What can organic agriculture contribute to sustainable development?

Long-term comparisons of farming systems in the tropics

**BACKGROUND**

In Europe, numerous studies have proven the advantages of organic agriculture in terms of ecosystem services and economic impact. Organic farming is now increasingly being taken up by farmers, NGOs, national programmes and agricultural development agencies in tropical countries as a means to improve food security and rural livelihoods in a sustainable way. Demand for reliable data on the environmental and socio-economic performance of organic agriculture is high, but only few attempts have been made so far to systematically compare this farming system alongside conventional practices.

**APPROACH**

To fill this gap, FiBL and its partners in the developing world are running long-term farming system comparisons of 10 – 20 years’ duration in Kenya, India and Bolivia. The replicated field trials make it possible to monitor the effects of organic agriculture on yield, yield stability, product quality, soil fertility and biodiversity, as well as on natural and economic resource efficiency. The impacts of organic agriculture on livelihood systems – i.e. on farm income, education, health, gender relations and farmers’ social mobility – will be studied in farm surveys.

### STRATEGIC OBJECTIVES

- Place the debate on organic farming in developing countries on a rational basis
- Foster agricultural policy dialogue in the developing world
- Identify challenges for organic agriculture in tropical countries and address them in a targeted way
- Contribute to the development of organic and sustainable agriculture in developing countries

### ACKNOWLEDGEMENTS

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**Kения**

**LOCATION:** Sub-humid highlands of Central Kenya  
**CROPS:** Maize, vegetables  
**TREATMENTS:** Conventional and organic, both on a low-input and a high-input level  
**PARTNERS:** International Centre of Insect Physiology and Ecology (icipe), Tropical Soil Biology and Fertility Institute of CIAT (TSBF-CIAT), Kenyan Agricultural Research Institute (KARI), Kenyatta University (KU)  
**TRIAL START:** March 2007

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**India**

**LOCATION:** Semi-arid Central India  
**CROPS:** Cotton, soy, wheat  
**TREATMENTS:** Organic, bio-dynamic, conventional, GM-cotton  
**PARTNERS:** bioRe Association India, possibly Indian Council of Agricultural Research (ICAR)  
**TRIAL START:** June 2007

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**Bolivia**

**LOCATION:** Humid Northern Bolivia  
**CROPS:** Cacao, agroforestry products  
**TREATMENTS:** Under consideration  
**PARTNERS:** Asociación de organizaciones de productores ecológicos de Bolivia (AOPEB), Promoción e investigación de productos andinos (PROINPA), Universidad La Paz  
**TRIAL START:** March 2008

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**icipe – African Insect Science for Food and Health**

P. O. Box 30772-00100 Nairobi, Kenya  
icipe@icipe.org  
www.icipe.org

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**FiBL – Research Institute of Organic Agriculture**

Ackerstrasse, CH-5070 Frick, Switzerland  
info.suisse@fibl.org  
www.fibl.org