

Session Partnerships: April 13th 11.00 hrs

4s2b: Food system transitions in deltas under pressure

ROLES OF RICE LANDRACES IN SUSTAINABLE FOOD PRODUCTION IN THE COASTAL MEKONG DELTA OF VIETNAM

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Rice production has played an essential role in farmer's livelihoods in the Vietnamese Mekong Delta and food security in Vietnam. In the past three decades, intensive rice production with high-yielding rice varieties significantly contributed to national food security and the agricultural economy. High-yielding rice varieties, characterised by short-growth duration and high reliance on high input levels of agro-chemicals, have gradually replaced rice landraces with long-growth duration, low external input requirements and relatively low yields. A raised question is whether such the rice landraces will still play their roles under pressures from negative impacts of climate change and reduced flows of the Mekong, and the promotion of agricultural transformation in the Mekong Delta.

By analysing census data between 1984 and 2020 from the National and Provincial Statistics Office, we find that currently, high-yield rice varieties are mostly grown the freshwater and irrigated agro-ecozones. Whereas rice landraces still share about 1- 40% of the total rice-growing area in coastal provinces. The practice of drought- or salinity-based farming systems is considered a way to help farmers in the coastal zone adapt to the challenges of changing water resources while sustaining their livelihoods. Rice landraces are grown in the rainy season, followed by shrimp or annual upland crops in the dry season. Rice component is usually considered secondary from the economic aspect, contributing to about 25 – 30% of the total income of the farming systems. However, they are of great importance from the ecological aspect, facilitating the sustainability of the farming systems. Further improvement of rice landrace production is necessary through a package solution for cropping technologies and rice value chains.

Keywords: Mekong Delta, rice landrace, sustainable, climate change