



Tropentag, September 16-18, 2026, hybrid conference

“Towards multi-functional agro-ecosystems
promoting climate resilient futures”

Exploring ways to strengthen resilience and health of humans, animals and crops – presentation and discussion of project results

MAJA CLAUSEN¹, EDITH SIMEIT²

¹*Federal Ministry of Agriculture, Food and Regional Identity (BMLEH), Division 123 - General and Fundamental Research Issues, Coordination of Research, Germany*

²*Federal Ministry of Agriculture, Food and Regional Identity (BMLEH), Division 614 - Technical Cooperation und International Bioeconomy, Germany*

Abstract

The German Federal Ministry of Agriculture, Food and Regional Identity (BMLEH) established several funding instruments of global reach, such as project grants in the frame of “Research Cooperation for Global Food Security and Nutrition” as well as a PhD-programme targeting German departmental research institutions and the BMLEH-affiliated Leibniz Institutes. The goal is to contribute to improving global food security and nutrition through practice oriented trans- and interdisciplinary research. The Federal Office for Agriculture and Food (BLE) acts as project executing agency.

Given the continuing unsustainable utilisation of natural resources and increasing pressures from pests and diseases due to climate change, ensuring a steady supply of healthy and safe food – as well as its accessibility – pose a major challenge. The BMLEH-session will highlight three different projects that are developing innovative solutions for increasing the safety of food and feed as well as understanding the exposure to health hazards, such as mycotoxins: In Ethiopia, the project “SUSCAMI” strives to improve the handling and safety of camel milk along the value chain; in Kenya, the project “SoLFOOD” holistically fights against fungal infestation and aflatoxins in maize; and the project “Mycotoxins_-Ghana” investigates the relationship between dietary patterns and internal exposure to mycotoxins.

The session will provide insights into different approaches and discuss challenges and barriers as well as opportunities for improving food safety and health of humans, animals, plants and the environment (One Health).

The following research consortia will present:

1. Bekele Megersa

University of Addis Ababa

Project: “Sustainable camel milk production through improved husbandry practices and milk value chain (SUSCAMI)”

2. Katharina Neumeier

Max Rubner-Institute, Federal Research Institute of Nutrition and Food (MRI)

Project: “Ecological, Technological, and Capacity-Building Strategies for Sustainable Optimisation of Local Maize-Based Food Systems and Climate-Resilient Food Production for Smallholder Farmers in Kenya (SoLFOOD)”

3. Michael Oppong

German Federal Institute for Risk Assessment (BfR)

Project: “Associations between diet and internal exposure to mycotoxins among adults in Ghana and Ghanaian migrants in Europe (Mycotoxins_Ghana)”

Keywords: Aflatoxins, camel milk, food safety, food security, maize, mycotoxins, nutrition, sub-Saharan Africa