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EXCELLENCE FOR SUSTAINABILITY

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Participatory Technology Development (PTD) Trials in India

Background

bioRe Association is working with (about 5000) organic farmers, to solve their major practical farming problems. PTD-approach offers a great opportunity to work with the organic farmers to find solutions to their problems like in nutrient and pest management.

Objectives

The objective of PTD is the participatory development of locally adapted technologies to improve the organic farming practices. Farmers and researchers collaborate in identifying and addressing their problems and challenges in order to find improved and sustainable solutions (Figure 1).

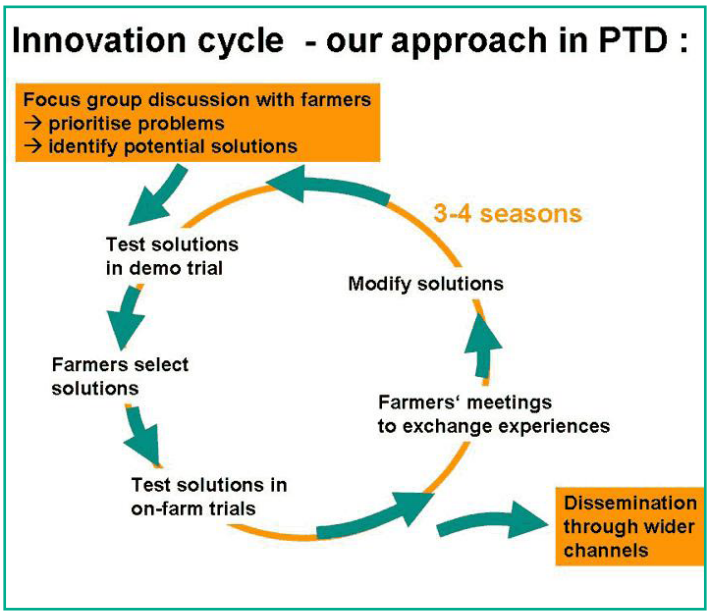

Figure 1 Innovation cycle used in PTD to identify and prioritise problems, identify possible solutions, test and disseminate them. Farmers are involved in most steps of the cycle.

Nutrient Management

Research questions

- How can the efficiency of rock phosphate in the local organic cropping system be increased?
- How can storage and quality of farm-yard manure be improved?

Methods

- Lab experiments with locally available acidic material to find suitable acidulators for rock phosphate
- Rock phosphate pot trial with varying levels of acidulation time and quantities of acidulators
- Comparison of manure quality from different storage systems through lab experiments.
- On-farm rock phosphate trials with improved manure and buttermilk as acidulator in cotton and soya.

Pest Management

Research questions

- How can organic pest control be improved?
- What is the efficiency of self-made organic pest control products and how can it be optimized?
- What is a suitable monitoring strategy for on-farm pest monitoring?

Methods

- Survey with farmers (organic and conventional), extensionists and experts to identify the major cotton and soya pests in the region and the most common pest control products
- On-farm pest trial to compare the effect of different pesticide in cotton with large area
- On-station pest trial to compare the effect of different spraying intervals in cotton.
- On-farm pest trial to compare farmer's practice to an intensive, regular spraying interval.

Conclusion

Due to the good result of RP trial, farmers start to adopt the practice of preparation and fertilizing with rock-phosphate enriched farm-yard manure. Leaflets are developed and widely used in the area for preparation of pest control products.

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LIECHTENSTEINISCHER ENTWICKLUNGS-DIENST

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