RECONNECTING INNOVATION PROCESSES BETWEEN AGRICULTURE AND FOOD SECTORS TO SUPPORT A SUSTAINABLE TRANSITION OF AGRIFOOD SYSTEMS: TRACKING COUPLED INNOVATIONS DESIGNED BY ACTORS

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A NEED FOR COUPLED INNOVATIONS TO SUPPORT A SUSTAINABLE TRANSITION OF AGRI-FOOD SYSTEMS

• Transition of agri-food systems is underway but remains slow partly because of the strong disconnection between agriculture and food sectors (Brun et al. 2021)

• Coupled innovations have been defined as “novelties designed in a coordinated manner when they fall under innovation areas usually managed independently” (Meynard et al. 2017)
AIM OF THE STUDY

TO ANALYZE HOW ACTORS HAVE COORDINATED THEMSELVES TO DESIGN COUPLED INNOVATIONS WITHIN FOOD RELOCALISATION DYNAMICS
MATERIALS & METHODS

TRACKING COUPLED INNOVATIONS: SCREENING

300 facilitators of territorial food projects in France

94 candidate case studies

39 cases of “coupled innovations” between agriculture and food sectors

> Historical depth
> A group of local actors sharing the same vision

2 case studies analyzed in depth

LOCAL CHESNUT VALUE CHAIN

‘FROM GRAIN TO BREAD’ LOCAL VALUE CHAIN

Adapted from Salembier et al. (2016; 2021)
MATERIALS & METHODS

TRACKING COUPLED INNOVATIONS: SCREENING AND INTERVIEWS

- **15 actors interviewed**
  Chesnut producers, elected representatives, worker in the process workshop, forester from National Forestry Office

- **10 actors interviewed**
  Farmers, bakers, millers, advisors from extension services or associations

Adapted from Salembier et al. (2016; 2021)
Tracking coupled innovations: building a conceptual framework

Analysis of the interactions between the 4 key components of the design process and actors involved

Goals

Actors

Ideas

Experimentation

Knowledge

Producing knowledge through practice

Adjusting/revising goals based on the knowledge produced

Actors in interactions
- Actor 1
- Actor 2
- Actor 3
- Actor 4

Time

Innovations
- Agronomical
- Technological
- Organisationnal
RESULTS: Application of the framework to the chestnut case study

- Private chestnut producers
- Municipalities
- Association of producers
- Association Châtaignes des Grès

RESULTS: Application of the framework to the chestnut case study


Chestnut groves restauration through pruning and grafting

- Private chestnut producers
- Municipalities
- Association of producers
- Association Châtaignes des Grès
- Professional chestnut producers
- Community of municipalities
RESULTS: Application of the framework to the chestnut case study

Chestnut groves restoration through pruning and grafting


Goals
Ideas
Knowledge

Experimentation

Private chestnut producers
Municipalities
Association of producers
Association Châtaignes des Grès

Professional chestnut producers
Community of municipalities
RESULTS: Application of the framework to the chestnut case study

Chestnut groves restauration through pruning and grafting

Using an existing unit outside the area to probe the process and the economic viability

RESULTS: Application of the framework to the chestnut case study


Goals  Ideas  Knowledge

Experimentation

Chestnut groves restauration through pruning and grafting

Using an existing unit outside the area to probe the process and the economic viability

- Private chestnut producers
- Municipalities
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Private chestnut producers  Municipalities  Association of producers  Association Châtaignes des Grès
RESULTS: Application of the framework to the chestnut case study

- Chestnut groves restauration through pruning and grafting
- Using an existing unit outside the area to probe the process and the economic viability
- Multi-products process workshop
- Adaptation of practices (e.g. chestnut harvest) to the process
- Shared management and involvement

Timeline:
- 1970
- 2001
- 2007
- 2008
- 2014
- 2015
- 2020
- 2021
Discussion: two case studies with common features

- A similar dynamic of food relocalisation involving key steps:
  - Establishing a first agronomical innovation
  - Identifying new market opportunities following a turning point
  - Sharing finances and knowledge to design a local value chain
  - Creating a multi-purpose processing unit and diversifying crops and products

- An iterative process between design (I and K) and test (E), followed by a change in goals (G)

- A strategic role played by the processor to coordinate the activities of actors
Main methodological contributions and perspectives

• Screening criteria identified
• A conceptual framework allowing us to analyze coupled innovations designed by actors of a local value chain
• Perspectives: to analyze other case studies in order to test the robustness of the conceptual framework and to enrich it
Thank you for your attention!