

Ecological approach to organic farming in the Tropics

Introducing the active system approach

Interest in ecological organic agriculture is increasing across Africa due to the need for more sustainable options to agricultural production, food and nutrition security, and concerns about the negative effects of synthetic agrochemicals on human and environmental health. Organic farming requires not only renouncing synthetic agrochemicals, but a shift in approach and focus – moving to a holistic system view. Some key points must be considered in order to successfully transition to a truly ecological organic approach.

This factsheet introduces the ecological approach to organic farming, changes that are necessary to implement the approach, expected benefits, and provides a few examples of recommended systems for the tropics. The information is based on long-term experiments and on-farm research conducted in the scope of three projects across different countries in Africa, as well as Bolivia and India. Further products in the series, e.g., posters, videos and more, are linked in the 'Further information' section on the last page of this factsheet.

Key findings from the research

- In the **ecological approach to organic farming**, farmers work with nature and help to sustain living ecological systems and cycles – this includes: soil, plants, animals, wildlife, community, society and environment.
- This approach requires a focus on the **productivity of the whole farm system** over the longterm using organic best practices, e.g., crop rotations, local crops, agroforestry, etc. instead of focusing on short-term income.
- Ecological organic farming systems are **knowledge intensive** – farmers and advisors should learn, experiment and share knowledge with one another.



Ecological organic agricultural systems aims to sustain the health of ecosystems and people. The use of synthetic agrochemicals is prohibited and replaced by active, system-oriented farm management, e.g., diversified cropping systems, integrated pest and disease management, closed nutrient cycles. Ecological approaches are knowledge-intensive and depend on combining tradition, innovation and science to benefit the environment and promote fair relationships and a good quality of life for all involved.

