Oral sessions | Abiotic Stress for Crop Production | P33: Salinity

# [O33] Salinity

Chair: Yoshihiko Hirai (Okayama University, Japan)
Chair: Sakae Agarie (Kyushu University, Japan)
Chair: Glenn Borja Gregorio (Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), Phillippines)
Thu. Sep 9, 2021 5:00 PM - 7:00 PM  Room 3 (Oral) (Abiotic Stress for Crop Production)

5:00 PM - 5:20 PM

## [O33-01]Sustainable and Innovative Solutions to the Salinity Intrusion in the Mekong River Delta Affecting Rice Production

(Invited Speaker)
○Glenn Borja Gregorio[1, 2, 3] (1.College of Agriculture and Food Science, University of the Philippines Los Baños, Philippines, 2.Office of the Director, Southeast Asian Regional Center for Graduate Study and Research in, Philippines, 3.National Academy of Science and Technology, Department of Science and Technology, Philippines)

Salinization, as aggravated by climate hazards, has been significantly affecting rice production in the Mekong River Delta, a major rice production region in Vietnam. What can farmers do to effectively respond to salinization and ensure farm production is maximized? Suggested solutions-massive promotion of Good Agricultural Practices (GAP) including cultivating saline-tolerant rice varieties among farmers up to a level that achieved significant and wider strategic adoption. To ensure institutional flexibility to respond to climate change-induced salinity and other hazards, the following policy interventions are suggested: Sustained promotion and support for research and development towards the development and wider adoption of integrated rice farming technologies that ensure high productivity and resilience; More research on effectively identifying and designing innovative ways to improve rice production efficiency along with establishing credit and insurance systems for rice farmers; Awareness building on the adverse impacts of unsustainable practices such as extensive groundwater pumping and agro-chemical application; Investments to improve varieties that have tolerance to flooding, drought, heat, and salinity and a breeding program for new varieties, while maintaining support to traditional rice varieties; Enhanced application of modern technology and science-based recommendations along with capacity development for improved rice seed quality, innovative cropping system, pest and disease management, infrastructure and enterprise development to ensure efficiency at lowest risk for farmers; Farmers' adoption of GAP, particularly the use of climate change-ready rice varieties to effectively respond to salinization and ensure farm production is maximized.