An approach to build on innovations developed by farmers: « Tracking farmers’ innovations »

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What is Tracking farmers’ innovations…

In western countries, a growing number of R&D organizations is developing approaches to identify and study farmers’ practices that they qualify as innovative, atypical, out of the norms…
(Blanchard et al., 2017; Mériguet et al., 2018; Feike et al., 2010; Jagoret et al., 2012…)

We propose to call these approaches “tracking farmers’ innovations” (Salembier et al., 2016)

These approaches contrast with the most common knowledge production methods in agronomy: experimentation, study of the diversity of farmers’ practices in a territory (Doré et al., 2008; Andersen, 2017…)

Although tracking innovations is developing, little is known about the ways to implement it

What are the common features of tracking farmer’s innovations approaches, and how do they contribute to farming system design?
1. What are the common traits of tracking approaches?

2. How do this approach contribute to farming system design processes?

3. Does it exist different tracking strategies?
1. Common traits of tracking farmers’ innovations approaches

It doesn’t exist « one good » approach for tracking, but a diversity, adapted to different R&D situations !

These approaches have in common to be used to identify, study and share innovations developed by farmers alone or with other actors in their territories.

This approach relies on the assumptions that farmers developed unknown and interesting practices for those who seek to identify them (>> Unknown & desirable)

What is considered « innovative » is defined from the point of view of the person implementing the approach.

This approach is at the heart of many R&D works, but it often remains implicite and poorly formalised.
1. Common traits of tracking farmers’ innovations approaches

All the tracking approaches follow 5 steps:

1. Defining an tracking project
2. Identifying and focusing on innovations
3. Getting to know the innovation and gathering infos
4. Analysing the innovations
5. Sharing the results and feeding design processes

We highlighted different ways to perform each step!
2. Tracking farmers’ innovation for farming system design

→ Eg. 1: When exploring orphan fields of innovation, little invested by R&D, tracking is a way to orientate R&D projects and to develop solutions building on what farmers have already explored in their farm.

- Experimentation on station: crossbreeding in dairy farms
- Support a collective of farmers to design cover crops adapted to their situations.
2. Tracking farmers’ innovation for farming system design

→ Eg. 2 : Raising creative anomalies

During the design of farming systems, studying farmers’ innovations can help thinking « out of the box » by opening new innovation paths.

These findings made them realize that project implicitly considered ‘Managing perennials like pests’.

The tracking led them reopen the project to consider :‘Living with perennials and benefit from their services’.

Managing perennial weeds in organic farming

Indicators of the state of the environment
- Refuges for natural enemies
- Fodder
- Beekeeping

Certain farmers consider that perennial weeds can provide them services.
2. Tracking farmers’ innovation for farming system design

→ Eg. 3 : When designing farming systems, tracking approaches produce systemic knowledge on farmers innovations, and enrich the design process with ideas and innovative alternatives

>> PRODUCING PORTFOLIO OF INNOVATIONS, TO INSPIRE OTHERS WHEN DESIGNING THEIR OWN SYSTEMS

Example: portfolio of intercropping practices to manage weeds
3. Three strategies for tracking farmers’ innovations

- **Tracking to follow and contribute to emerging innovations**
- **Targeted tracking**
- **Exploratory tracking**

Innovations discovered / analysed during their implementation

- **Exploratory tracking in orphan fields of innovation or open new innovation paths**
- **Targeted tracking of proven innovations**

After their implementation
Take home messages

- Tracking farmers’ innovations is an approach, part of the scientific movement willing to build on farmers’ innovations – ≠ innovations developed by R&D (Chambers et al., 1989; Seyfang and Smith, 2007; Biggs, 1985…)

- Our study provides guidelines to help people willing to engage in innovation tracking approaches

- This approach shakes up the common ways to build knowledge in agronomy – mainly experiment – and invites to develop new ways to build evidence on « singular innovations »

- Perspectives:
  - going beyond technical innovation (organisational, social, coupled innovations…),
  - going beyond « extraction » – developping intellectual property managment rules !
  - Crossing our experiences: we focuses on France - similar initiatives exist eelsewhere!
Thank you for your attention!

>> To go further:


Ideas website: https://www6.inrae.fr/ideas-agrifood