International Technical Webinar

Enhancing Agrifood Systems Through Climate-Smart and Nutrition-Dense Crops

25 APRIL 2024 | 14:00-16:00 (GMT +7) | 08:00-10:00 (GMT +1) | ZOOM

BACKGROUND

About 2.37 billion people worldwide face food insecurity, with 418 million in Asia alone. Two billion suffer from micronutrient disorders. In low- and middle-income countries, diet-related illnesses cause 77% of deaths. Asia's reliance on staple crops contributes to malnutrition. Addressing this requires farming intensification, dietary diversity, and traditional diets for long-term food security.

Millet and quinoa, nutrient-rich and resilient, offer dietary diversity and low greenhouse gas emissions. Legumes complement them well, enhancing production and sustainability through intercropping. Utilizing these crops can boost food security on marginal lands, but challenges persist in developing countries due to low awareness and inefficient distribution.

Recognizing the urgency of this situation, the Regional Office for Asia and the Pacific (RAP) of the Food and Agriculture Organization (FAO) of the United Nations, and the International Atomic Energy Agency, operating through the Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture, have joined forces. Their collaborative effort aims to build regional and national capacity for mainstreaming and integrating climate-smart and nutrient-dense crops, thereby accelerating the transformation of agri-food systems. In pursuit of this goal, FAO RAP and the Joint FAO/IAEA Centre are organizing a technical webinar to raise awareness and advocate for the integration of climate-smart, nutrient-dense crops into mainstream agricultural practices.

OBJECTIVES

- This webinar serves as a platform for key stakeholders, such as plant breeders and seed system experts, to gain insights, strategies, and actionable steps. Objectives include a deep dive into climate-smart crop breeding techniques, encompassing mutation breeding and cutting-edge technologies, and highlighting advancements in seed system enhancement.
- The event aims to explore and advocate for the integration of climate-smart and nutrient-dense crops into mainstream agricultural practices, fostering the transition towards resilient and sustainable agrifood systems.
- Participants will gain comprehensive knowledge and practical approaches to enhance the productivity and production of climate-resilient, nutrient-dense crops, contributing to the overall resilience and sustainability of agri-food systems.

MODERATOR: DR. BO ZHOU- FAO RAP, THAILAND

Time	Activity
14:00 – 14:05	Opening Remarks **Ms. Dongxin Feng** *Officer in Charge for Day-to-Day Matters/Acting Director, Joint FAO/IAEA Centre*
14:05 – 14:15	Group Photo and House Rules Introduction of the Speakers **Dr. Romeo Labios** *FAO RAP, Thailand*
Session I: Recent developments in plant breeding (mutation and hybridization/ selection) of nutrient-dense and climate-resilient crops	
14:15-14:55	Climate-Smart Crop Breeding through Induced Mutation for Food and Nutritional Security **Dr. Fatma Sarsu** *Joint FAO/IAEA Center, Austria*
	Millets for Nutritional Security Under Climate Change **Dr. C Tara Satyavathi** *ICAR- Indian Institute of Millets Research, India*
	Developing Climate-Resilient Pulses Varieties to Nourish Africa **Dr. Kelvin Kamfwa** *University of Zambia, Zambia*
14:55-15:05	Q & A
Session II: Advancements in seed systems of nutrient-dense and climate-resilient crops	
15:05-15:45	Seed system enhancement of climate-smart and nutrient-dense crops: Millets and Quinoa **Dr. Ashok Kumar** *ICRISAT, India*
	Strategies for enhanced impacts of improved varieties of climate-smart and nutrient-dense crops through innovative seed systems **Dr. Christopher Ojiewo** *CIMMYT, Kenya*
	Climate resilient and nutrient-dense crops R&D program in China **Dr. Xianmin Diao** *CAAS, China*
15:45-15:55	Q & A
15:55-16:00	Closing Remarks and Moving Forward **Mr. Robert Simpson** *Special Advisor to the ADG/RR* *FAO RAP, Thailand*

For more information, contact:

- Dr. Fatma Sarsu (F.Sarsu@iaea.org)
- Dr. Bo Zhou (Bo.Zhou@fao.org)
- Dr. Romeo V. Labios (Romeo.Labios@fao.org; romeolabios@gmail.com
- Dr. Irfan Afzal (irfanuaf@gmail.com)

Register here: https://bit.ly/EnhancingAgrifoodSystems