAEA Division during the FAO Conference's 38th Session at the FAO's headquarters in Rome, Italy on 19 June 2013. (Photo: Conleth Brady, IAEA)