

## PROJECTS: KENYA

# LONG-TERM SYSTEM COMPARISON IN KENYA: WHAT CAN ORGANIC AGRICULTURE CONTRIBUTE TO SUSTAINABLE DEVELOPMENT?



### Project

The declared goal of this scientific project is to compare different methods of cultivation (conventional and organic) in a **field trial**. Of particular interest is the relationship between organic farming methods and yield, as well as quality and shelf-life of produce. First scientifically proven results showed that with good soil, especially good soil fertility, and sufficient rainfall, crop yields after converting to organic cultivation from conventional methods were equal. In areas where soil quality was not as good, organic cultivation produced half the crop yield of conventional methods, and the use of more fertilisers did not lead to higher crop yield. Under such conditions, the use of expensive fertilisers is not worthwhile for farmers. It is more important to increase soil fertility in a sustainable way.

Locations in Kenya; Thika and Chuka in different agro-ecological zones were selected along with areas in Bolivia and India. At both locations a **field day** is carried out, where interested farmers can inform themselves on organic farming and the field trials.

To address emerging issues in organic agriculture, researchers collaborate with organic farmers to develop new technologies. Farmers identify challenges that they face in their daily farm lives and work together with scientists to find adapted solutions directly in the field. Thereby, farmers get to know and practice new technologies such as improved composting.

### Relevance

The concept of organic farming opens up new possibilities for sustainable development in the South, since organic agriculture has the potential to maintain yield at a constant level, which is particularly important in risk-prone tropical areas. With certification of their produce, farmers also gain access to attractive markets. What and how organic agriculture can contribute to the availability of nutrition and sustainable development in tropical countries has not been scientifically investigated until now. A systematic, long-term comparison of different cultivation systems shall deliver the first findings.

### Development Goal

Practice-oriented, scientific clarification of the significance of organic agriculture for sustainable development (long-term comparison between conventional and organic farming).

#### Project number:

BV PH-03

#### Project active since:

July 2005

#### Project phase duration:

Until December 2012

#### Budget for 2011:

75'000 USD

#### Project coordinator:

Juan Guillermo Cobo, FiBL

#### Program responsibility:

Verena Albertin



*Field trials shall show the effects the different cultivation methods have on crop yield.*



*The results achieved are passed on directly to the farmers.*

## Beneficiaries

200 men and women farmers profit directly from the technology development with researchers and expand their knowledge in organic farming. Additionally over 1000 farmers benefit from the public field days.

## Achieved so far

The first substantiated results comparing conventional and organic farming have been generated. The results are continually communicated to farmers through media such as articles in the Biovision farmers' newspaper TOF or on the TOF radio programmes.

## Goals

1. **To deliver scientific findings on the contribution of organic agriculture** to sustainable development: Long-term field studies comparing conventional and organic farming will provide solid data on opportunities and risks
2. **Participatory development of locally adapted techniques and promotion of innovation:** Researchers and organic farmers work together to develop solutions to specific problems in organic farming

## Partner organisation

Research Institute of Organic Agriculture (FiBL, implementing partner organisation, [www.fibl.org](http://www.fibl.org)); International insect research institute *icipe*, [www.icipe.org](http://www.icipe.org); Tropical Soil Biology and Fertility Institute of CIAT (TSBF-CIAT) [www.ciat.cgiar.org](http://www.ciat.cgiar.org), Kenyan Agricultural Research Institute (KARI), School of Environmental Studies and Human Sciences of Kenyatta University (KU)

## Sustainability

Sustainability calls for a holistic vision: healthy people, animals and plants in a healthy environment. (4x Health, 4-H Strategy). Every project supported by Biovision effects considerable improvements in at least one of the four health areas. The key to effectively replicating the success of the project is the availability of specific information on the methods applied and the results achieved. With this approach and its 'helix of effects', living conditions are improved and the poverty of the people is gradually overcome while the environment is protected.

### Contact:

Biovision – Foundation for Ecological Development  
Schaffhauserstr. 18  
CH-8006 Zürich  
Tel. +41 44 341 97 18  
Fax +41 44 341 97 62  
[info@biovision.ch](mailto:info@biovision.ch)  
[www.biovision.ch](http://www.biovision.ch)  
Swiss Post Account:  
87-193093-4



Research fields for the system comparison in Thika and Chuka.



A future for all, naturally