



Crop Modelling
for Agriculture
and Food Security
under Global Change

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Food Systems Transformation Needs – Challenges for Policy and Opportunities for Modelling Systems, Crops, and Food Security

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This presentation describes how the world is confronted with an aggravated food systems crisis. Climate change, environmental deterioration such as related to soils and biodiversity, markets, political disruptions and wars are generating short and long-term effects that cause human suffering. The elements of crises differ by regions and countries, as well as ecosystems. Political responses to food crises at national and global level have been initiated such as by the UN Food Systems Summit of 2021 and its follow up stocktaking events in 2023 and 2025. Driving forces of the food crisis, and needed policy actions are discussed in this presentation, that also touches upon opportunities for modelling food systems, crops, and ending hunger. Science-driven priorities of innovations in support of the food systems transformation will be outlined.