



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.



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



Kenya

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



India

Location: Semi-arid Central India
Crops: Cotton, soya, wheat
Treatments: Organic, bio-dynamic, conventional, GM-cotton
Partners: bioRe Association India, possibly Indian Council of Agricultural Research ICAR
Trial start: June 2007

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



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