

# Réintégrer l'élevage sur des fermes en cultures.

Une analyse comparative des freins et leviers à travers trois régions d'étude

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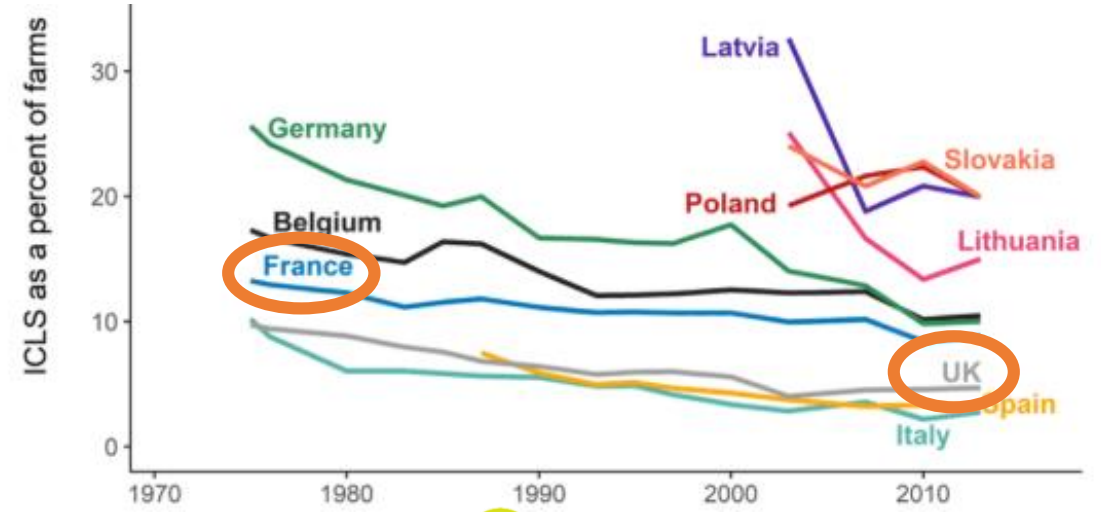
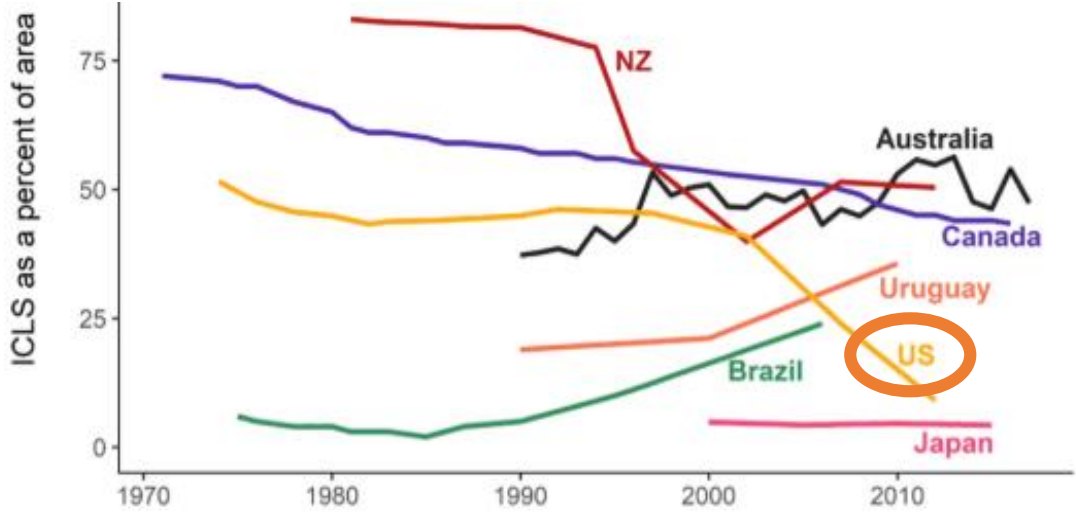


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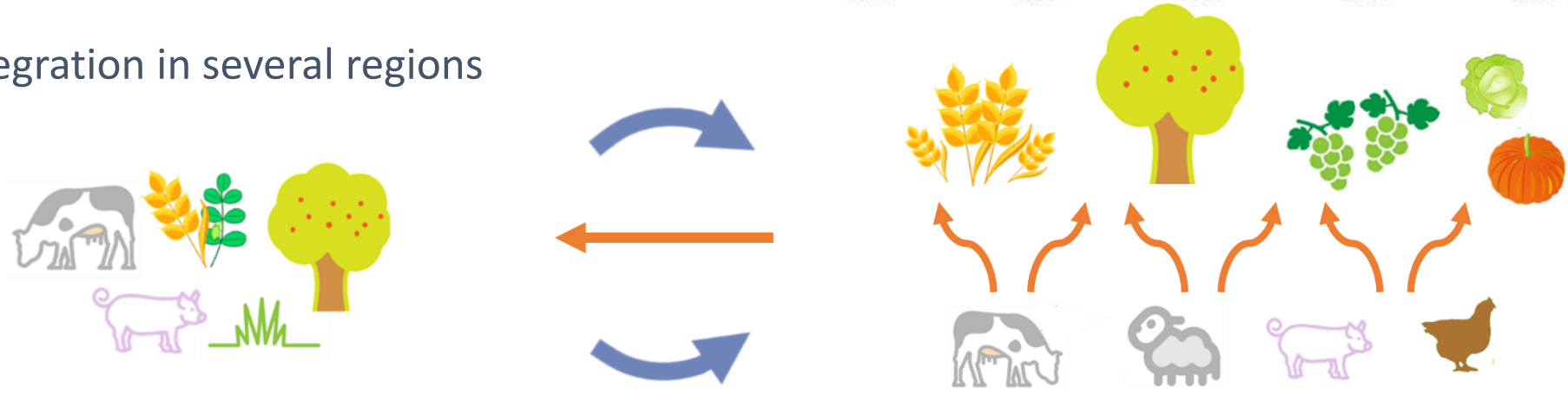


THE UNIVERSITY OF VERMONT

# Crop and livestock productions are disconnected worldwide



## Livestock reintegration in several regions



(Lemaire, 2014 ; Veysset, 2014 ; Martin, 2016, Garrett, 2020)

# Livestock reintegration

Not much studied specifically  
beyond farmers' motivations



Characterize the sociotechnical barriers and levers for  
reintegrating livestock to sustain its development



# 3 case-study regions with a specialization gradient

Identified by our pairs



### East of Scotland

A photograph of a stone castle perched on a grassy cliff overlooking the sea. Below the photo are three icons: a sheep, a cow, and a stalk of wheat, with arrows pointing from the wheat to the sheep and cow.

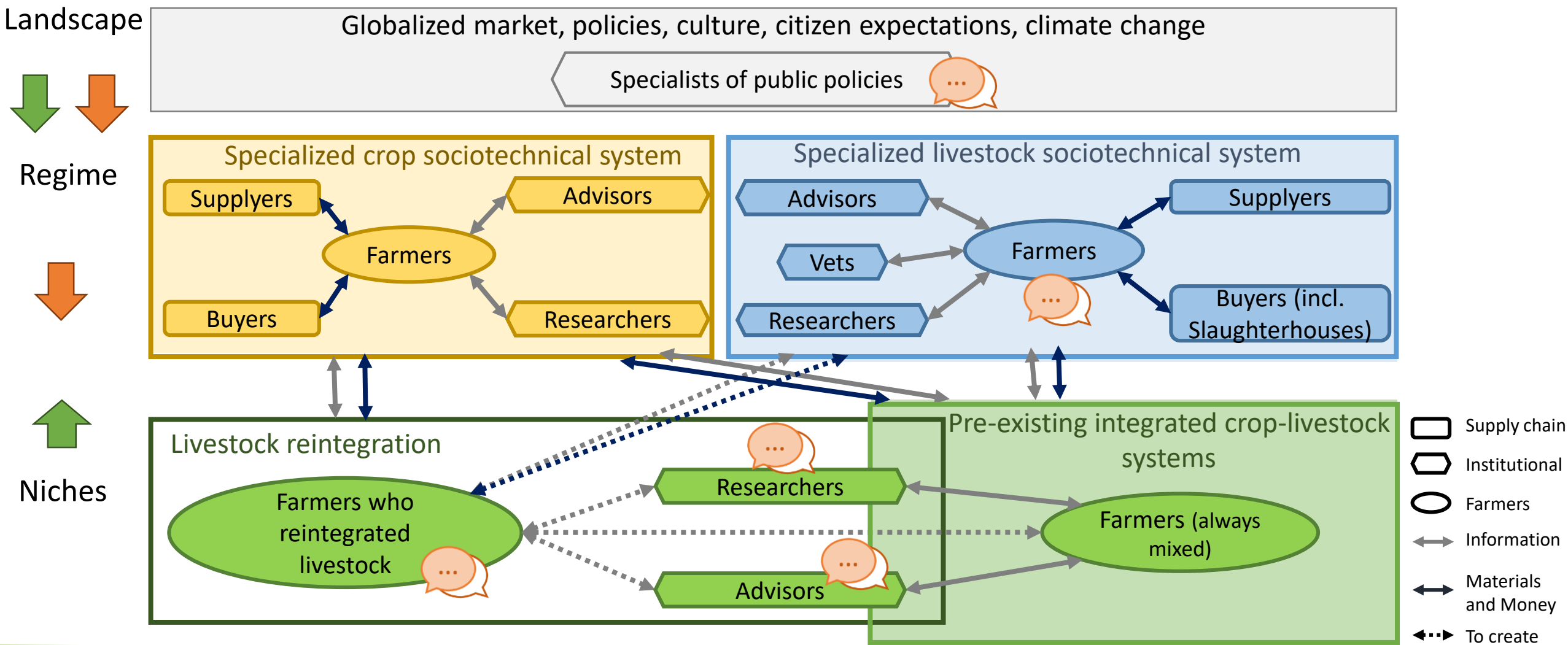
### Toulouse Basin

A photograph of a city with a large domed church and a bridge over a river. Below the photo are icons for a sheep, a chicken, a cow, a wine glass, and a factory, with arrows indicating relationships between them.

### North California

A photograph of the Golden Gate Bridge. Below the photo are icons for a chicken, a cow, a sheep, a bunch of grapes, and a tree, with a diagonal line separating the livestock from the crops.

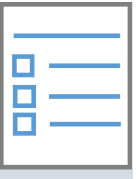
# Interviewing key actors of the sociotechnical system surrounding livestock reintegration



# Interviewing key actors of the sociotechnical system surrounding livestock reintegration

33 semi-directive interviews with representative actors  
Identified via our network + snowball sampling

- Functioning of the organization
- History of livestock farming in the area
- Place of integrated crop livestock systems in work/organization and its evolution
- **Barriers and levers and actors contribution to them**
- Future of livestock reintegration in the area



Farmers (19)



**PAC 2022**

Technical advisors (5), Associations (1), Specialists of public policies (6)



Researchers & Teachers (2)

- Description of the system
- Farm visit



Interviews were recorded and analysed inductively with a comparison between regions

# Various ways for reintegrating livestock

## Crops

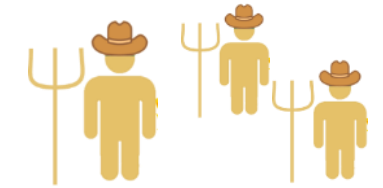


- All type of crops used (Fr, Sc)
- **Perennial** and industrial crops (Ca)

## Livestock



- Outdoors meat sheep (Fr, Sc, Ca) or goats (Ca)
- Monogastric production embedded in the value chain (Fr, Sc)



Workforce and attendance



Investments



Complexification,  
reluctance to change,  
fear and prejudices

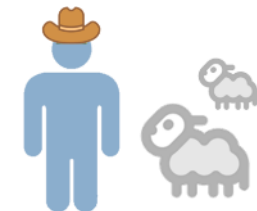
## Level of reintegration



Farm



Partnership (Sc, Ca)



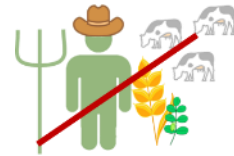
# Lock-ins from the regime

Very similar in the 3 case study



All actors in all case study

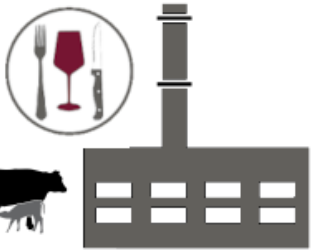
Lack of knowledge / commitment to acquire them  
(Fr, Ca, Sc)



Lack of skilled workforce (Fr, Ca ; Sc less specialized)  
Lack of infrastructure (Fr, Ca, (Sc))



Identifying the 'good' partner despite diverse mindsets (Fr, Ca, Sc) and distance (Fr (Sc, Ca))



Vets with a connecting role (Ca)

Decrease of services linked to livestock  
(Fr (crop regions), SC (not specific to LSR))



Lack of compatibility with agroindustrial model : predefined harvest date, fear of rejected products (Ca)



# Lock-ins from the landscape



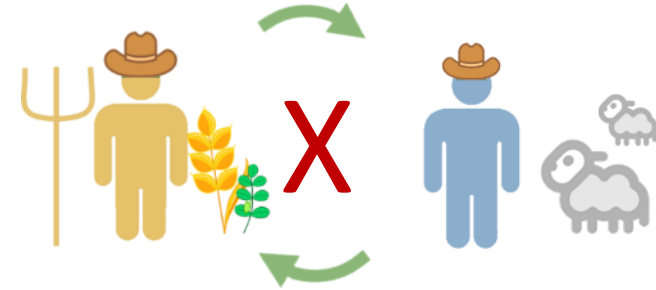
Lack of incentive (Fr, Ca, Sc) :  
subsidies, additional valorization  
(consumers not ready to pay more in Sc)



Regulation (Ca, (Fr))  
+ misunderstanding



Pressuring livestock :  
veganism, GHG (Sc, (Fr))



Negative view of cooperation  
(Ca, Sc)



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Lack of communication between farmers and policy makers

Funding times disconnected from agronomic time

(Fr, Sc (even if less))



Lock-ins specific to a type of production :  
bird flue (Fr, Sc), lack of market for pork after BREXIT (Sc)

# Push factors from the niche

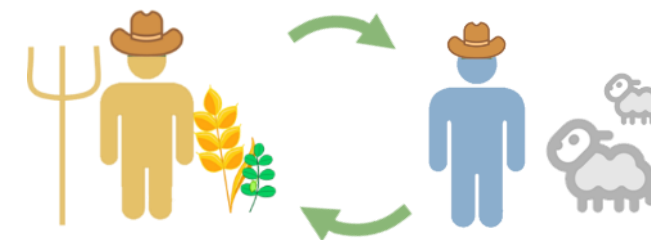


Knowledge production and sharing (Sc, then Ca and Fr)



Indirect valorization via connected labels

**Match.Graze**



Partnerships facilitation (Sc, Ca, (Fr))

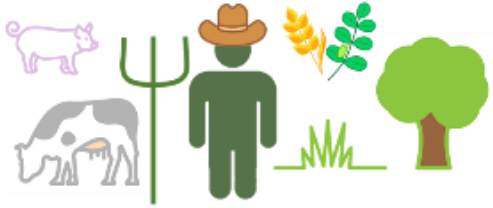
Initiatives from associations and advisors to promote reconnection on mixed farm and partnerships

Sc – Government project and collective action

- Organic farming (Fr, (Sc, Ca))
- Regen farming (Sc, Ca) can be valorized by industries, even though the definition is unclear
- Premium products (Sc), direct selling (Fr)

- Meeting app (Sc, Ca, (Fr))
- Contract templates (Sc, Ca, Fr)
- Technologies (mentioned in Sc but also elsewhere)

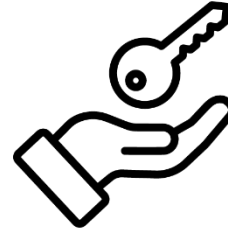
# Pull factors from the landscape



Cultural heritage of traditional mixed farming systems (Fr, Ca, Sc)



Lack of organic matter and fertilizer prices (Fr, Sc)



Difficulty to access land (Fr, Sc)



Will to install a young shepherd



Indirect incentives : cover crops (Fr, Sc, Ca)

New policies including conditionality measures (Sc, Fr, grants in CA but questions on their accessibility)



Tourism image (Fr, Sc)

Payment from natural resources (Sc)



Wildfire prevention (Ca)



Mindset – Back-to-the-land movement heritage (Ca)

Freedom to “do things differently”



# Livestock reintegration: A call for collective action

Similar barriers to ICLS, but few actions taken so far



Farmers (adoption)



Knowledge production



Communication on the benefits on those systems

Buyers (valorization)



Policy-makers (subsidize)



Agroenvironmental impacts of those systems

(Asai, 2018 ;Martin, 2016 : Garrett, 2020)



Thank you for your  
attention !