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July 1st 2024, Trapani, Italy

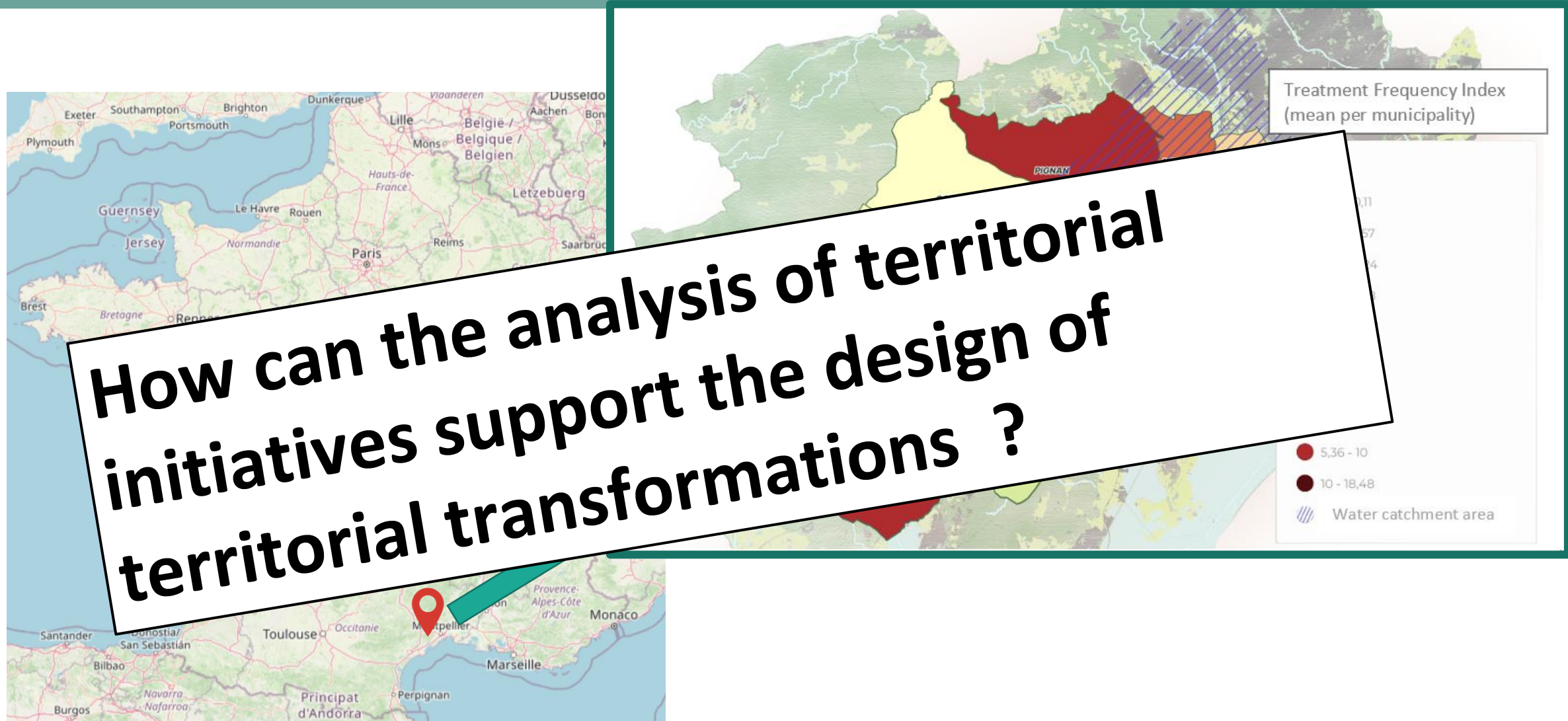


A landscape-scale approach to reducing pesticides: how can the analysis of local initiatives and dynamics support the design of territorial transformations?

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Lorène PROST (INRAE, UMR SADAPT)



Case study : The Western Plain of Montpellier, France



OpenStreetMap.org

Data collection

- Semi - structured interviews (18)
- Farm visits (5)
- Participation in workshops/meetings (7)
- Organisation of two workshops
- Reading of reports

Results validation

- Two presentations to local stakeholders



Crossing frameworks on landscape agronomy and collective action

Amblard et al., 2018

1. Territorial determinants of collective action

2. Configurations of collective action

3. How does collective action contribute to the territory's development ?

Material, organizational and symbolic dimensions of the territory enabling the emergence of pesticide reduction initiatives

ALaDyn framework: resources, landscape patterns and farming practices (Benoit et al., 2012)

Potential contribution of local initiatives to pesticide reduction at the territory level

Territorial determinants of collective action

Material

Proximity to two cities

Multiple challenges faced by the territory: infrastructure projects, climate change

Organizational

Public structures eager to support initiatives

Local distribution channels impacting the organization of agricultural actors

Strong presence of **associative actors** (naturalists, protection of nature)

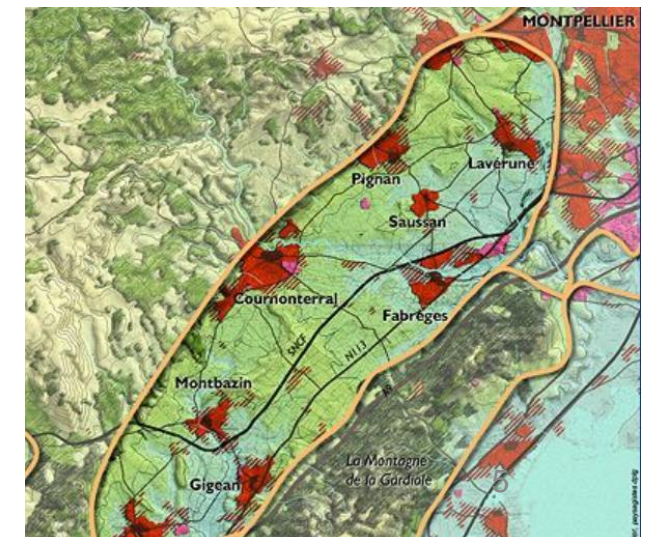
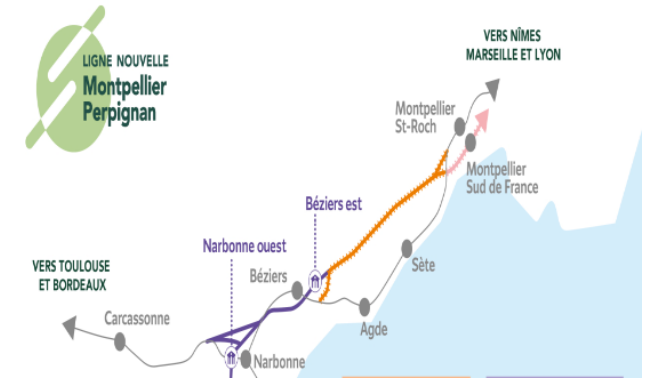
Symbolic

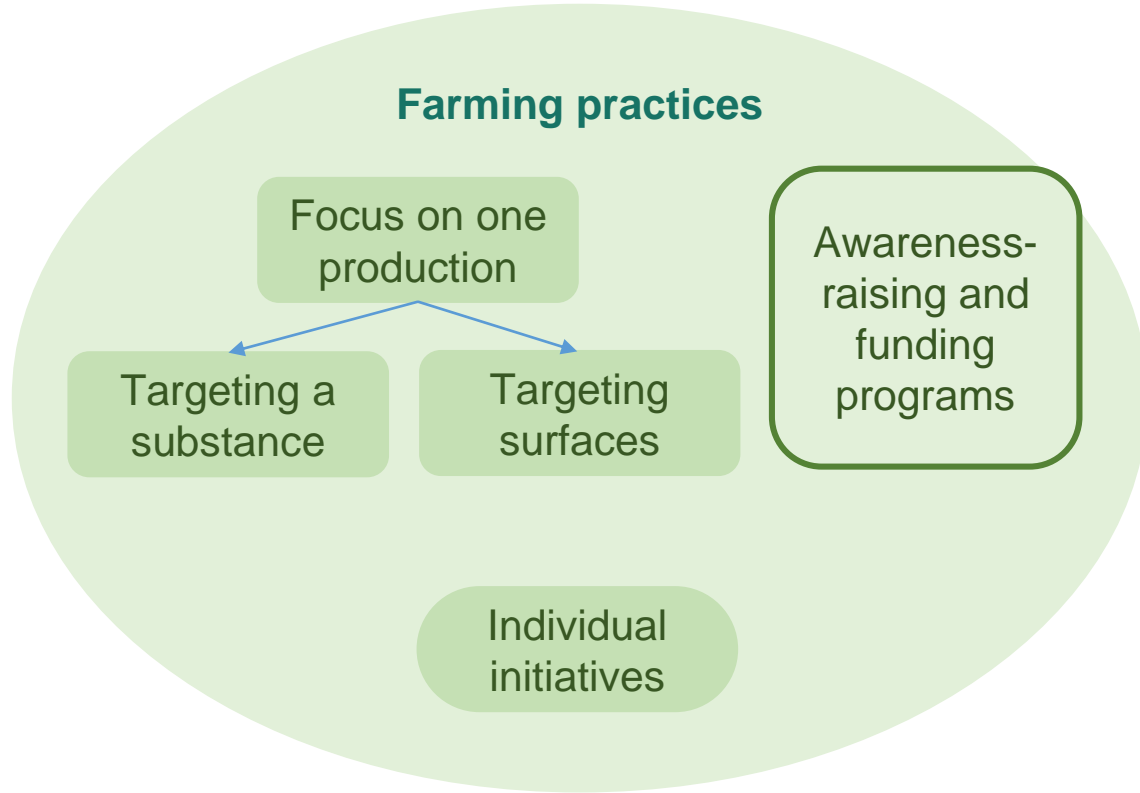
Different **senses of belonging** to the territory: administrative territories

Multiple use : hunting, hiking, rave-parties, pastoralism, renewable energy...

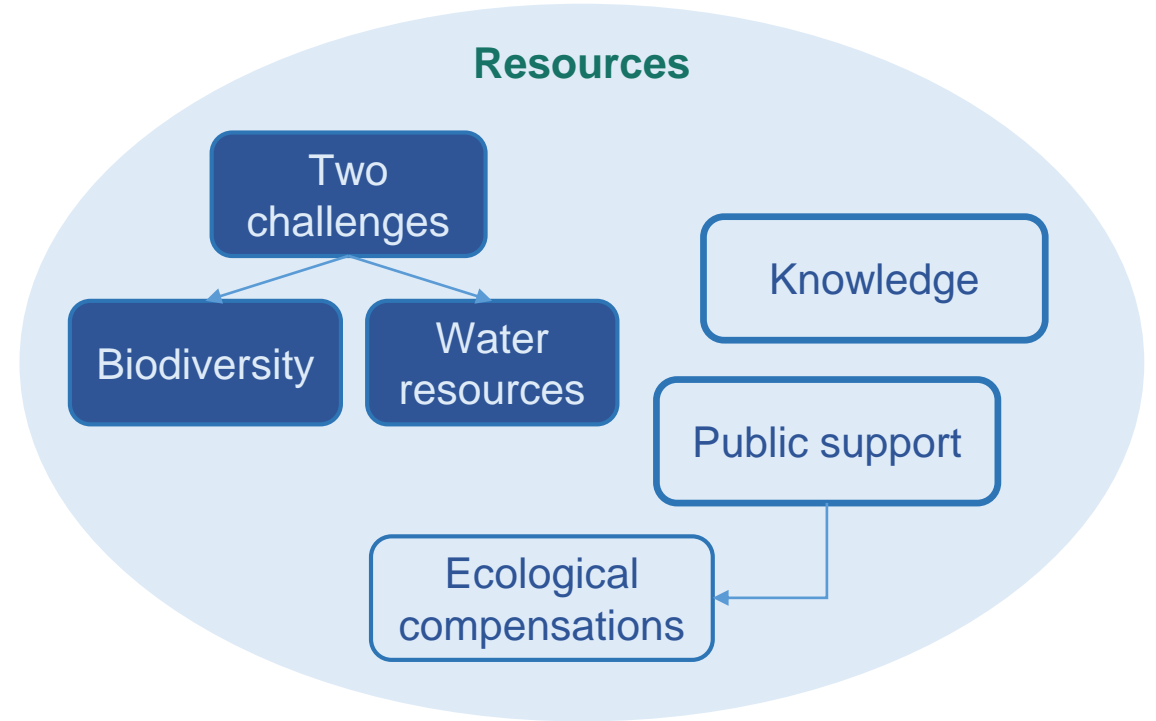
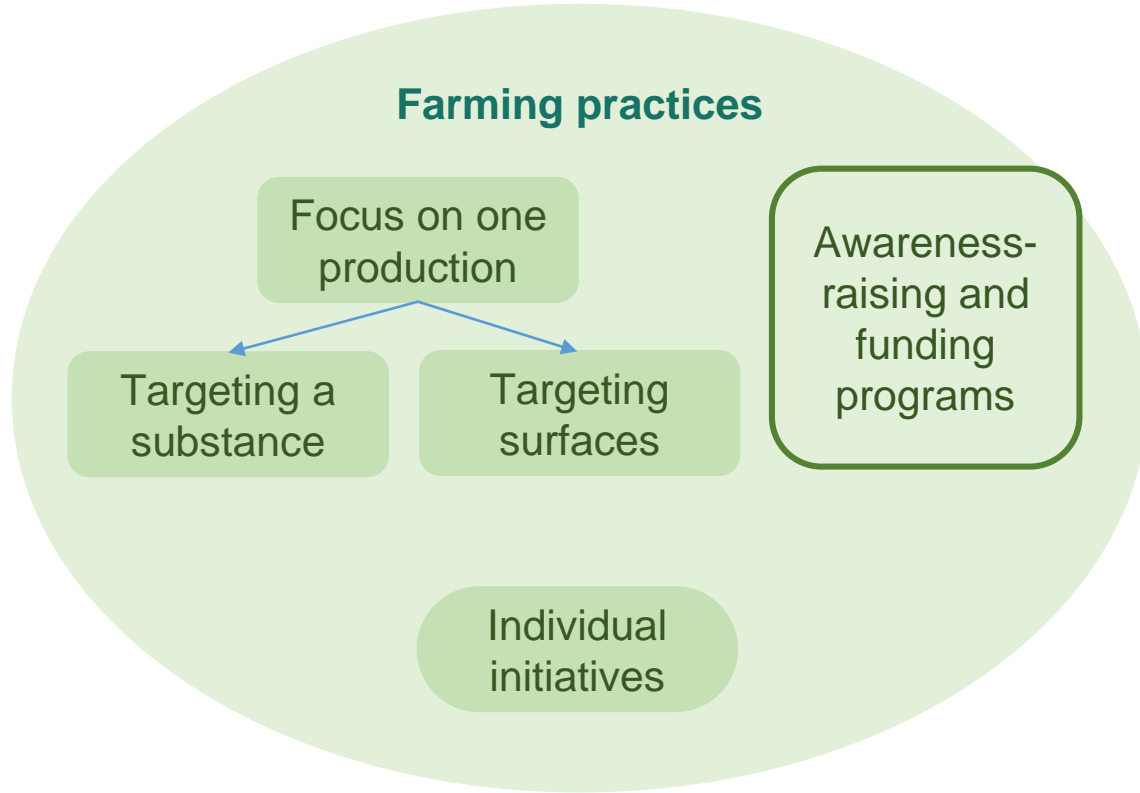
Landscape **mosaic**

Strong **winegrowing identity** : village festivals, designations of origin...

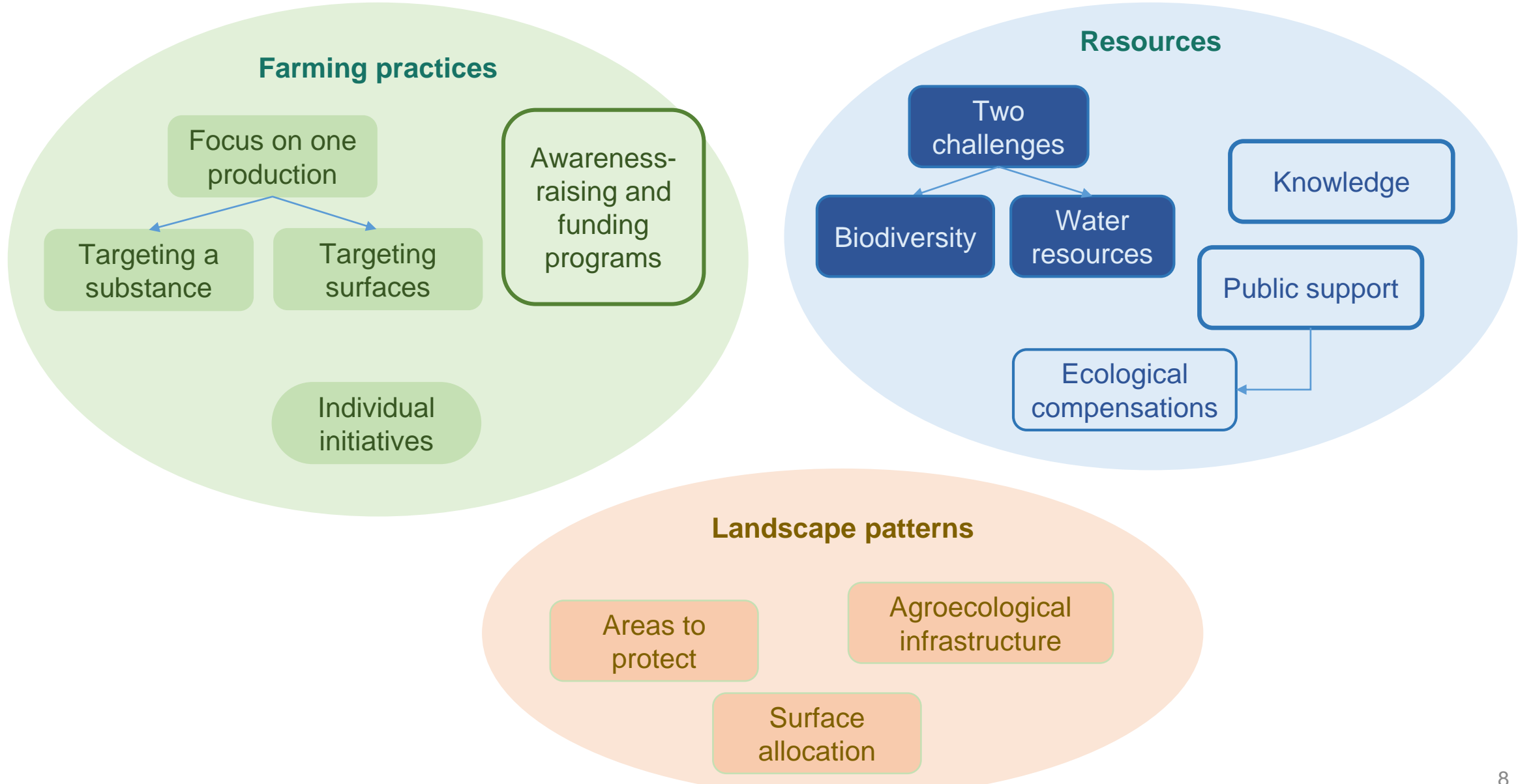




Impact of initiatives on farming practices, resources and landscape patterns



Impact of initiatives on farming practices, resources and landscape patterns



Different strategies

Targeting impact on surfaces (certifications)

Valorization of production (*practice implementation*)

Direct

VS

Targeting impact on holistic but very local pesticide reduction

Valorization of product (*price*)

Indirect impact on pesticide reduction

Limits

- Targeting of **specific** productions
- **Competition** between initiatives for financial support from public structures
- Mobilization of **farmers**
- « **Parallel** » **networks** of innovative initiatives

Practical implications

- **An opportunity for local stakeholders**

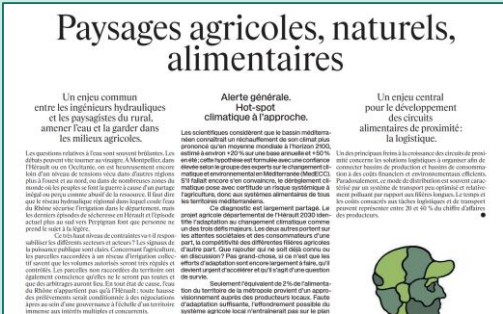
A way to better navigate into what is done on the territory ?

A clearer view of the territory's diversity ?

- **A starting point for the design phase**

Identification of what is already done and its potential

Identification of three pesticide reduction scenarios to explore with local stakeholders



Theoretical implications

- An(other) invitation to reflect on ways to analyse and support transformations at the territory level
- An empirical application of landscape agronomy
- A method to initiate territorial design ?
- Identification of conditions for activation systemic levers to territorial transitions



Thank you!

Any questions ?