

DIVERSIFICATION DES CULTURES : VERROUILLAGES ET LEVIERS

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1

Des barrières aux verrouillage

La diversification : quels sont les freins ?

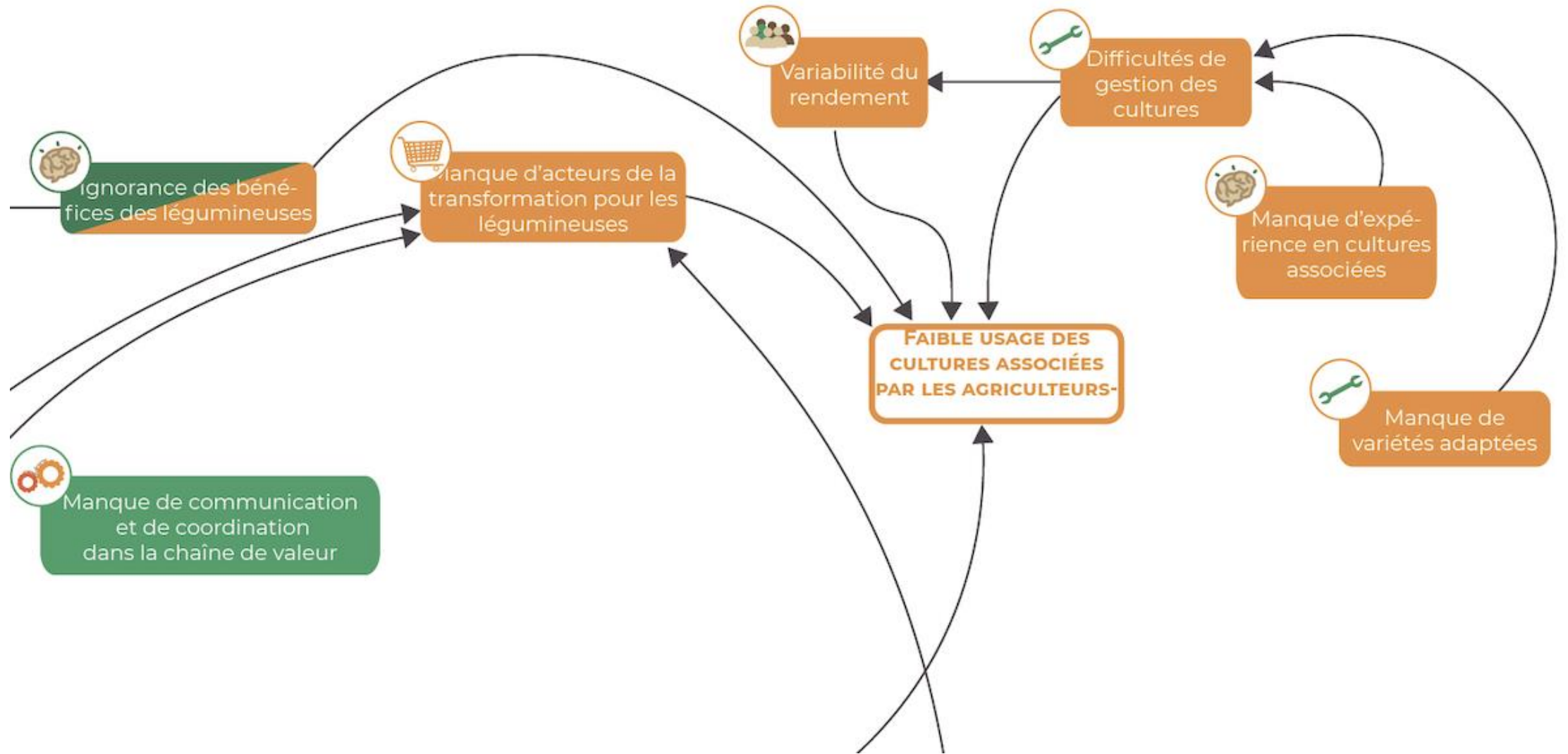
C'est trop compliqué à mettre en œuvre ...

Ce n'est pas assez rémunérateur ...

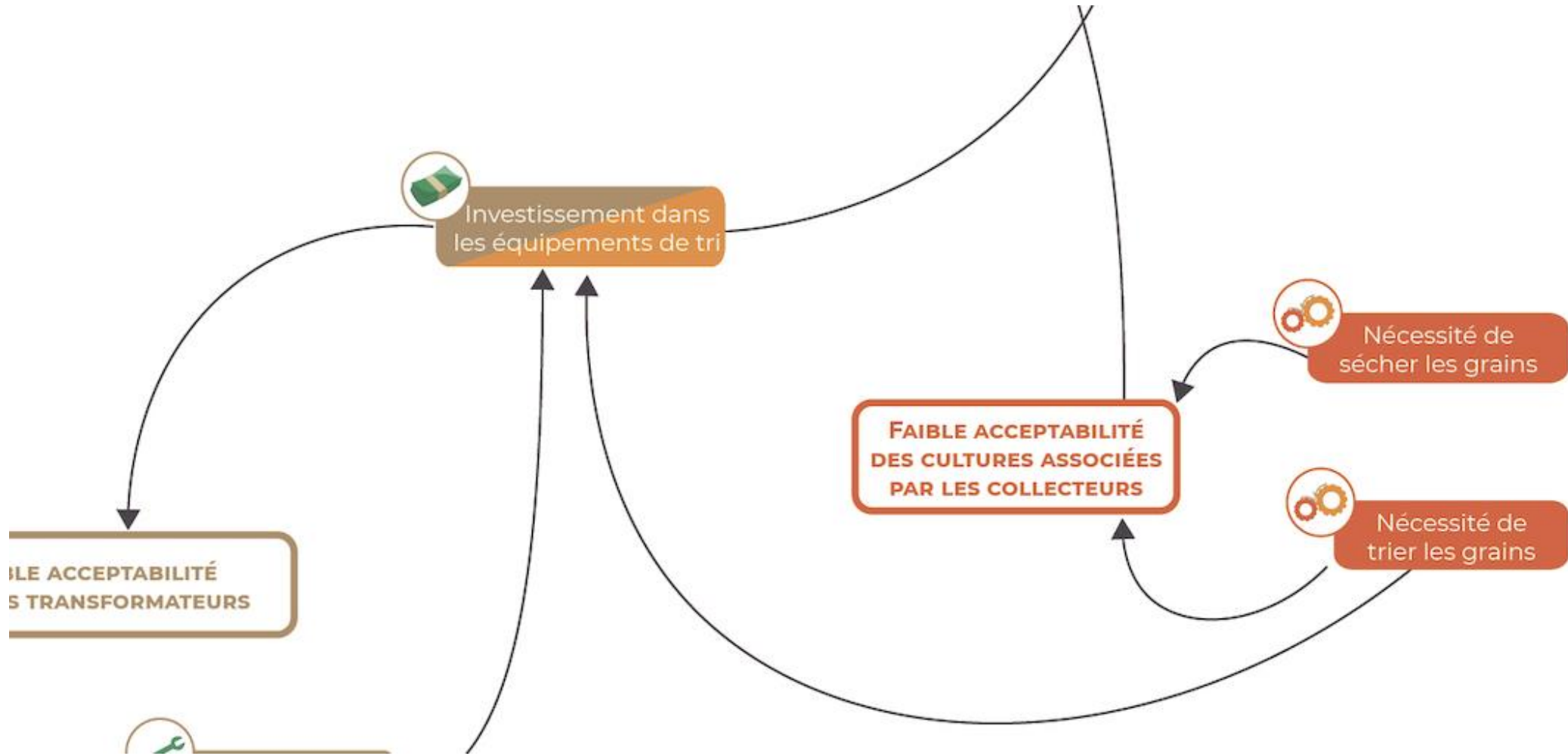
Il n'y a pas de débouchés

Manque de soutien politique

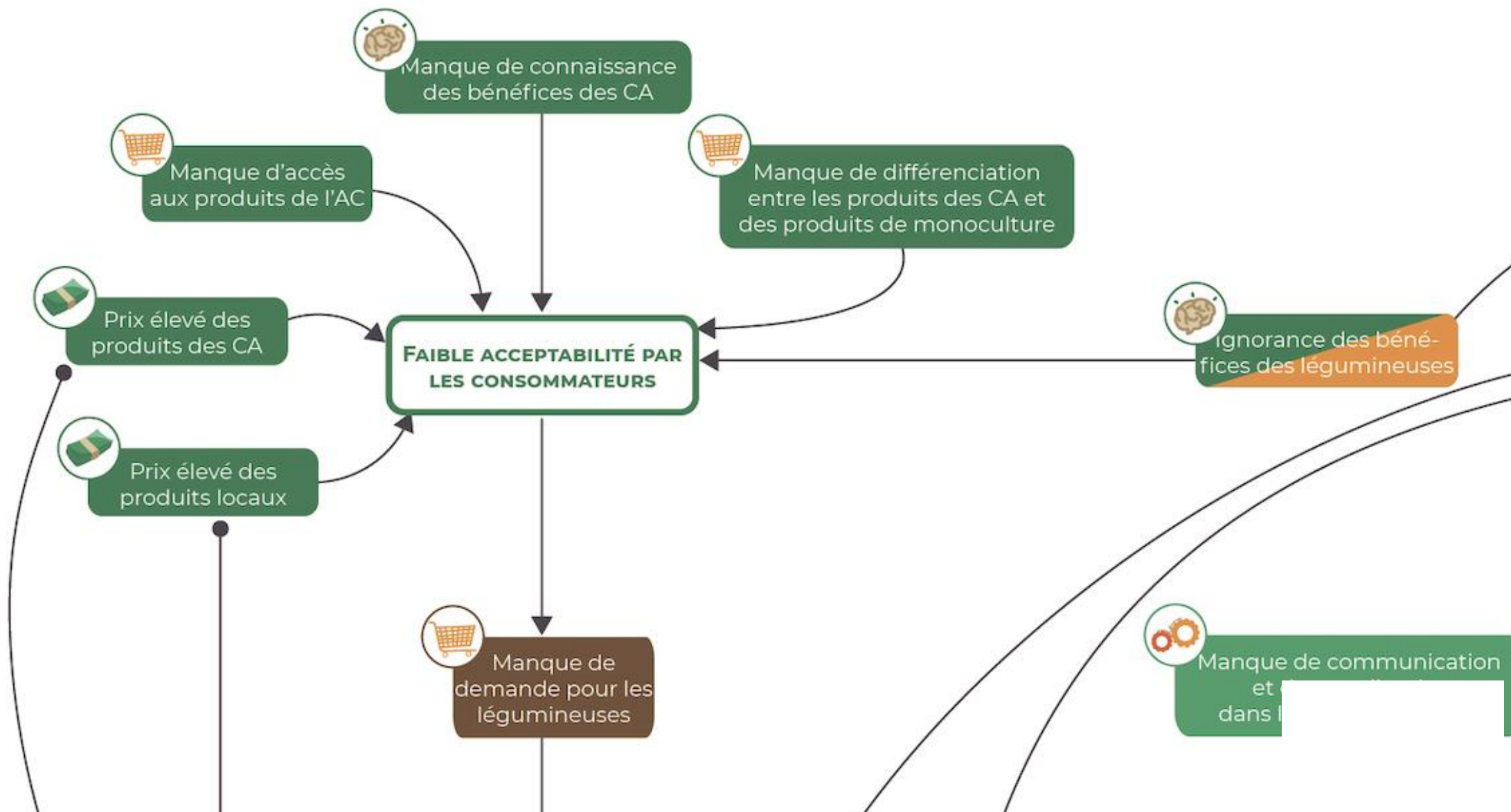
Au niveau de la ferme



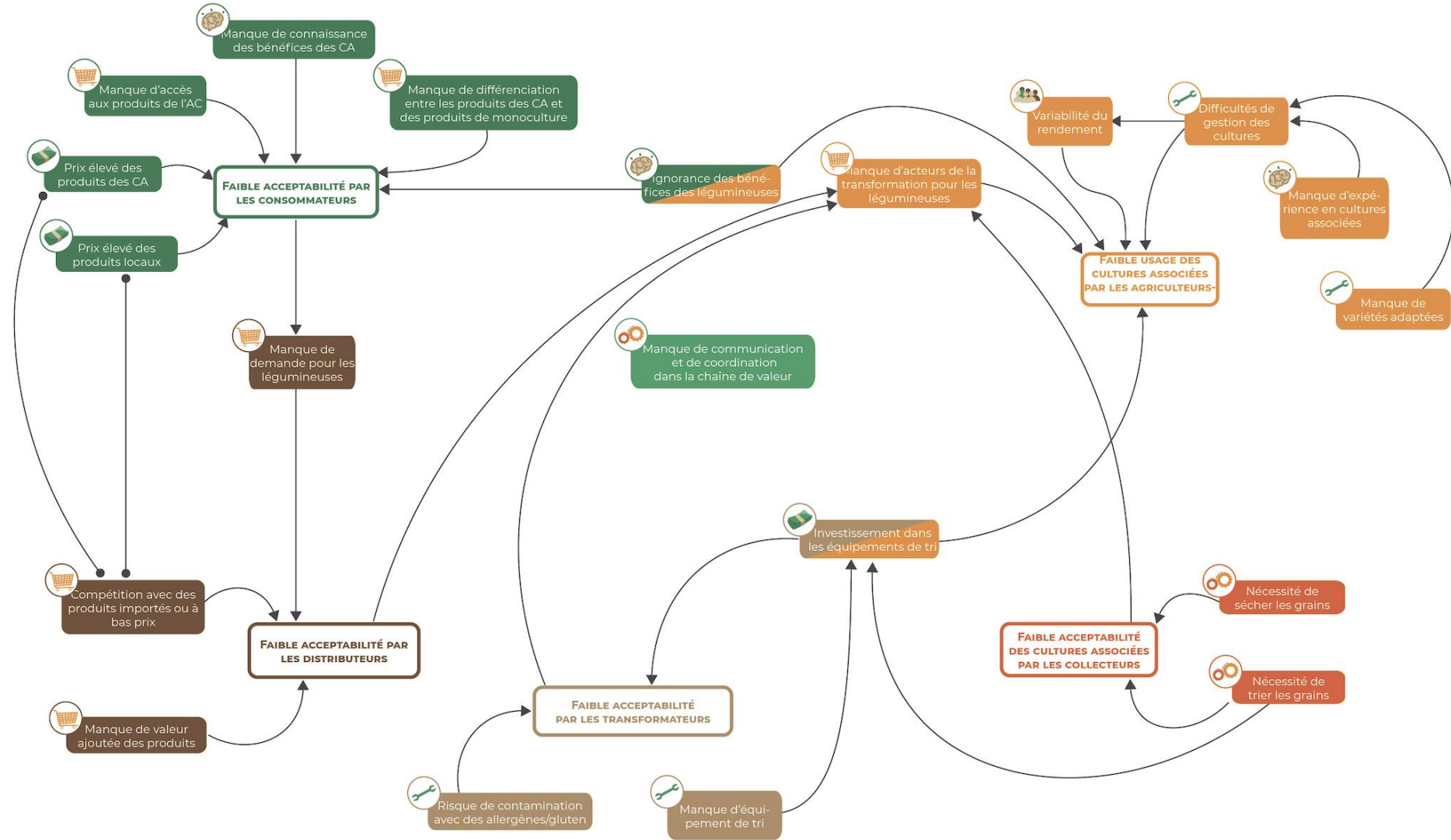
Au début de la chaîne de valeur



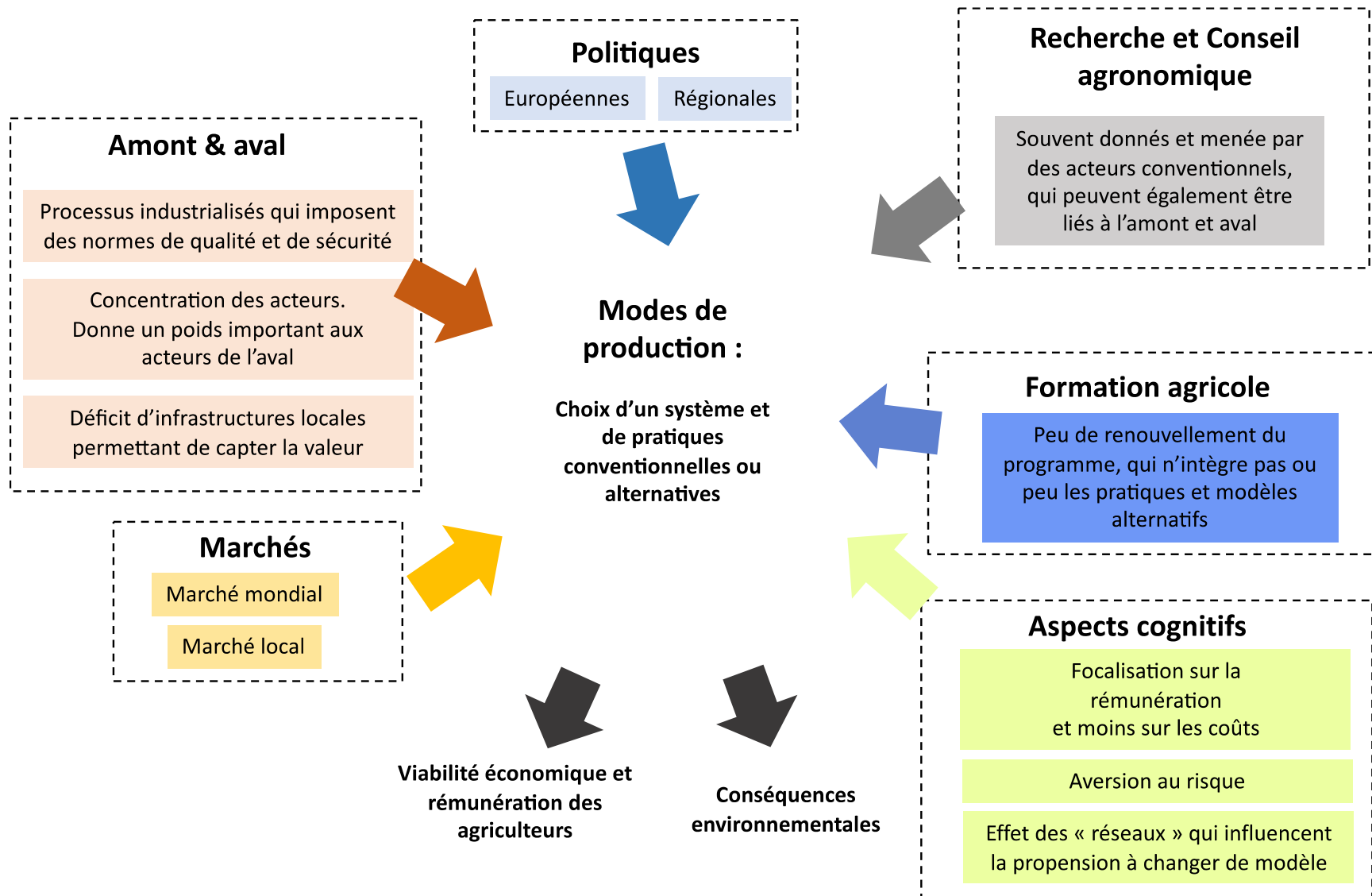
Au niveau des consommateurs



Map of interactions between barriers CICS #2 (Sweden)



La combinaison des barrières fait verrouillage





**Quels verrouillages
à la diversification ?**

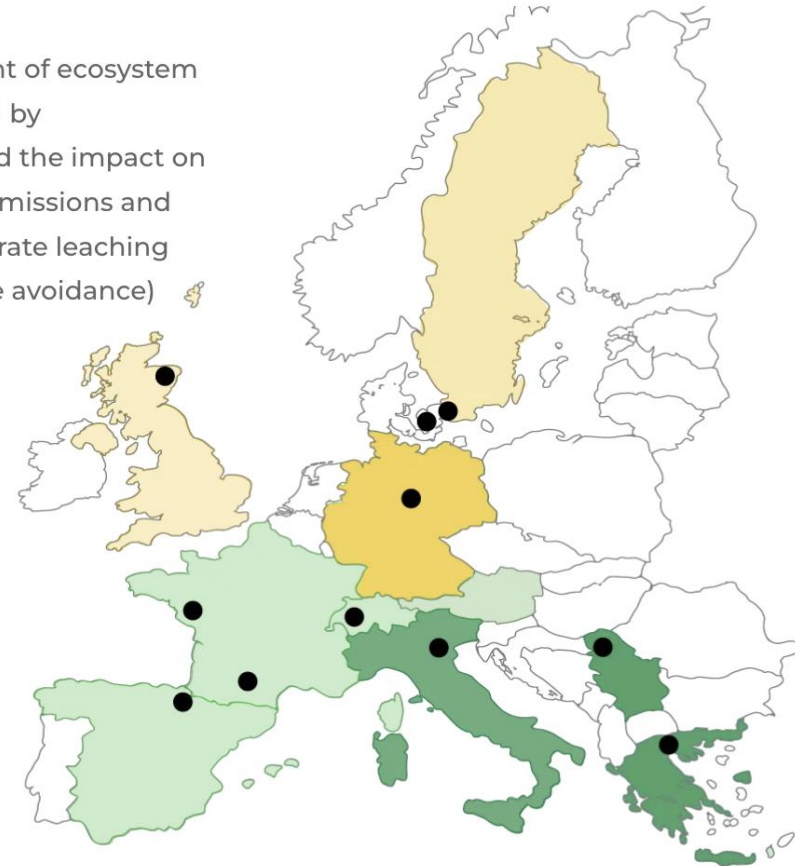
Plus de vingt études de cas en Europe



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and the impact on
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(use avoidance)



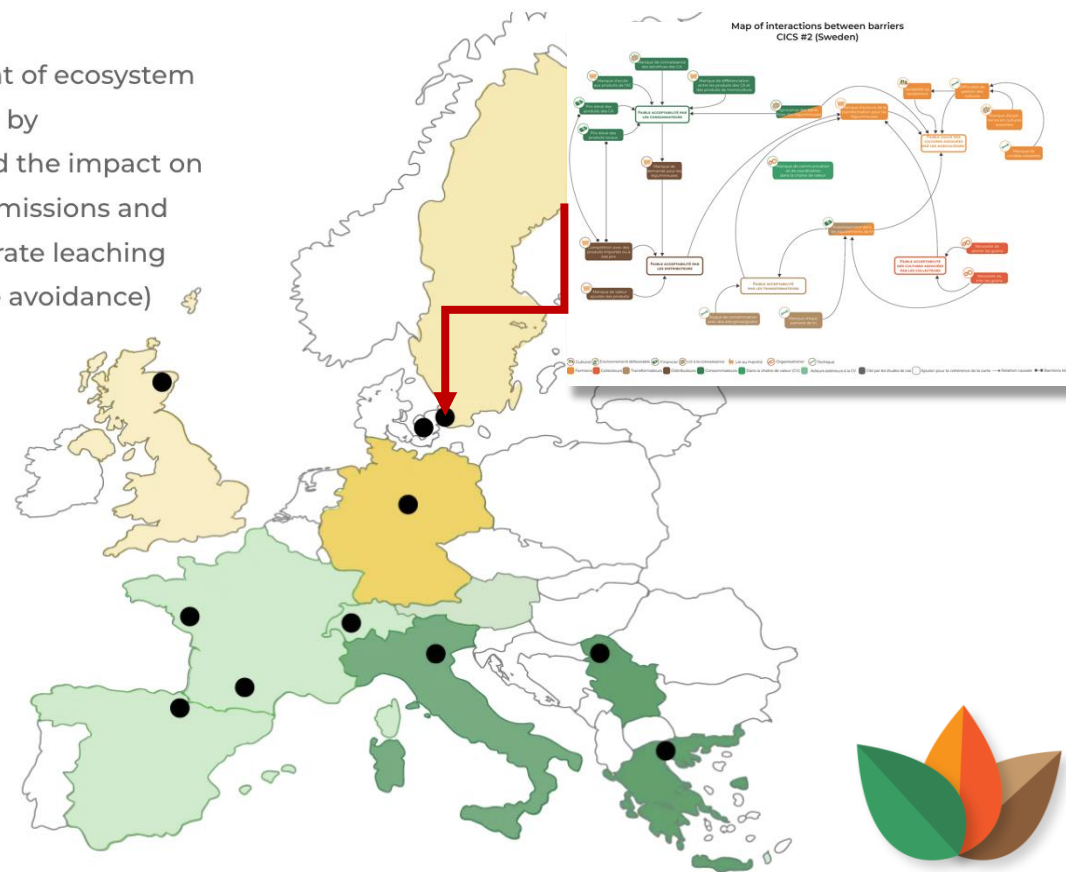
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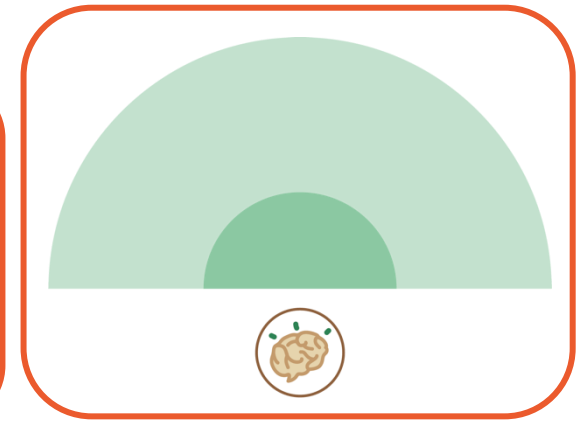
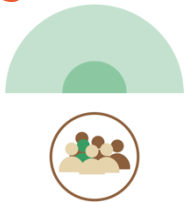
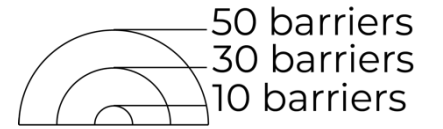
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Quelles sont les principales barrières ?

Few barriers linked to regulations and politics

Relevance of considering the whole value chain, the lack of market being a bottleneck in many CICs



LÉGAUX

CULTUREL

FINANCIER

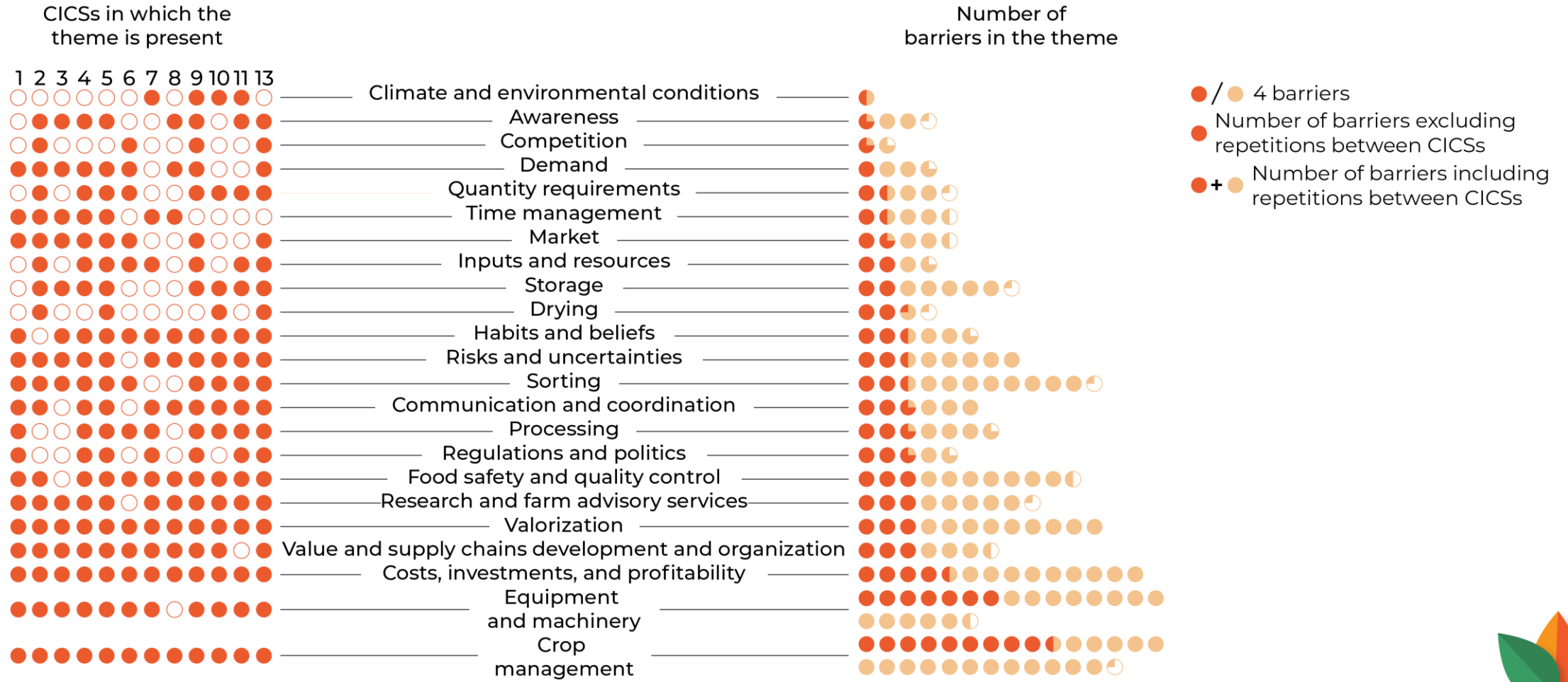
ORGANISATIONNEL

TECHNIQUES

MARCHÉ

CONNAISSANCES

Diversité de situations, diversité de barrières



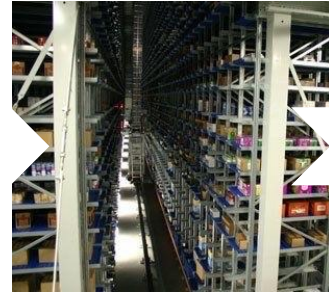
**Quelles stratégies pour lever
barrières et verrouillages dans la
chaîne de valeur ?**

Les acteurs des chaînes de valeur

FERMES



LOGISTIQUE, TRANSFORMATION, DISTRIBUTION



CONSOMMATEURS



Les acteurs de la chaînes de valeur : des acteurs-clé



Pourcentage des différents types de barrières selon les différents niveaux de la chaîne de valeur

Le mode de coordination un élément clé

COOPÉRATION

Les organisations restent indépendantes et autonomes.

Relations informelles et de courtes durées

Effort minimal

Risques limités

COORDINATION

Échange d'information, planification en commun et éventuellement financement commun

Haut degré d'engagement

COLLABORATION

Haut degré d'engagement et de longue durée

Haut niveau de confiance

Développement de structure à long terme

Objectif communs

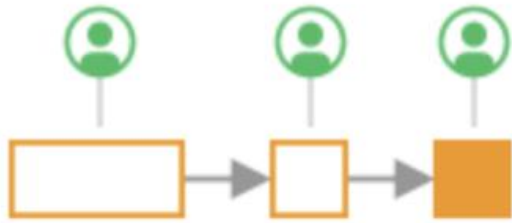


Conditions
instables

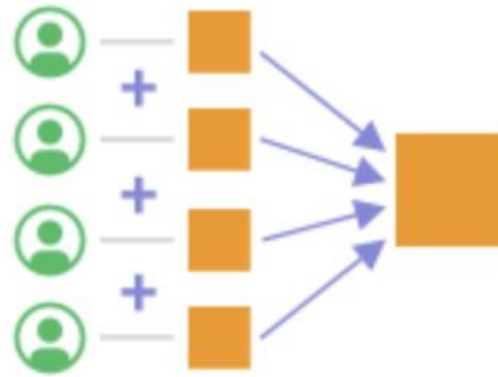


Conditions
stables

Le mode de coordination un élément clé



Coordination



Coopération



Collaboration

Quels critères possibles pour un prix juste?

Production et commercialisation

1. Prix supérieur au prix du marché conventionnel
2. En accord avec les coûts de production
3. Permet un niveau de rémunération juste et durable
4. Prend en compte la valeur ajoutée (coût d'opportunité) par rapport à d'autres cultures
5. Acceptabilité du prix pour les consommateurs

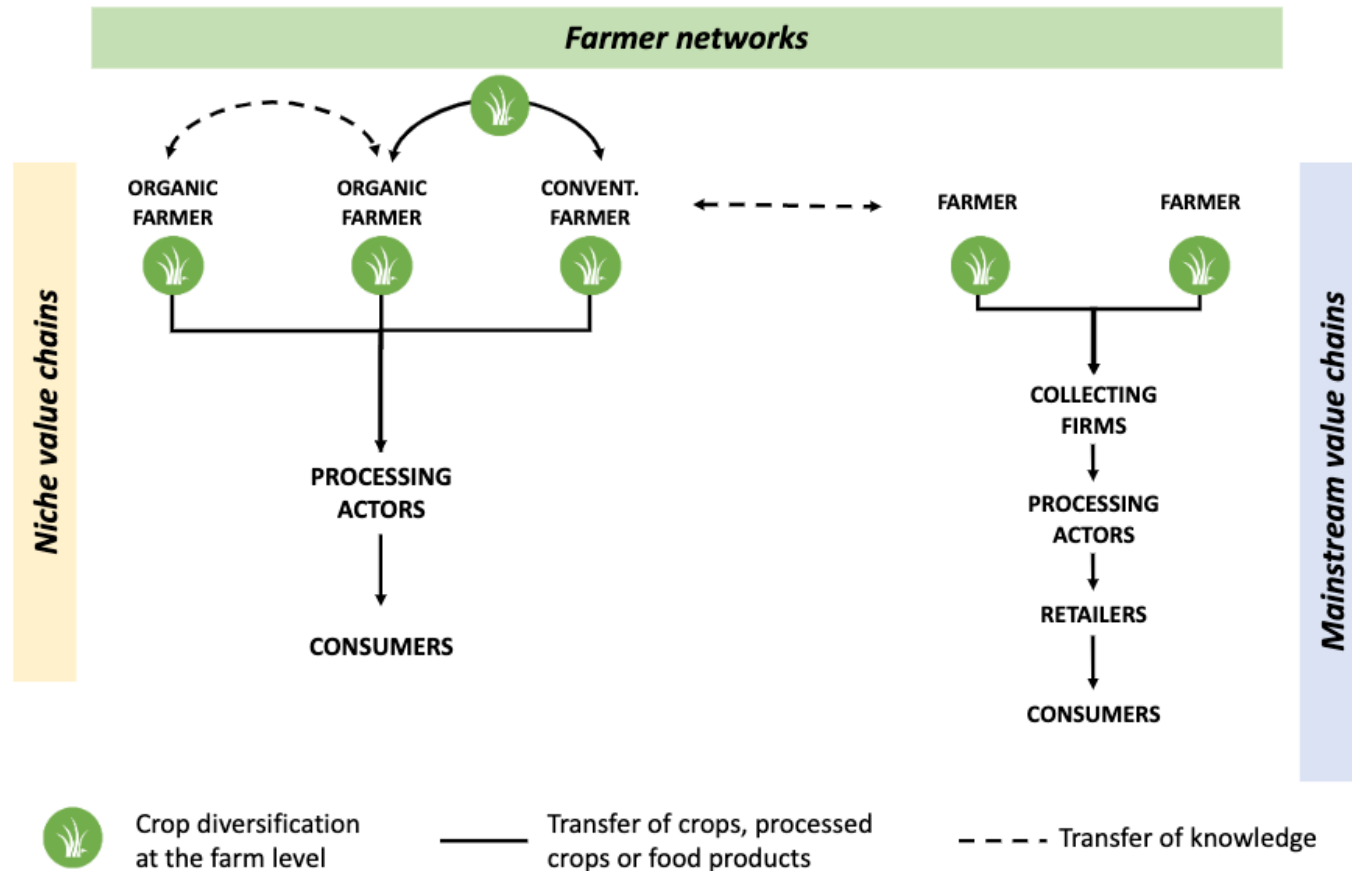
Développement de chaîne

6. Permet des investissements
7. Mutualisation et couverture des risques
8. Stabilité et/ou ré-évaluation du prix

Relations entre acteurs

9. Transparence
10. Distribution équitable de la valeur entre acteurs
11. Engagement à long-terme des acteurs
12. Effort partagé parmi les acteurs pour garantir les débouchés commerciaux
13. Gouvernance équitable
14. Délais de paiement acceptables

Une diversité de contextes



RESEARCH ARTICLE

Innovating within or outside dominant food systems? Different challenges for contrasting crop diversification strategies in Europe

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Figure 1: The three innovation settings for developing crop diversification. Crop diversification can occur in: (a) niche value chains; (b) mainstream value chains; and (c) farmers' networks of innovation. Examples of these innovation settings are provided in the text above. (Adapted from Morel et al 2020).

Diversité des chaînes de valeur

Type of value chain	Dimension of diversification	Governance	Example
Highly specialized	Global, long, product-oriented, elemental, market coordination, individual farmer	Spot market, commodities	Global commodity markets
Integrated specialized	Global, long, product- and process-oriented , elemental, market coordination, individual farmer	Certification, preferred supplier contracts, still anonymous	Global markets of certified organic products
Integrated diversified	Local, long, product- and process-oriented, elemental, integrated coordination, collaborative	Relational, collaborative contracting	Diversified, high-quality products based on sustainability and locality claims with well integrated chains
Highly diversified	Local, short , process-oriented, holistic , integrated coordination, collaborative	Direct marketing, cooperatives/ associations	Coordinated cooperatives sharing a vision of transforming the agri-food system towards sustainability, supplying local organic stores and consumers

Weituschat et al. (2018)





Des solutions à tous les niveaux

Pour chaque barrière, une diversité de solutions

OBSTACLE

AXES STRATEGIQUES

SOLUTIONS

Manque de connaissances techniques et de références

DÉVELOPPER DES CONNAISSANCES ET DES RÉFÉRENCES SUPPLÉMENTAIRES

RENFORCER L'ACCESSIBILITÉ ET LA DIFFUSION DES CONNAISSANCES

- Expériences sur le terrain au niveau des exploitations agricoles
- Expériences sur le terrain par ou avec des groupes d'agriculteurs
- Expériences et recherches sur le terrain par ou avec des acteurs en aval
- Diversification des sources de connaissances des agriculteurs (réseaux, etc.)
- Accès aux connaissances d'autres régions ou d'autres pays
- Connaissances grâce à des formations supplémentaires

Exemple from (Amrom et al. 2021).

Recommandations pour les décideurs

1. Documenter le développement de la diversification des cultures aux échelles régionales, nationales et européennes
2. Adapter la politique agricole commune pour soutenir les pratiques agroécologiques innovantes
3. Réallouer les moyens publics et privés en recherche-développement vers des cultures de diversifications et des cultures mineures
4. Mettre à disposition des mécanismes financiers pour atténuer et partager les coûts de l'innovation et les risques durant les premières années d'innovation
5. Soutenir la coopération entre les acteurs qui s'engagent dans des trajectoires de diversification et développent des innovations
6. Entreprendre de grandes campagnes de promotion des avantages des cultures mineures et de la consommation des produits issus de la diversification

The research done in the context of DiverIMPACTS shows that barriers apply differently depending on the socio-economic context of farms and value chains [9]. Thus, specific support should be designed to effectively address barriers in these three innovation settings.

Recommendations for policy makers to foster crop diversification

- 1 Monitor the development of crop diversification at regional, national and EU levels.
 - Better monitoring at the regional, national and EU level would highlight progress, challenges and opportunities and enable proper support policies and advisory strategies to be designed;
 - Crop diversification data is still scarce; no statistics are available at the EU level;
 - Specific indicators could be included in Eurostat or FADN datasets
- 2 Adapt the CAP Policy to support innovative agroecological practices.
 - Proper support for diversification would accelerate the uptake, thus increasing the environmental benefits and facilitating economies of scale in new value chains;
 - The CAP should be adapted to account for the specificities of crop diversification, e.g., updating the CAP information system to allow farmers to report more complex crop patterns;
 - Subsidy rules should be clarified for farmers willing to cooperate at the territorial level (e.g. land exchange, direct sale of crops between farmers).
- 3 Reallocate public and private R&D resources towards minor and diversification crops.
 - Innovative knowledge, techniques and technologies need to be further developed in order to implement new practices and value chains; in particular:
 - Further R&D is needed on breeding and farming practices³, as well as to assess the impact of the new practices and support technological and organisational innovations at the value chain level⁴.

³ Examples of R&D aspects to be further developed include: specific breeding criteria to address the needs of intercropping and develop minor crops; techniques and technologies for strip cropping and intercropping; tools to assess the benefits of longer rotations in conventional farming; and management tools to support farmers' decision making.

⁴ Examples of technological and organisational innovations needed at the value chain level include: post-harvest management and processing technologies for mixed crops or new crops; new contracts, logistics and organisational modes adapted to crop diversification innovation settings; collection and analysis of value chain success factors.

DiverIMPACTS policy brief: Recommendations for overcoming barriers to crop diversification towards sustainable agriculture.



Deux documents de référence



POLICY BRIEF

Recommendations for overcoming barriers to crop diversification towards sustainable agriculture

Clémentine Antier, Loïc Viguier, Antoine Messéan and Philippe V. Baret

- The diversification of cropping systems is still limited due to barriers occurring at the farm level, along value chains as well as in the coordination between actors.
- Different barriers affect niche and mainstream value chains.
- Future policies should address barriers using a systems approach and should differentiate between innovations in niche and mainstream value chains.
- Barriers can be addressed by monitoring the uptake of crop diversification, reallocating public and private resources towards agroecological practices and value chains based on minor crops, providing financial support to actor networks to mitigate innovation risks, and communication campaigns to promote minor crops.

Introduction

Crop diversification is recognised as a central strategy to improve productivity, delivery of ecosystem services and resilience of cropping systems [1]. It can be achieved by including more crops in existing rotations or cultivating several crops together in a field. Ecosystem services provided by crop diversification include the conservation of biodiversity, preservation of water quality, pesticide-free pest and disease control, improved soil quality, and climate change mitigation [2-5]. Crop diversification can thus be considered key to reaching the EU environmental sustainability targets.

Although multiple benefits of crop diversification have been proven, the development of diversified cropping systems is still limited due to several barriers in the agri-food system. Conventional crop rotations typically last only 3 to 5 years [6], which indicates that limited number of crops are being cultivated. At the EU level, 70% of the annual agricultural crop-ping area is cultivated with only eight species¹.

In this context, a detailed analysis of barriers to crop diversification was undertaken by the DiverIMPACTS project. The analysis aimed to highlight the factors limiting the development of more diversified cropping systems and identify enablers to facilitate the shift to more sustainable food systems. To be effective, these enablers have to be rolled out using a systems approach [8], which takes into consideration all stages and actors in the value chains as well as the interactions between them.

¹ The eight species are: Common wheat and spelt, barley, grain maize, rape and turnip rape seeds, sunflower seeds, and green maize. The annual cropping agricultural area was 85 744 ha, 82% of the EU-28 arable land [7].

DiverIMPACTS policy brief: Recommendations for overcoming barriers to crop diversification towards sustainable agriculture.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727482 (DiverIMPACTS)

DiverIMPACTS Diversification through Rotation, Intercropping, Multiple cropping, Promoted with Actors and value-Chains Towards Sustainability

Report Addressing barriers to crop diversification: key elements of solutions identified across 25 case studies

Work package: 5
Work package leader: Philippe Baret (UCLouvain)
Report leader: Clémentine Antier (UCLouvain)

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CO Confidential, only for members of the consortium (including the Commission Services)	

Research and Innovation action: GA no. 727482
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- www.sytra.be
- www.diverimpacts.net
- www.intercropvalues.eu



transition of
food systems

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