Organized Session 18

Paddy-based Agriculture and Water Environment towards Achieving SDGs

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Concept of organized Session

Paddy-based agriculture has a crucial role in achieving the SDGs not only through provisioning food but also through regulating environment and sustaining livelihood. International Society of Paddy and Water Environment Engineering (PAWEES) is a world leading member of the international network of professional organizations aiming to improve paddy-based agriculture and water environment. International Conference 2022 will be held 17th November in Fukuoka, Japan. In the proposed session current issues of importance for paddy-based agriculture related to land and water will be presented and discussed. The topics cover water and soil management, disaster risk management, regional resource management and ICT and smart Technologies. Four speakers will make presentations under following titles, followed by discussions.

(1) Influence of changes in waterway types through farmland consolidation on water cycle and water environment in a paddy fields area

(2) Predicting the effects of climate change on soil moisture condition of arable land in Japan

(3) Water management to control paddy heat and nitrogen environment for promoting sustainable paddy farming

(4) The role of paddy fields and rice farming on the water environment in Japan

**Keywords:** Water and soil management, Paddy-based agriculture, Irrigation and drainage, SDGs