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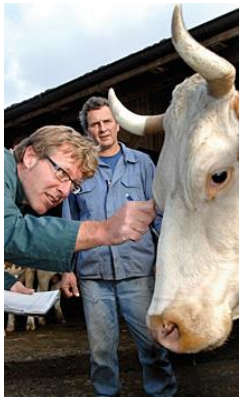
Research Institute of Organic Agriculture
Forschungsinstitut für biologischen Landbau








Challenges of organic farming in Kenya and impact of participatory technology innovation development

18th IFOAM Organic World Congress ICEC, 13-15 October 2014, Istanbul
Participatory Research in Practice – Challenges, Opportunities and Developing Ideas around the World

SYCOM PROJECT

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Kangari Organic Farmers Association

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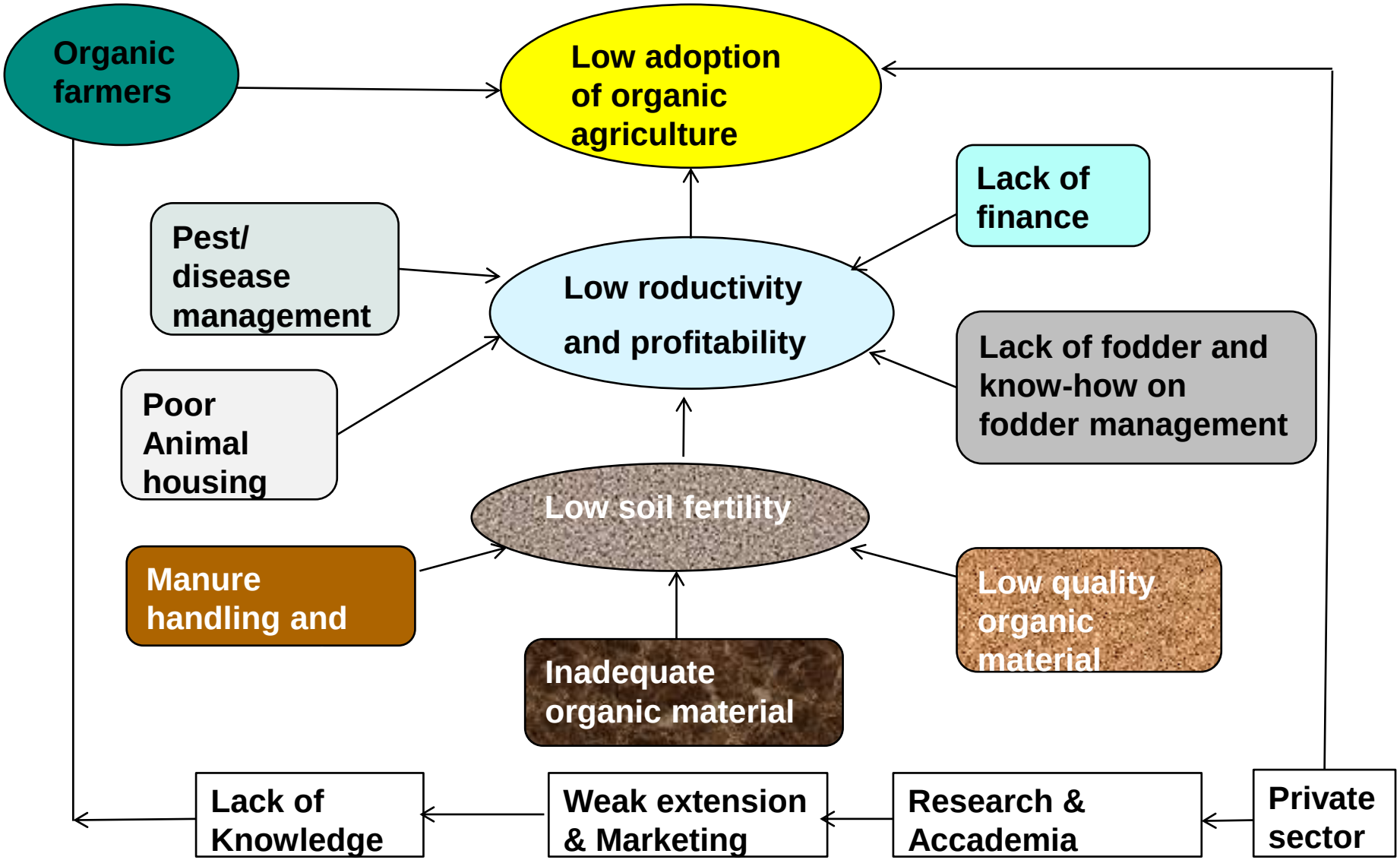
Organic farming in Kenya and Challenges

Video

General Problems Identified Initially by Farmers



Priority Problems Addressed, and Possible Solutions

Low crop productivity

Low soil fertility

Inadequate organic material

Low quality organic material

Soil improvement technologies selected

- ❖ Best uses of biomass
- ❖ Composting techniques
- ❖ Management of rock phosphate

PTD Designs and Approaches

- 2009 to 2011:
  - only farmer designed – farmer managed (FDFM)
- 2011 to date:
  - Research designed – farmer managed, RDFM (Baby Trial)
  - Researcher designed – researcher managed, RDRM (Mother Trial)

Lessons Learnt from PTD Designs and Approaches

A. Farmer designed - farmer managed

What are the Strengths?

- Farmers allocate trial plots as per the availability of land-hence many farmers involvement in the trial.
- Farmers are free to test, adapt or reject technologies without pressure from project staff.
- Data collection is done by farmers hence pride of ownership to the trials by farmers.
- Creates critical exchange of ideas among farmers.

Lessons Learnt from PTD Designs and Approaches

A. Farmer designed - farmer managed

What are the Weaknesses?

- Data collected on the performance of the technology is of low quality due to farmers poor record keeping.
- Statistical analysis of data become impossible due to non-uniformity of types of crops, treatments application, and plot sizes.
- The trials usually lack replications hence block effects are not addressed.

Lessons Learnt from PTD Designs and Approaches

B. Researcher designed - farmer managed (baby trial)

What are Strengths?

- Symbiotic relationship between the researcher and the farmer:
  (i) knowledge and experience sharing,
  (ii) needs of farmer and researcher are captured.

- Data produced is of high quality and can be statistically analyzed.

- Constant contact between the farmer and the research for consultation.

Lessons Learnt from PTD Designs and Aproaches

B. Researcher designed - farmer managed (baby trial)

What are the Weaknesses?

- Farmers demand incentives from researchers to meet the set standards of the experimental trials.
- Crop rotation is controlled by the researcher which may force some farmers to plant what they did not plan to plant at that particular season.
- Statistical data is given priority to farmers learning

Lessons Learnt from PTD Designs and Approaches

C. Researcher designed - Researcher managed (Mother trial)

What are the Strengths?

- Trial protocol are well followed
- Every scheduled management practice is carried out in timely manner
- Good quality data collection that meets the required standard for statistical analysis
- Treatments and replications are put under similar conditions

Lessons Learnt from PTD Designs and Approaches

C. Researcher designed - Researcher managed (Mother trial)

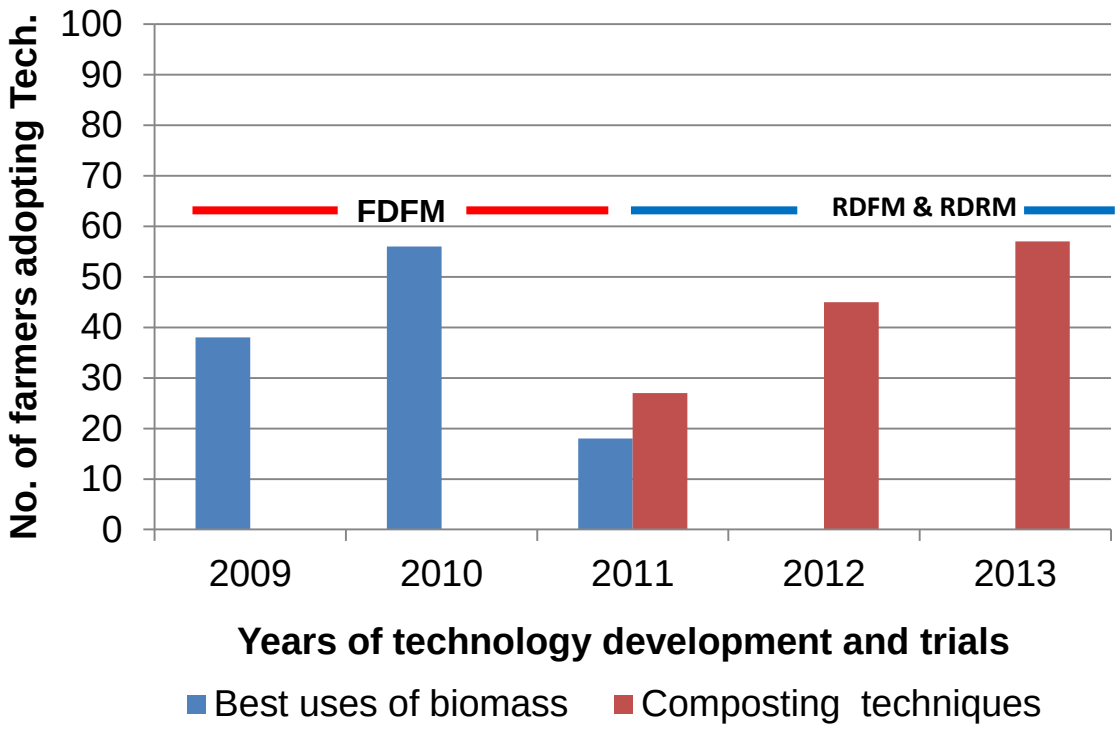
What are the Weaknesses?

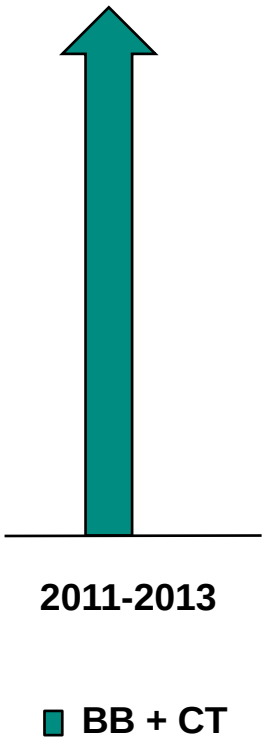
- Experimental design does not strengthen farmers' capacity to conduct their own trials.
- Project technicians and field assistants are responsible for collecting data and monitoring the trials.

Impact of PTD Designs and Approaches on Technology Adoption

Registered farmers practsing the technologies

Non-registered farmers practising the technologies





Impact of the Innovation Technology Development on Farmers

1. Farmers initiating other income generating projects within the organic practice

2.Farmers embark on bore-hole irrigation

3. Improvement in living standards e.g. construction of good farm house

Impact of the Innovation Technology Development

4. Reduced school drop out rate.

5. Support children university education abroad

6. Technology spreading t other communities

How can we bridge the gap between food insecurity, manultrition, food sufficiency, sovereinty and food security in Sub Saharan Africa SSA?

- Farmers should be called upon to set research agendas for agricultural technology development
- Use of farmer participatory in technology development enables farmers to:
  - Question
  - explore
  - discuss the suitable design
  - evaluate the results
  - decide on the adoption of the technology

Acknowledgement

Donors

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