



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; Modernel 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?**

Research method – Cross-analysis of 14 initiatives in France

Tracking farmers' innovations in different R&D organisations



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 implicate and poorly formalised.

1. Common traits of tracking farmers' innovations approaches

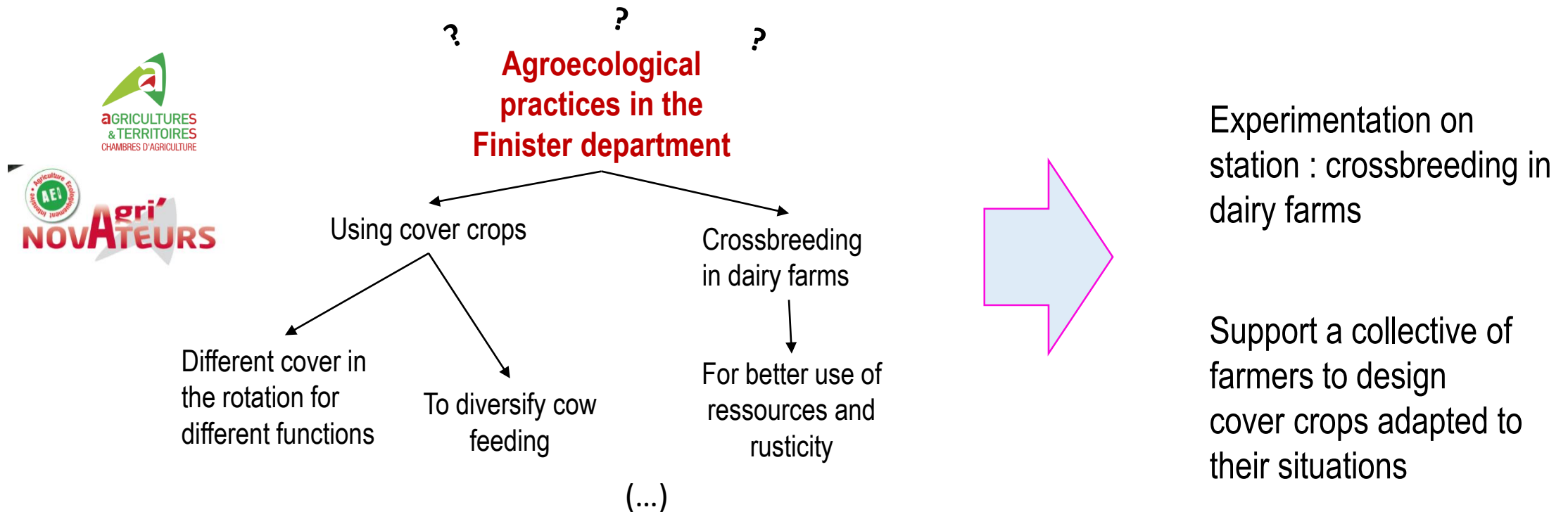
All the tracking approaches follow 5 steps :



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**



2. Tracking farmers' innovation for farming system design

→ Eg. 2 : Raising creative anomalies

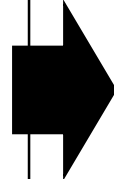
During the design of farming systems, studying farmers' innovations can help **thinking « out of the box »** by opening new innovation paths

Managing perennial weeds in organic farming



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1

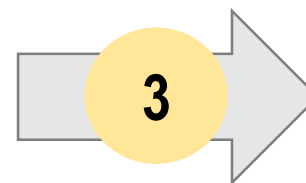


2

Certain farmers consider that perennial weeds can provide them services

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

These findings made them realize that project implicitly considered '**Managing perennials like pests**'



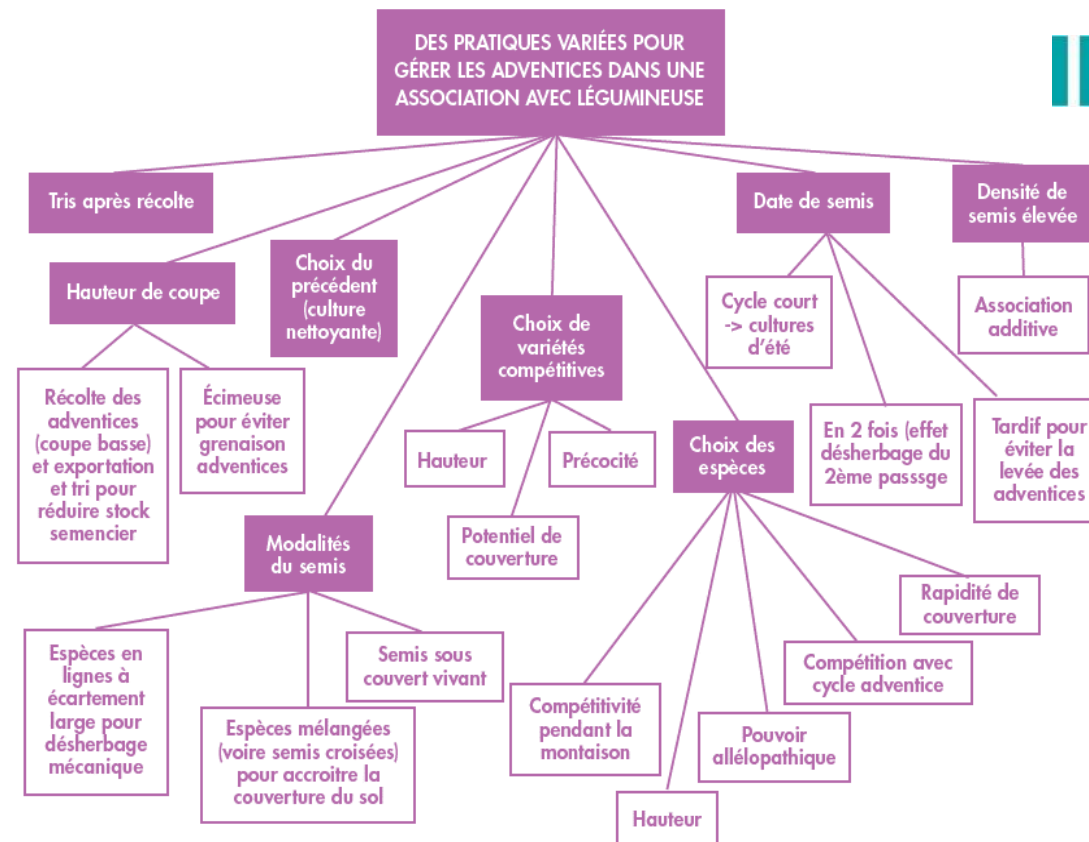
The tracking led them reopen the project to consider : '**Living with perennials and benefit from their services**'

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

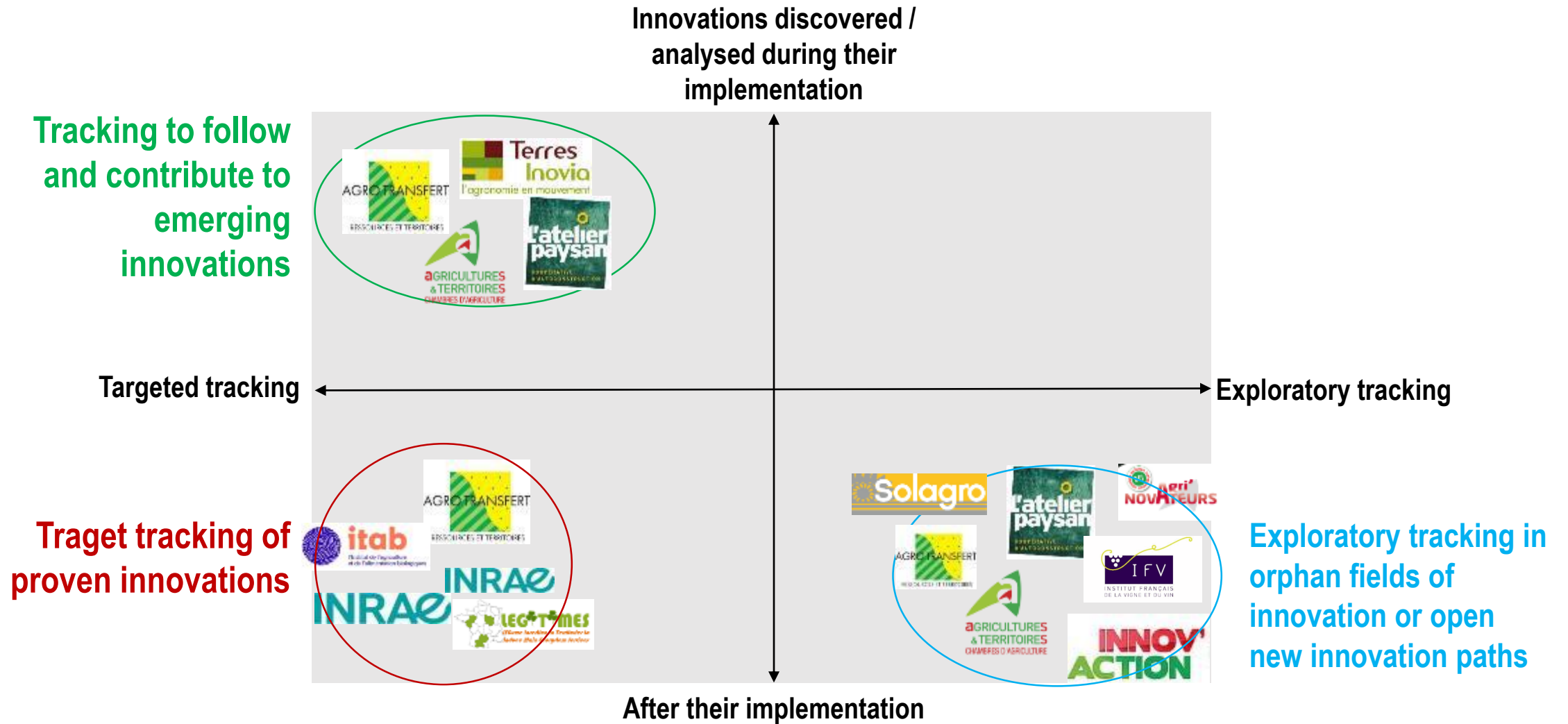
Example: portfolio of intercropping practices to manage weeds



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3. Three strategies for tracking farmers' innovations



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 »** – developing intellectual property management rules !
 - Crossing our experiences: we focuses on France - **similar initiatives exist elsewhere!**



Thank you for your attention !

>> To go further :

Salembier C., Segrestin B., Weil B., Jeuffroy M.H., Cadoux S., Cros C., Favrelière E., Gimaret M., Lechenet M., Noilhan C., Petit A., Petit M.S., Porhiel J.Y., Reau R., Ronceux A., Meynard J.M. 2021. A theoretical framework for tracking farmers' innovations to support farming system design. *Agronomy for Sustainable Development* 41 (61)

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