



**HAL**  
open science

## Coexistence of agricultural models: a new paradigm of territorial development? Lessons from the Format project

Pierre Gasselin, Sylvie Lardon, Claire Cerdan, Salma Loudiyi, Denis Sautier, Guy Faure

### ► To cite this version:

Pierre Gasselin, Sylvie Lardon, Claire Cerdan, Salma Loudiyi, Denis Sautier, et al.. Coexistence of agricultural models: a new paradigm of territorial development? Lessons from the Format project. Living Territories 2018, Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD). FRA., Jan 2018, Montpellier, France. pp.23 vues, 10.13140/RG.2.2.17217.20321 . hal-01877527

HAL Id: hal-01877527

<https://hal.science/hal-01877527v1>

Submitted on 5 Jun 2020

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - NonCommercial - NoDerivatives 4.0 International License

Session: Coexistence and confrontation of agricultural models in the territories

# Coexistence of agricultural models: a new paradigm of territorial development?

Lessons from the Format project

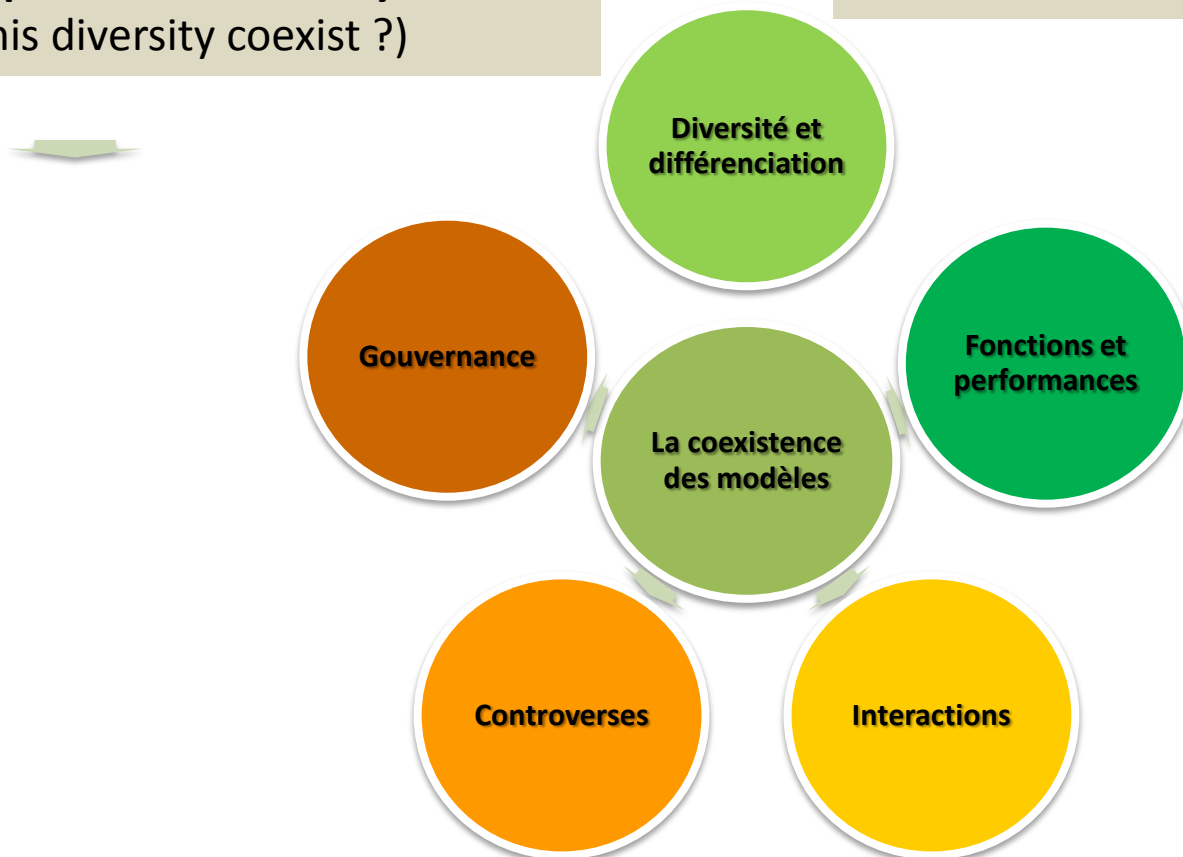
**Pierre Gasselin (Inra), Sylvie Lardon (Inra & AgroParisTech),  
Claire Cerdan (Cirad), Salma Loudiyi (VetAgro Sup),  
Denis Sautier (Cirad), Guy Faure (Cirad)**



# FORMAT Project: 4 objectives

**1** To show the **diversity of organizational forms** related to **agricultural production systems and place-based food systems** (How does this diversity coexist ?)

**2** To further **elaborate observed combinations** (at spatial & time scales) and show how these scales are linked



**3** To identify how this diversity can become an **adaptive resource** for territories and a **lever of action** and innovation in public policies

**4** To stimulate and consolidate a **scientific community** on a vibrant research issue



# Which « models » are we tackling ?

Archetypes of an  
observed reality

- A concrete shape
- Current or past

A statement  
A claim

- Social, political,  
union, identity,  
etc.
- A desired future

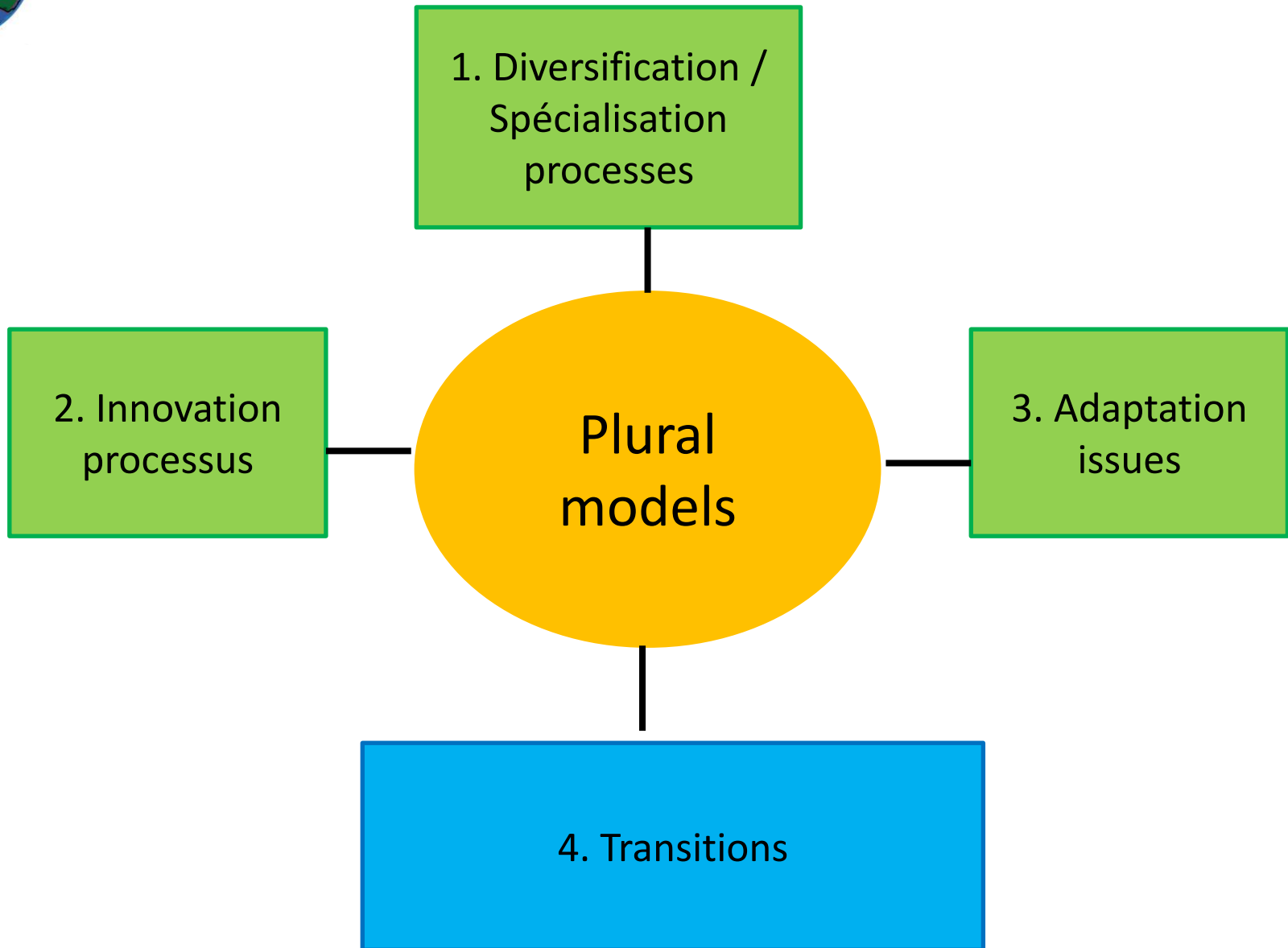
A set of norms  
towards action

- Specifications,  
certification,  
evaluation

- Agricultural models often refer to social organisation of labour and capital, and to specific relationships with nature, techniques, knowledge, the State, the market and territories.
- Models  $\leftrightarrow$  A global coherence : The achievement of a minimal consensus
- Models  $\neq$  development models (with collective goals and guiding principles for action)



# Transversal analysis at territorial level





# Methodology

Revisiting 20 existing case studies worldwide of the FORMAT project

For each of the 4 thematics, analysis that provides

- a first analytical framework
- Presentation of preliminary results : processes, scales, mechanisms, factors and effects of coexistence
- Open up new research avenues

A symposium to debate these results and consolidate research issues



# Specialization and Diversification dynamics in the territories





# Questions on specialization / diversification

The coexistence and confrontation of models questions these two dimensions, often put in opposition :

- **Specialization:** integration, performance
- **Diversification:** equilibrium, autonomy

**H1.** Diversification and Specialization participate in **one and same process of adaptation of productive spaces** to the global system

**H2. Close connection between «Spe/Div» and power relations:**

- a. Specialization: gradual subjection to same operating system
- b. Diversification: underpinned by plurality of decision centres... or sometimes by *lack of project*

**Multiple levels of analysis :**

- a. spatial
- b. actors
- c. time scales





# Cross-cutting results from the case studies

## 1. Characterization of current trends

- Productive specialization is a mainstream trend, at farm or/and territory level (*Vietnam, Ecuador..*)
- Dominant pathway to foster economic gains, technical changes

## 2. Main « Specialization/ Diversification » drivers :

- Global dynamics of markets and macro-actors (firms)
- Rules of access to resources : land, credit and markets
- Stakeholders' representations of diversity vs. specialization (e.g.: state policies ; collective action)
- Territories are also drivers : Successful specialization often relies on local diversity of skills, production and needs (clusters)

## 3. Evaluation of effects

- «passive coexistence» is frequent (*side-by-side in different markets*)
- Risks for social exclusion and resilience (tension on resources)
- Need for coordination and public policy initiatives.



# Co-existence and confrontation of models: Renewing the specialization/diversification debate

## 1. Specialization and Diversification are interacting

- Specialization processes feed on the diversity of resources within territories.. (*milk sheds, peri-urban areas..*)
- ..while successful diversification often borrows from the « specialization » paradigm (*organization, reputation..*)
- Possible win-win situations according to combination of scales

## 2. Research can inform and characterize these relations :

- Description of « Spe/Div » at different space and time scales
- Highlight the value of diversity in a sustainable perspective
- show linkages between changes in food systems and productive systems
- unveil resistances, conflicts and blocking points

## 3. «Coexistence & confrontation” drives us to address larger scales

- Space scale: i.e., territory
- Social scale: contribution to multi-stakeholder processes.



# Grasping the plurality of agricultural models through innovation systems

## Argentina and Burkina Faso





# Objectives

- How different innovation systems contributing to different agricultural models coexist?
- How Research & Development (R&D), agricultural extension are shaped by and contribute to a plurality of ag models?
- Innovation system = R&D, Ag extension (restricted vision of innovation system)



## Argentina

- A duality of agriculture that goes with a duality of system innovation with :
  - a majority of actors from R&D and advisory supporting intensive agriculture based on scientific knowledge
  - the creation of a specific R&D and advisory for family farm, doing research differently by promoting learning, etc.



## Burkina Faso

- Alliances of a variable geometry between Professional org, NGO, public research, private firms to produce knowledge, innovate and support agricultural being diversified and as a response to international incentives :
  - Sustainable intensification
  - Agroecology
  - Organic agriculture



# Innovation systems are distinguished by

- 1. The context** where they operate
- 2. The corpus of justification** used to promote new production systems, ex. in Burkina
  - Sustainable intensification : modernity/productivity / revenues
  - Agroecology : endogenous innovations, sustainable agri /self-sufficiency/family farming
  - Organic ag : economic interests, health, sustainable ag
- 3. Stakeholders systems** involved in advisory & technical support, knowledge production vary according to innovation systems :
  - Importance of certain actors in specific agricultural models
  - No public research on certain agricultural models
- 4. Advisory & technical support approaches vary according to innovation systems** (change objectives pursued, advisory & support methods, support stances of farm advisors)
  - External knowledge vs local knowledge & expertise
  - Knowledge transfer vs empowerment



# Grasp the plurality of agricultural models through innovation systems: a summary

- Innovation systems construction according to agricultural models that are more or less institutionalised
- Alternative paths constructed against the green revolution model & expressed within specific R&D and advisory spheres
- At the territory level, models of coexistence are quite hermetic for leaders (to differentiate in order to exist)
- Hybridization also happens at the farmers' level and some professional organisations



# Hybridization and adaptation at the territorial level





# Hybridization confers adaptive capacity to socio-spatial organizations of agriculture and food



Food systems re-territorialisation and the role of retailers in models hybridization. **Qualité Carrefour approach**

Virginie Baritoux (VetAgro Sup) et Marie Houdart (Irstea)



Commodification of tradition : Promotion of know-how and identity of **the faxinalense d'Emboque community in Brazil**

Vanessa Iceri (AgroParisTech)



Hybridization of food supply circuits in the **urban area of Pisa**

Rosalia Filippini (Université de Milan)



Landscape attractiveness of small scale agriculture as a driver of innovative spatial management in **South Europe**

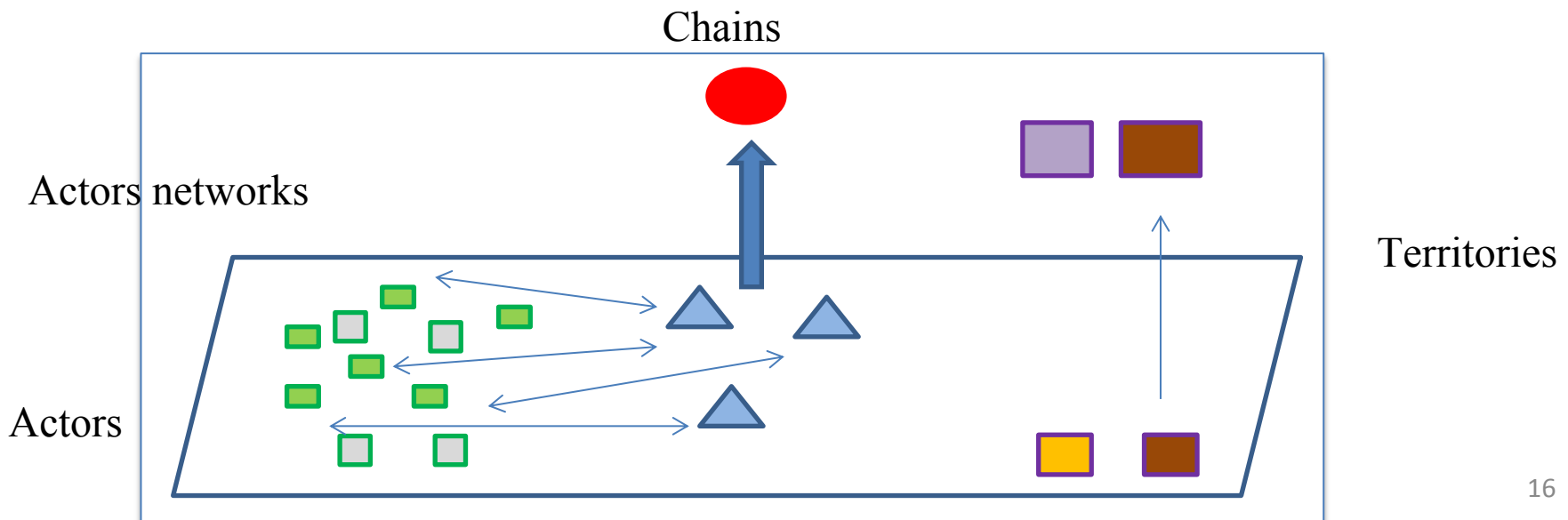
Teresa Pinto Correia (Université d'Evora)





# Analytical Framework

Organisational levels types	Organisational levels characteristics	Hybridization	Adaptation	Sustainability conditions
Actors	Who are the stakeholders (size, economic models, practices, ...)			
Actors networks				
Chains	What are the main characteristics of channels (types of interactions, governance)			
Territories	What are the territorial resources mobilised & spatial patterns			





# Common results and new questions

- **The diversity of hybridization forms** (practices, production systems, economic models, organisation modes, relationships, ...)

How to assess the links between models

- Multiple **combinations** (in production systems, of marketing, of consumption, in power relationships, in interactions with new actors, ...), at different **organisation levels** (actors, between actors, chains, between chains, territories, ...)

Are hybrid forms enduring or transitory?

- That rely on the hybrid character of at least one actor (“go-between actors”?) which have the capacity to connect **the local and the global**

Are these hybrid forms associated to territorial sustainable development ?



# Food system transitions at the territorial level





# A first analytical framework related to 3 main questions

- 1. What are the main trends in the territory, what are the main components of transition processes?**
  - a. What kind of transition is it about? At what scale? With which actors?
- 2. What are the main factors of food systems transition at territorial level ?**
  - a. What are the factors triggering the transition ?
  - b. Who are the actors driving the processes?
  - c. Are there territorial conditions, limitations or promoting contexts of changes and transition?
- 3. What are the main impacts of these processes at the territorial level?**
  - a. Effects on the food systems?
  - b. Which forms of coexistence are resulting ?



# Food system Transitions in territories: overview

- Drivers of food systems transition at the territorial level
  - **Territorial conditions** driving these transitions ?
    - Changes in the socio political landscape (national & local public policies)
    - Burgeoning civil society initiatives ( A city : Mar del Plata) about production & consumption
    - Social change in some places (new dwellers) playing as a place-based resource (Mar del Plata, BioVallée)
  - **But still limitations** (lock-out effects, technical, social and political, ...) ?
    - Technical lock-out to adopt agro ecological practices (ex. Mar del Plata)
    - “Territorial lock-out” are not explicit in all the case studies
- The impacts are not specifically analysed but mentioned between transition processes and coexistence modes within territories:
  - Juxtaposition of disconnected agricultural production models (cf. « passive coexistence»?)
  - Power relation redefined within territories that leads to compromises or conflicts & tensions btw dominant actors and new actors
  - In search of integration and hybridization of models / regimes
- A gradient of coexistence situations that interrogate their territorial impacts



# Further questions

## **A theoretical research prospect**

- The theory of socio-technical transition pathways (Geels & Schot 2007) presupposes a model standardization trajectory. Works on coexistence are calling this into question.
  - The multi-level perspective adapted to the study of sociotechnical regimes and value chains may be less adequate to grasp transition in territories.

## **An empirical research prospect**

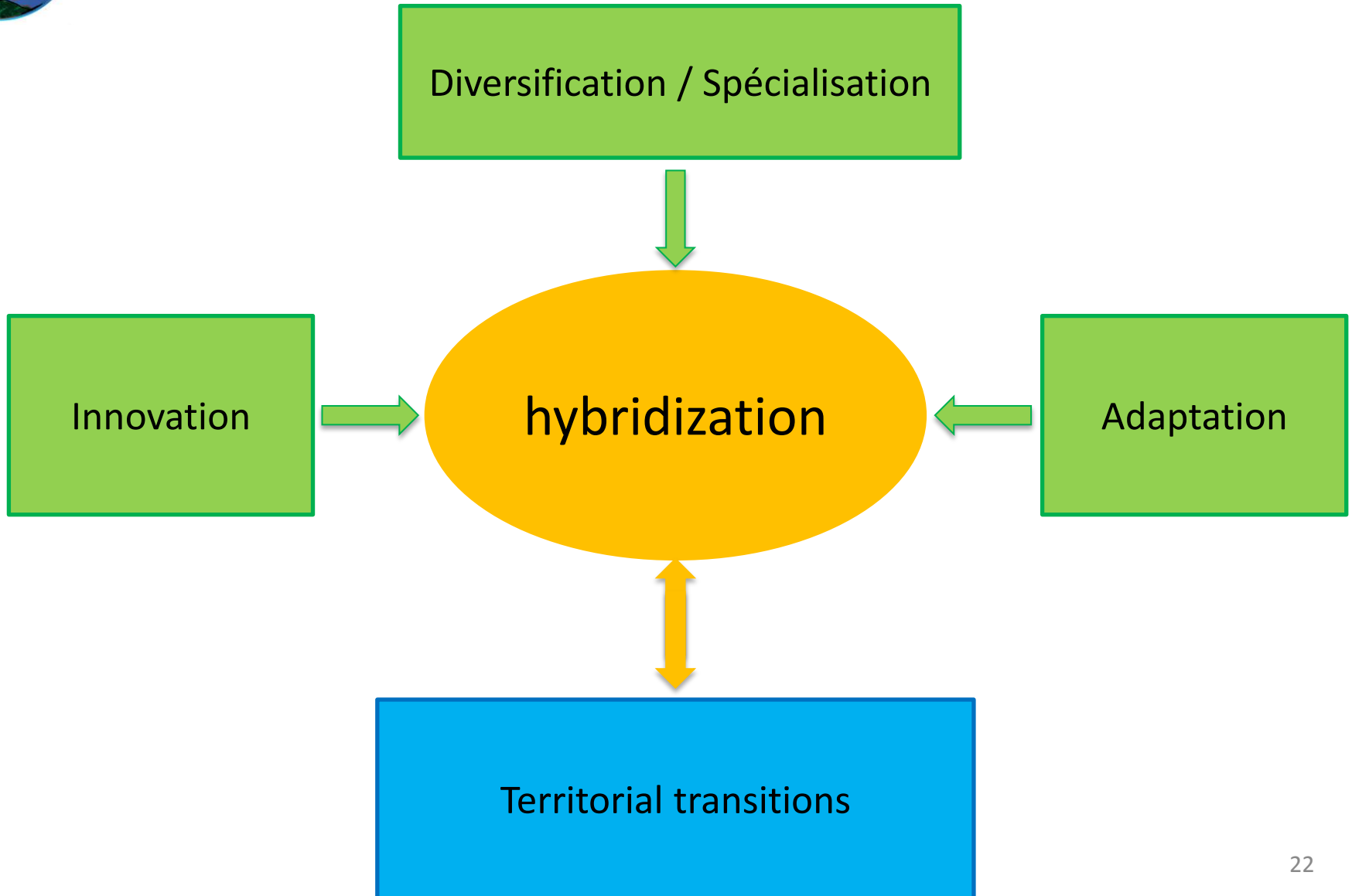
- How does model coexistence affect the territorial transitions of food systems?
- To what extent is the territorial scale more relevant than the global one, to govern transitions and the coexistence of models ?
- Which linkages can be established between coexistence modalities and the models of territorial development?

## **A methodological effort**

- Strengthen the methods to analyse transition paths, the coexistence arrangements and their territorial impacts.



# Transversal analysis at territorial level



# Insights for further research and action

- Combination of different theoretical frameworks
- Criticism on the theory of sociotechnical transition pathways, from the point of view of Territorial Development
- Idea of permanent transition
- Analyze power relations in these hybridizations : inequalities, capabilities, power plays
- Territorial implementation conditions. What's happening in the territory?  
Effects on the recomposition of territories
- Develop a research protocol on the co-existence of agricultural and food models
- Opening up towards the scientific community