The project at a glance

SysCom stands for "Long-term Farming Systems Comparison in the Tropics". It provides scientific evidence on the benefits and drawbacks of organic versus conventional farming practices. Its results support the development of policies and strategies that foster the adoption of sustainable land use practices at the local, regional and international level.

SysCom started in 2007 and is being implemented in Kenya, India and Bolivia by the Research Institute of Organic Agriculture (FiBL) in cooperation with local partner organizations. Two main activities prevail:

- **Cong-term experiments** are set in place to compare the agronomic, ecological and socio-economic performance of different farming systems. Experiments relate to best practices of local farmers for prevalent cropping systems in each context.
- > Participatory on-farm research is used to develop and promote locally adapted agricultural practices. Different mother-baby trials are implemented together with farmers to test and analyze different innovative practices on-farm and on-station.

Publications and further information visit: www.systems-comparison.fibl.org



SysCom Team



FiBL Project Team



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LENCE FOR SUSTAINABILITY

SysCom Comparing organic and conventional production systems in the tropics







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SysCom India

Location of project site

Kasravad, Khargone District in the Nimar Valley of Madhya Pradesh State – the site is characterised by fertile Vertisols and semi-arid climate with 800 mm annual precipitation mostly in a single peak monsoon season.

Long-term experiments

- Cash crop based production system with a 2-year crop rotation including cotton, soya, wheat.
- 4 treatments comprising biodynamic, organic, conventional and conventional with Bt-cotton, each replicated 4 times in 2 strips, so that each crop is grown each year.

Participatory on-farm research

- > Rock phosphate enriched farm-yard manure
- > Best organic pest management strategies

SysCom Bolivia

Location of project site

Sara Ana, in the valley of the river Alto Beni in the Bolivian rainforest – the site is located within a settlement region characterised by tropical humid climate with 1500-2000 mm of annual rainfall.

Long-term experiments

- Cocoa as the main crop cultivated in organic and conventional monoculture and agroforestry systems.
- The treatments involve different levels of complexity and biodiversity: from full sun to agroforestry to successional agroforestry

Participatory on-farm research

- > Cocoa on-farm variety testing
- > Pest and disease control

SysCom Kenya

Location of project site

Chuka and Thika municipalities in the sub-humid zones of Central highlands of Kenya – the 2 sites differ in amount and distribution of annual rainfall, 1500-2400 mm and 900-1100 mm respectively.

Long-term experiments

- > 4 treatments comprising conventional and organic management with differing input levels: rain-fed subsistence farming versus irrigated commercial-scale production.
- 6-season 3-year crop rotation with maize, beans, potatoes and vegetables.

Participatory on-farm research

- > Soil fertility management approaches
- > Sustainable management of soil born nematodes





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