

Concept Note:

Side Event of the Joint IAEA Division of Nuclear Techniques in Food and Agriculture

“Successes in Nuclear Applications: African VetLab Network and Sterile Insect Technique”

Wednesday 6 April 2016

8:00 to 9:00

1. A side event will be held by the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture on “Successes in Nuclear Applications: African VetLab Network and Sterile Insect Technique”, 6 April 2016, Abidjan, Côte d'Ivoire.

A. Background

2. Peaceful use of atomic energy for development is one of the major mandates of the International Atomic Energy Agency (IAEA). Since 1964, the FAO and IAEA have been cooperating through the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture to support and promote the safe and appropriate use by member countries of nuclear and related technologies in food and agriculture, with the aim to contribute to global food security and sustainable agricultural development. An integral part of the FAO-IAEA partnership is the FAO/IAEA Agriculture & Biotechnology Laboratories that spearhead the use of ‘atoms for peace’, with particular emphasis on research for development. Applying cutting-edge isotope and radiation technologies these laboratories add critical value to global agricultural research in the areas of animal production and health, food and environmental protection, insect pest control, plant breeding and genetics, and soil and water management & crop nutrition. Their extraordinary expertise is often at the forefront of worldwide efforts to fight global hunger and malnutrition, improve environmental sustainability, protect plants and livestock, improve farmers’ incomes and ensure safe food for consumers. This collaborative model, unique in the UN system, plays a pivotal support role in the success of nuclear applications in food and agriculture.

3. Major global trends that will frame agricultural development over the medium-term include rising food demand, lingering food insecurity, an increase in the occurrence of emerging and re-emerging transboundary plant and animal diseases (including those of zoonotic importance) and insects, unknown genetic potentials of animals for production intensification, poor optimization of local feed resources and feeding technologies and detrimental impacts of climate change. In the fifty years of the FAO-IAEA partnership cooperation has focused on the main areas of work in which nuclear techniques can most effectively contribute to implementing and achieving the FAO Strategic Objectives.

4. Nuclear applications serve a multitude of purposes as they address specific issues of agricultural importance, filling gaps and adding value. To optimize on-site implementation, the FAO-IAEA partnership strives to connect scientists and researchers, testing laboratories and regulatory entities

directly with farmers, their fields, crops, animals and production processes. Hence, the work of the Joint Division is more than just science – it is the application of science from laboratory to field.

5. The side event will provide a select overview of some successful applications of nuclear and related techniques in the Africa region in the areas of animal health, animal production and insect pest control.

B. Expected results

6. This side event aims to inform member countries of select outputs and impacts generated together with the IAEA through the unique FAO-IAEA partnership in achieving FAO's strategic objectives, how the partnership promotes synergisms and the mandates of both the FAO and IAEA, and how the collaboration generates results directly in the field and improves efficiency and impact for sustainable agricultural production.

7. It will offer a field-level view from member countries on what the Joint FAO/IAEA Division's expertise, technical support and technology transfer mean to member countries, including small-scale and often poor farming communities.

8. More specifically the session will focus on country commitments and achievements in the areas of veterinary networks, animal disease diagnostics, livestock improvement and efforts to control major native and invasive insect pests through an integrated pest management systems approach incorporating the Sterile Insect Technique (SIT) in the region.

Participants-Panelists:

- Session target countries – all ARC member countries, in particular focus countries for 2016-17
- Panelists:
 - Ms Lydia Greyling, Minister Plenipotentiary Permanent Mission of South Africa to the UN and International Organizations in Vienna
 - Mr Jérémy Bouyer, French Agricultural Research Centre for International Development (CIRAD), France
 - Mr Emmanuel Couacy-Hymann, National Laboratory for Agricultural Development (LANADA), Ivory Coast
 - Mr Henri Bayemi, Director, Institute of Agricultural Research for Development, Cameroon
- Facilitator: Mr Qu Liang, Director, Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, Austria
- Chair: Mr Bukar Tijani, Assistant Director General, FAO Regional Office for Africa

Agenda of the Side Event

Time	Activity
8:00-8:05	Welcome statement
8:05-8:10	The FAO/IAEA partnership
8:10-8:20	The African VetLab Network
8:20-8:30	Eradication of Population of Tsetse Fly – the Poverty Insect – with the Sterile Insect Technique
8:30-8:40	Nuclear Applications for Animal Disease Diagnosis
8:40-8:50	Nuclear Techniques for Livestock Improvement in the Context of Climate Change in Africa
8:50-9:00	Discussion, Q&A