Join us in this Hybrid Seminar:

Controlled-Environment Food Production

16 March 2023, Thursday

16:00 – 17:00 PM (SGT)

Refreshments will be provided after the talk

CREATE Tower Level 16 Summit Room

1 CREATE Way, Singapore 138602

REGISTER HERE!

Prof. Dr. Senthold Asseng

Chair of Digital Agriculture, TUM, Germany

Director World Agricultural Systems Centers, HEF

Prof. Asseng's field of research is the analysis of atmosphere-crop-soil systems. His main research areas include impact of climate variability and climate change, cropping sustainability, food security, and how systems analysis and crop modeling can assist autonomous robot-managed cropping systems in the field and in fully-environmentally controlled indoor vertical farming.

Prof. Asseng studied agricultural sciences and received his PhD at Humboldt University Berlin and his habilitation at Technical University Munich. He was a Principal Research Scientist at CSIRO in Australia. He became a Full Professor in Agricultural and Biological Engineering at the University of Florida and the Director of the Florida Climate Institute. In 2020, Prof. Asseng was appointed to the professorship for Digital Agriculture and in 2021 the Director of the World Agricultural Systems Center at the Technical University Munich

Abstract: While food demand continues to increase alongside a growing global population, environmental degradation, high water use, pesticide applications, nutrient pollution and biodiversity loss make many current cropping systems not sustainable. Crop yield trends are insufficient to meet the food demand by 2050 as grain yields in some regions stagnate despite ongoing improvements in crop breeding and management. Negative impacts of climate change further challenges a sustainable food production in the field. Controlled-environment food production offer massive productivity gains with reduced environmental impact but have their own challenges.

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