

Tropentag, September 14-16, 2022, hybrid conference

"Can agroecological farming feed the world? Farmers' and academia's views"

The agroecological approach for sustainable global food security

SAMUEL TUFFA

Oromia agricultural research institute, Agricultural transformation in Oromia (ATO), Ethiopia

Abstract

The industrialized food system is showing that it is not sustainable in any of the economic, social, or environmental aspects. However, the agroecological approach is holistic, balancing the focus on people and the planet. So with a deep understanding of the agroecological approach, the change needed to restore sustainability to food systems can occur. The agroecological approach has an essential role to play in the future of the global food systems. The agroecological approach uses the ecology of the food system and establishes farming and food systems that adjust to local environments. It has the explicit goal of transforming food systems toward sustainability, such that there is a balance between ecological soundness, economic viability, and social justice. The agroecological approach applies ecological principles and analysis toward the creation of more sustainable agriculture and food systems. The agroecological approach seeks to develop strategies to maximise long-term benefits. The agroecological approach incorporates indigenous local knowledge into the research and development processes and seeks to diversify biota, landscapes, markets, and institutions. Agroecologists work with different stakeholders to support empowering people. There is a deep relationship between culture and the environment in the agroecological approach. The livelihoods of smallholders, the elimination of hunger, the restoration of the earth's agrobiodiversity and agroecosystem resilience would all be better served under the agroecological approach. It focuses on the critical agents of change – family farmers, indigenous peoples, fishers, rural women and youth. Therefore, by integrating scientific evidence with local indigenous knowledge, the agroecological approach can contribute to sustainable global food security while maintaining the natural resource base.

Keywords: Agrobiodiversity, food security, local knowledge, sustainability, transdisciplinary