

# KEEPING BEES THE ORGANIC WAY



Beekeeping can be a valuable option to expand your farming activities. It can contribute to higher yields and help to generate additional income.

According to the International Federation of Organic Agriculture Movements (IFOAM, 2008) organic agriculture is «a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.»

## Potential for smallholder farmers



### Why beekeeping?

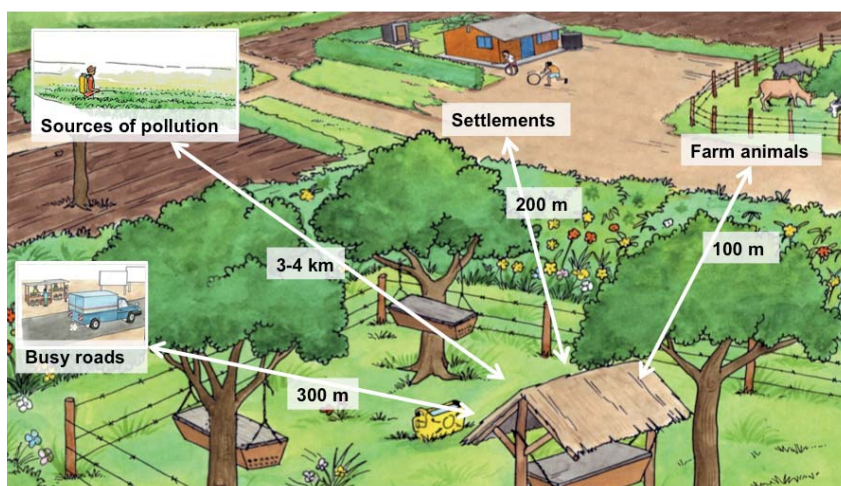
Keeping bees

- > improves yield as bees pollinate flowering crops including: coffee, cocoa, mango and citrus.
- > provides a food source.
- > increases conservation of biological diversity.
- > generates additional income.

### What has to be considered?

- > Land and labour costs
- > Suitability of the site
- > Proper processing facilities
- > Solid demand for bee products

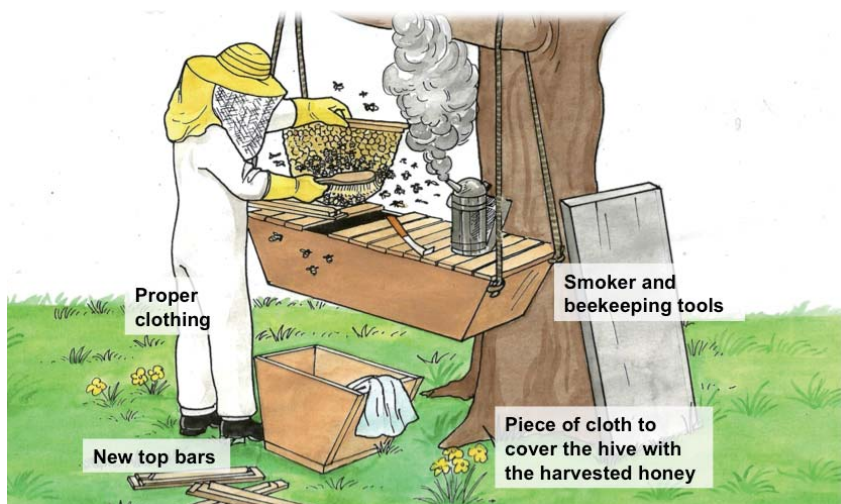
## Evaluating site suitability for beehives



### Bees need to live in an area:

- > with diverse vegetation that provides pollen and nectar as a food source.
- > with a reliable water source.
- > where they are not disturbed by animals, humans and traffic and where they are protected from sun, rain and wind.
- > that is far away (3-4 km) from farms using pesticides.

## Maintenance of beehives



### Many factors contribute to becoming a successful beekeeper:

- › Understanding the bee and how to properly care for them and their colonies.
- › Use of improved beehives such as top-bar hives, where each comb can be accessed independently without disturbing the others.
- › Proper equipment such as personal safety gear and tools for handling beehives and honey.

## Monitoring bee activity and management of pests and diseases



### Beekeepers must regularly monitor bee activity and hives to:

- › ensure bees are gathering enough nectar, pollen and propolis.
- › ensure proper development of brood.
- › recognize, prevent and treat signs of problems: pests such as varroa mites, wax moths and ants as well as household animals, and diseases such as foul brood and sac brood.

## Harvesting and processing of honey



Smoke the inside of the hive



Carefully wipe off the bees from the combs



Honey press



Honey extractor



Grading table made of stainless steel

When harvesting, special care must be taken to minimize damage to the bee colony, loss of honey and deterioration of quality.

Honey processing must be done in a bee proof, hygienic space using special equipment such as a honey press or extractor to extract the honey and honey sieves, strainers and filters to separate the honey from any solid particles.