

Farmer experimentation consists of testing the best practices seen on other farms during community exchanges and field days and putting into practice the lessons learned at training workshops.



Throughout the process of on-farm experimentation, group meetings and visits are carried out for mutual benefit, and results are shared during community field days to pass along the new and improved techniques.



Characteristics of an experimenter

- Natural curiosity
- Willingness to work and invest
- Interest in learning and openness to change
- The desire to involve their family in experiments
- Writes things down and keeps a record of the test so as to faithfully pass along the experience
- Learns from successes and failures
- Is communicative and willing to share their knowledge
- Persistence, and willingness to take risks



Step by step: Leading on-farm experimentation

Step 1

Create and organise a group to identify what are the main production problems and define and prioritise the topics of greatest interest.



Step 2

Observation is key because it involves monitoring the behaviour of the crops or how animals respond to specific handling, practices or trials. Each participant must commit to improving their observational capacity to analyse test results and effects. It's all about being willing to improve.



Step by step: Leading on-farm experimentation

Step 3

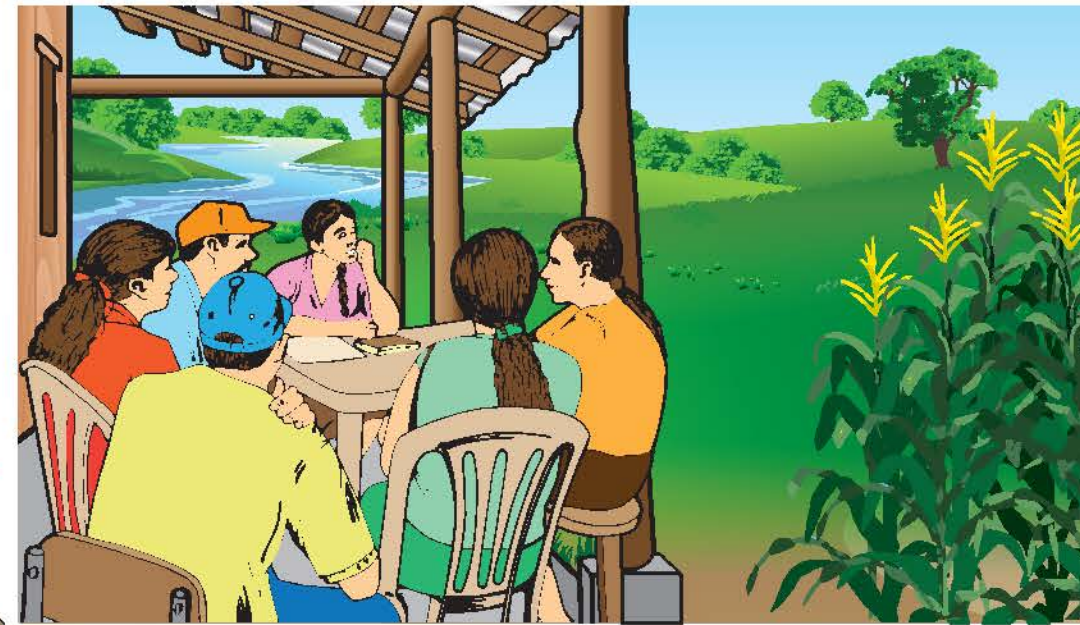
The practice to be tested is called a **“trial”**

It can be, for example, how a crop responds when fertilised with chemicals in contrast to one that is treated with organic fertiliser, and then comparing the production costs and respective benefits.



Step 4

Plan and assign to each member of the **group what they will do with their families** on the farm or plot so that the results can be analysed afterwards together. Define how often to program meetings or follow-ups to the experiments.



Step 5

Establish an **experiment size** that will be easy to handle and record. The size depends on the subject, on the crop or animal husbandry, and on the financial capabilities according to the variety and complexity.

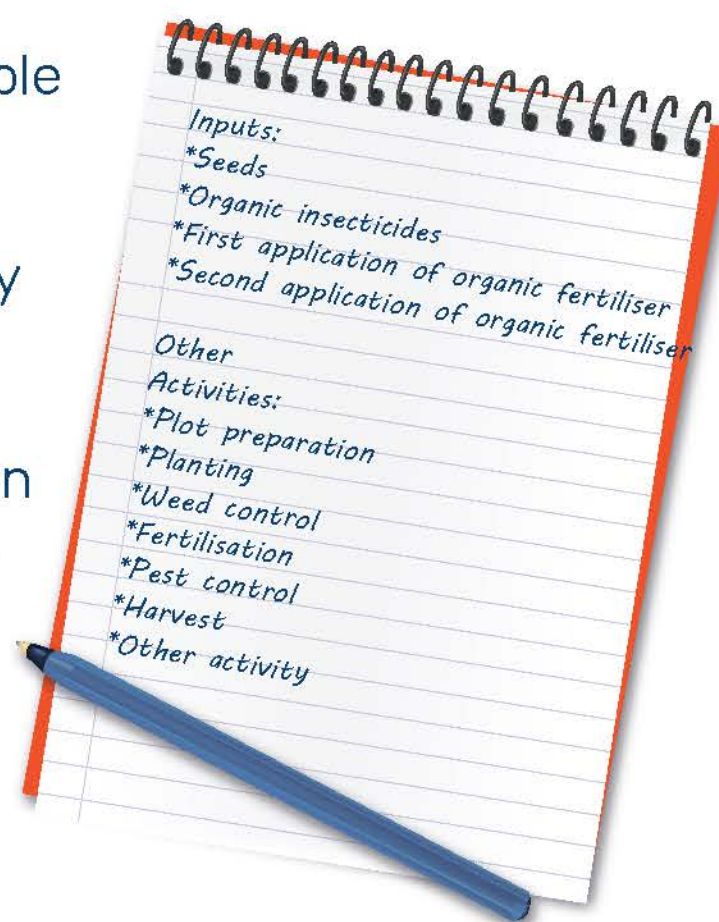
Subject of the experiment	Size
Verify the yield of a crop that's been fertilised with bokashi.	Ground covered by a pound of planting seeds.
Effectiveness of organic fertiliser in citrus tree transplants.	Test organic fertiliser on ten fruit tree plants. Apply five pounds of organic fertiliser at the moment of transplant.
Using velvet beans as ground cover for weed control a year before starting a vegetable garden.	Test on 100 square metres.
Applying bio-fermented fertiliser.	Apply to 10 maize plants. Apply to 20 vegetable plants.
Using hot water for pest control and to disinfect the ground.	One 1 x 1-metre vegetable bed.
Improving native corn seed.	12 pounds of native corn seeds per participant .

Name of the experiment: _____ Experimenter: _____
 Name of the farm: _____ Location: _____ Planting time and year: _____

Step 6

Define which **records must be kept** for analysis. For example, the presence and management of pests and diseases, production costs, and yields.

Choose a simple format with a logical order, and separately have people write down observations in a notebook as they see fit.



Step 7

Keeping a **record of income and expenses** is necessary for making decisions on whether to adjust or improve the trial or discard it altogether.

Activity	Number of days	Cost per day	Total costs
Plot preparation			
Planting			
Weed control			
Fertilisation			
Pest control			
Harvest			
Other activity			
Total costs			

Step 8

Share the **results at the Farmers' School** so that everyone can learn from each other. Make an evaluation based on the data and feedback from each participant in the setup of the farm experiment.



Step 9

Organise **field trips** within the group to see trial progress and best results.

