



Final Announcement

UFZ Environmental Modeling & Monitoring Colloquium

Thursday, 24 February 2022, 2-3pm pm

ONLINE

“Sustainable intensification of cropping systems in the context of climate risk & change”

Prof. Dr. Heidi Webber

Leibniz Centre for Agricultural Landscape Research (ZALF) & BTU Cottbus-Senftenberg

Extreme weather events constitute a key income risk for farmers and can contribute to regional food insecurity. The risk of weather shocks can inhibit long-term investments in more sustainable farming practices to build SOC or enhance biodiversity. Simply, many farmers cannot afford to lose their investment, even though on the long term, the benefits may residue the risk of damages from extremes. As such, comprehensive risk management strategies must not only reduce the risk of damages from weather and other shocks, but also allow prudent risk-taking to enable and incentivize the sustainable intensification. The correct mix of risk management options depends on the expected shocks, world region and production system. Ex-ante modelling tools can support the design of risk management strategies by evaluating tradeoffs between short term risks and costs of interventions against long term developments. To do so, they should be able to (1) be responsive climatic shocks in near and longer term; (2) capture dynamics of farm decision making under risk; and (3) assess the potential of a range of risk management strategies. Ideally such modelling approaches could be used in participatory scenario analysis to assess the interest, feasibility and barriers to proposed options and build adaptive capacity.

All interested colleagues are kindly invited.



Prof. Dr. Heidi Webber

... is Professor for Integrated Crop Systems Analysis and Modeling in joint appointment of ZALF and BTU. She develops modeling approaches for analyzing crop responses to climate and anthropogenic stressors. She integrates biophysical, economic and policy assessments in order to support the conservation of soil and water in cropping systems. Her background is physics, agricultural engineering, and crop sciences. She has studied in Nova Scotia and Quebec (Canada), worked as Postdoc at the University of Bonn, and is co-leading the Agricultural Landscape Systems Research Area at ZALF.

For more details, see: https://www.zalf.de/en/ueber_uns/mitarbeiter/Pages/Webber_H.aspx