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Oral sessions | Farming System | O21: Cropping System / Crop Rotation

## [O21] Cropping System / Crop Rotation

Chair: Katsuyoshi Shimizu (Kagoshima University, Japan)

Chair: Weidong Cao (Chinese Academy of Agricultural Sciences, China)

2021年9月9日(木) 09:45 ~ 11:45 Room 2 (Oral) (Farming System)

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10:05 ~ 10:25

### [O21-02] Climate Services for Improved Resilience of Cropping Systems

(Invited Speaker)

○Hideki Kanamaru (Food and Agriculture Organization of the United Nations, FAO Regional Office for Asia and the Pacific (FAORAP), Thailand)

Climate change is a significant risk for crop agriculture, particularly for vulnerable farmers in developing countries. Increasing temperature and changing precipitation pattern are affecting growing conditions of crops. Extreme weather events often make devastating impacts on crop production. FAO has been promoting Climate-Smart Agriculture which aims to achieve both climate change adaptation and mitigation while sustainably increasing productivity and income. One of the essential elements of CSA is climate services for improved resilience of cropping systems. A limited number of countries currently provide a full suite of climate services for agriculture. Addressing information needs on the short time scale, national meteorological services and ministry of agriculture collaboratively work on agrometeorological data collection, analysis, and production and dissemination of actionable advisories to farmers for their daily decision making. Based on the best science, early warning for pests and diseases is improved using daily weather monitoring, forecasts, and farm condition reports. On climate change time scale, more countries are able to assess climate risks for crops, and vulnerabilities impacting different livelihoods at community levels, using their own data for their own information needs for policy making, as an integral part of iterative process of national agriculture development planning. The presentation will discuss the importance of climate services in order to achieve Sustainable Development Goals, particularly zero hunger and climate challenges, with illustrative examples mainly from Asian countries, and how crop scientists can contribute to transformation towards a climate resilient agriculture.