Wat zou het effect zijn van de groei van de bioproductie in België op milieu, natuur en klimaat ?

Philippe Baret, UCLouvain

BioForum
SECTORORGANISATIE BIOLANDBOUW EN -VOEDING

23.09.2024

SYTRA transition of food systems

VISITEZ NOTRE SITE WEB : WWW.SYTRA.BE

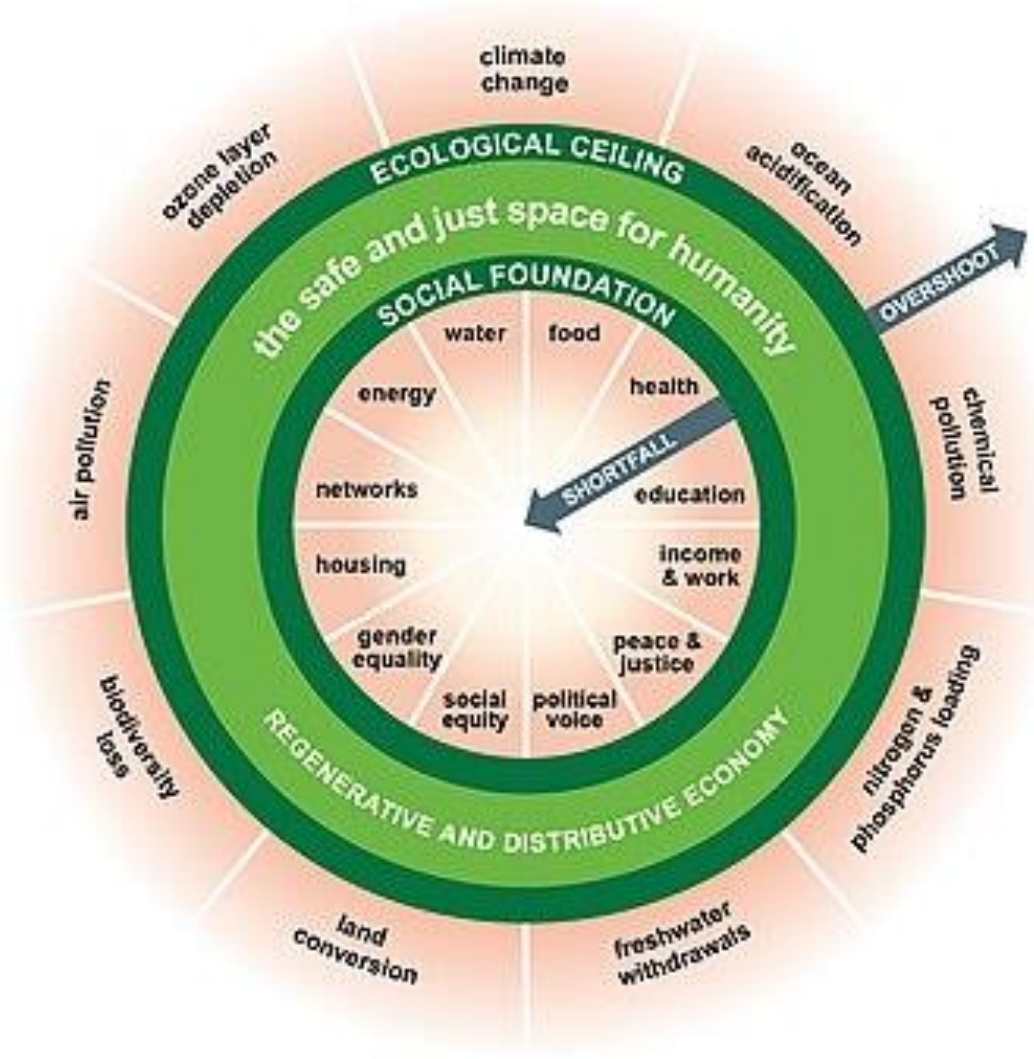
What is the impact of the increasing share of organic farming on the overall sustainability of the Belgian food system?

The challenge is not to compare organic and non-organic food systems, but rather to make the entire mix of food systems more sustainable.

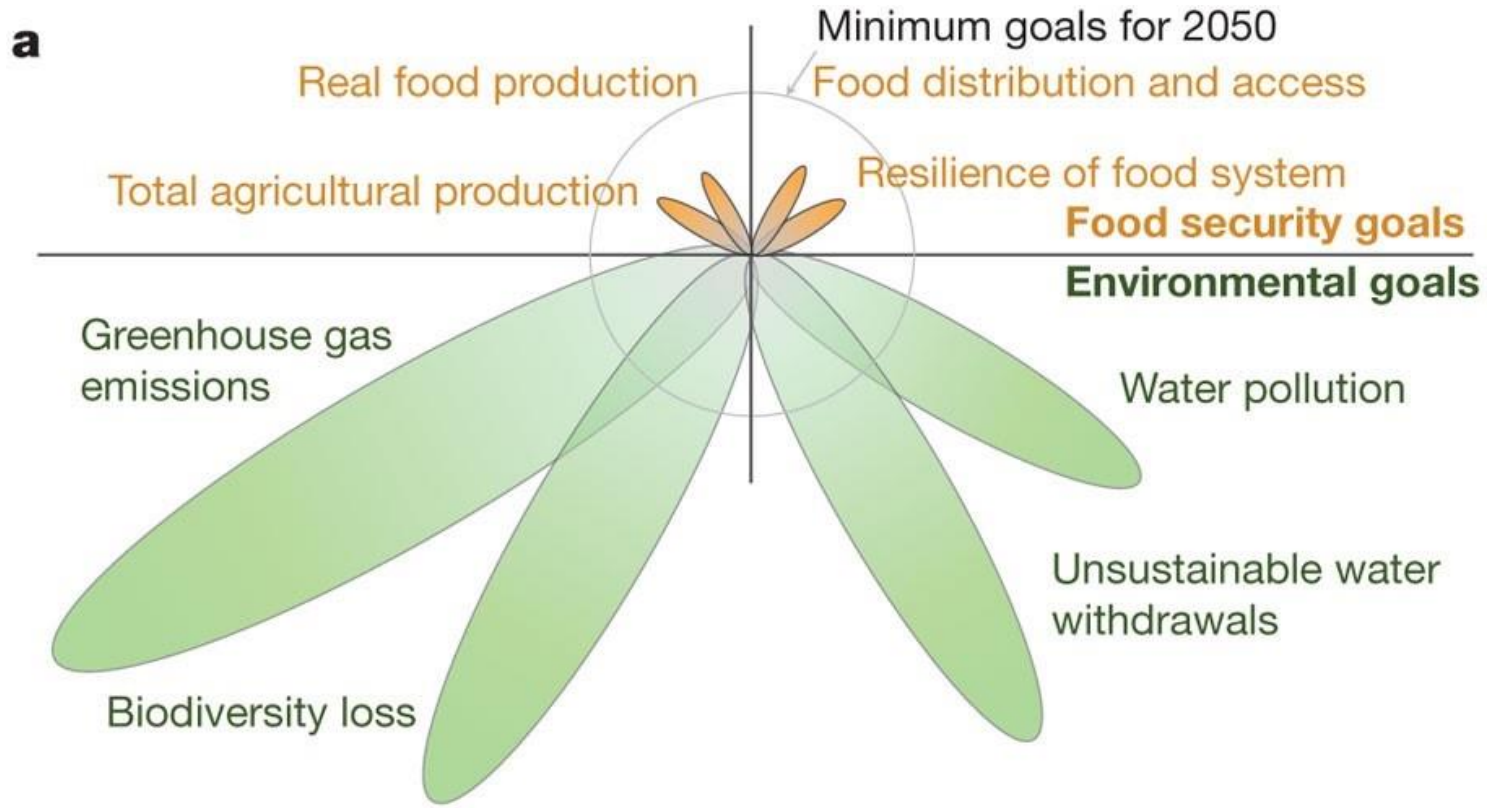
What ?

Challenges and state of the food system

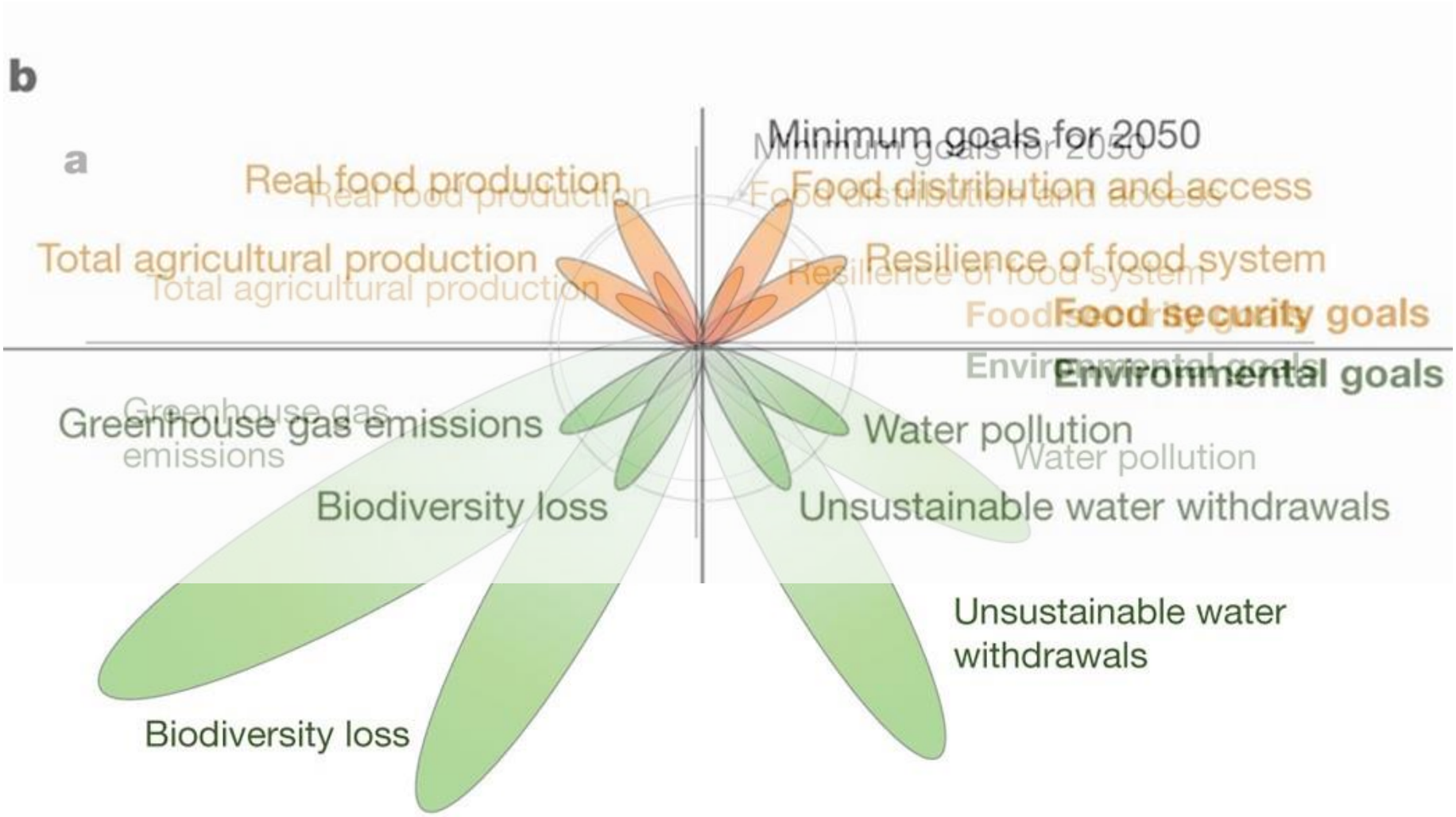
Challenges to the global sustainability



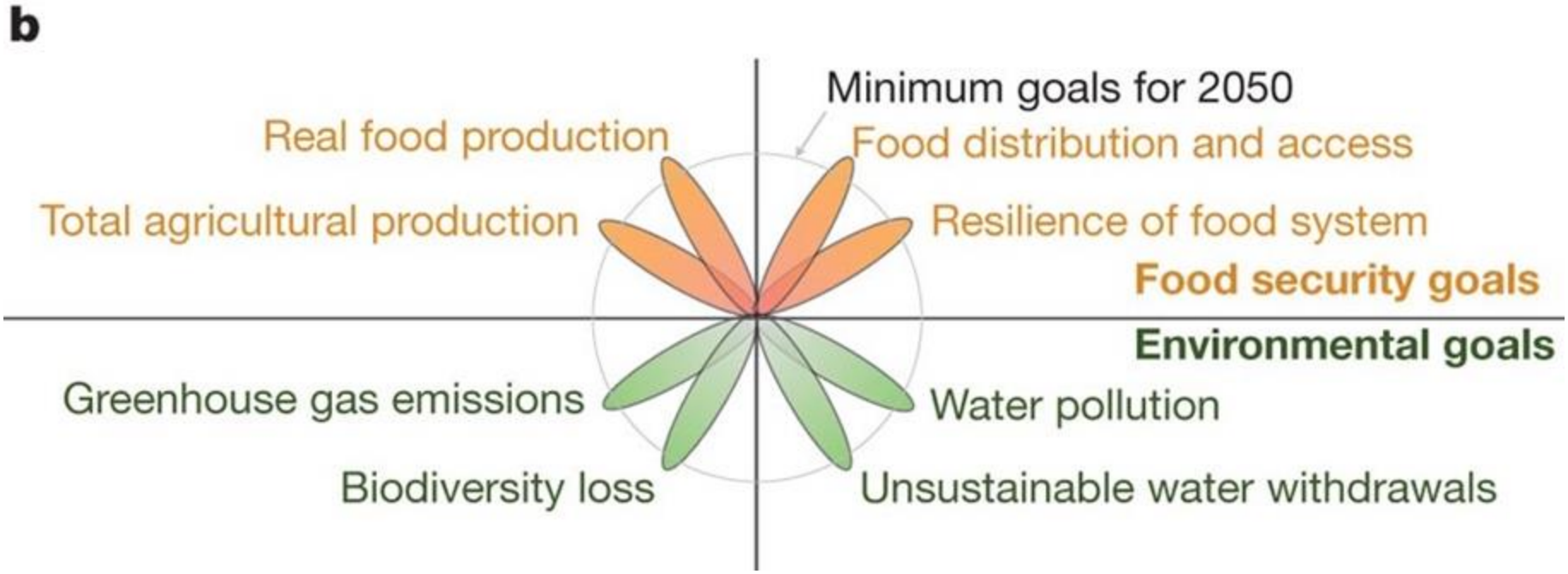
The today food systems are unsustainable



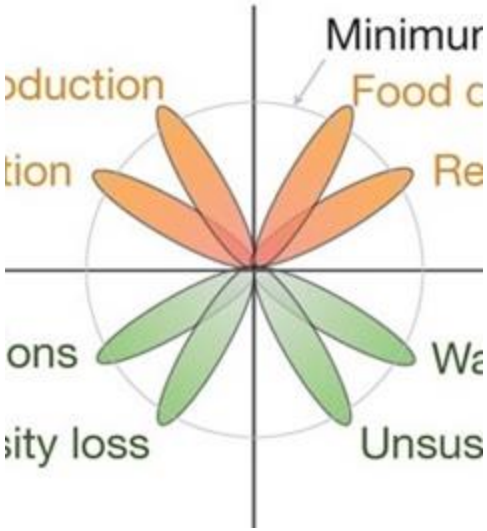
The challenges are huge



The challenges are huge



The challenges are huge



Is organic farming the best option to address all these challenges ?

No !

Comparative performances of organic ..

No system is perfect !

Figure 5 : Comparison of impacts of organic and conventional farming

From competition to cooperation

Is organic farming the best option to address all these challenges ?

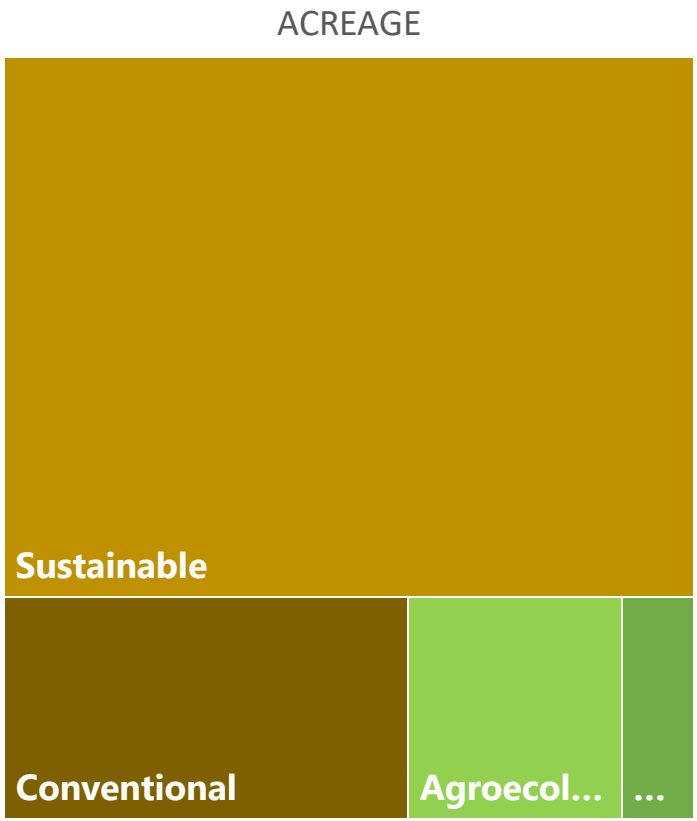
No !

Is organic farming the best option to address most of these challenges ?

Yes !

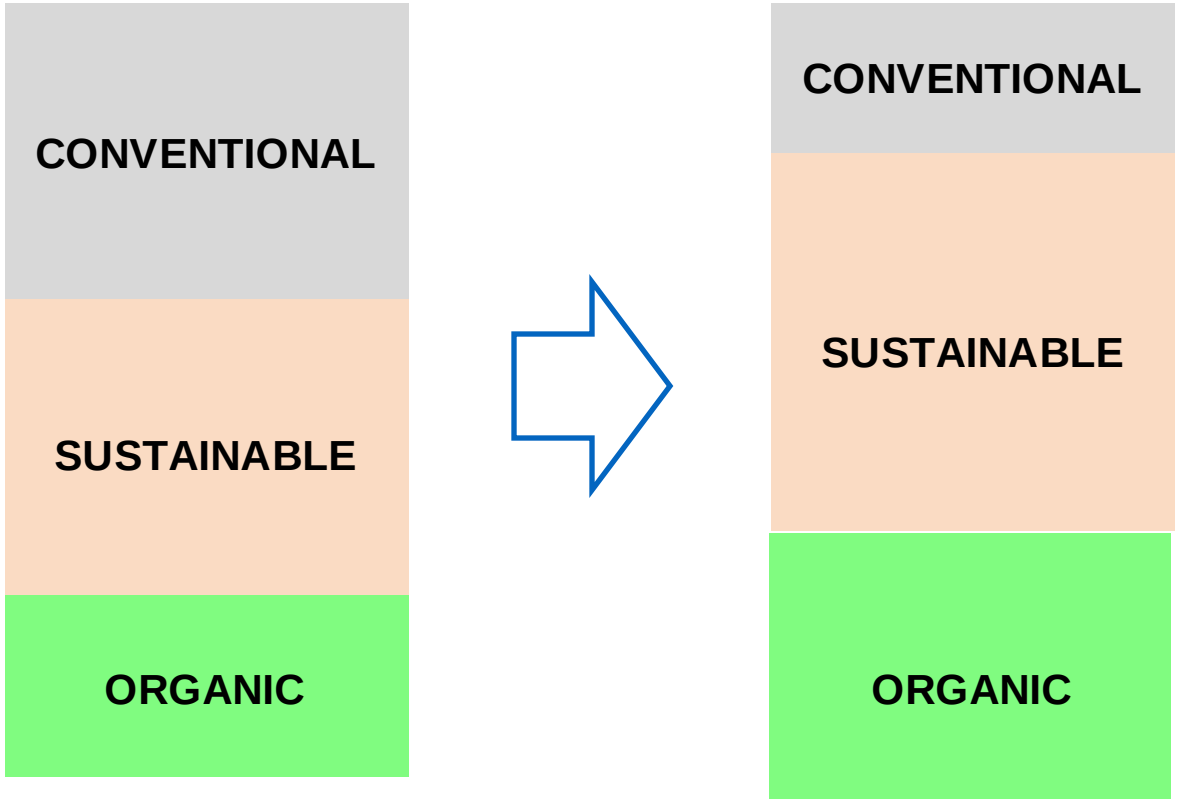
Share of land, share of production, share of impacts

Cereal production in Wallonia is a mix

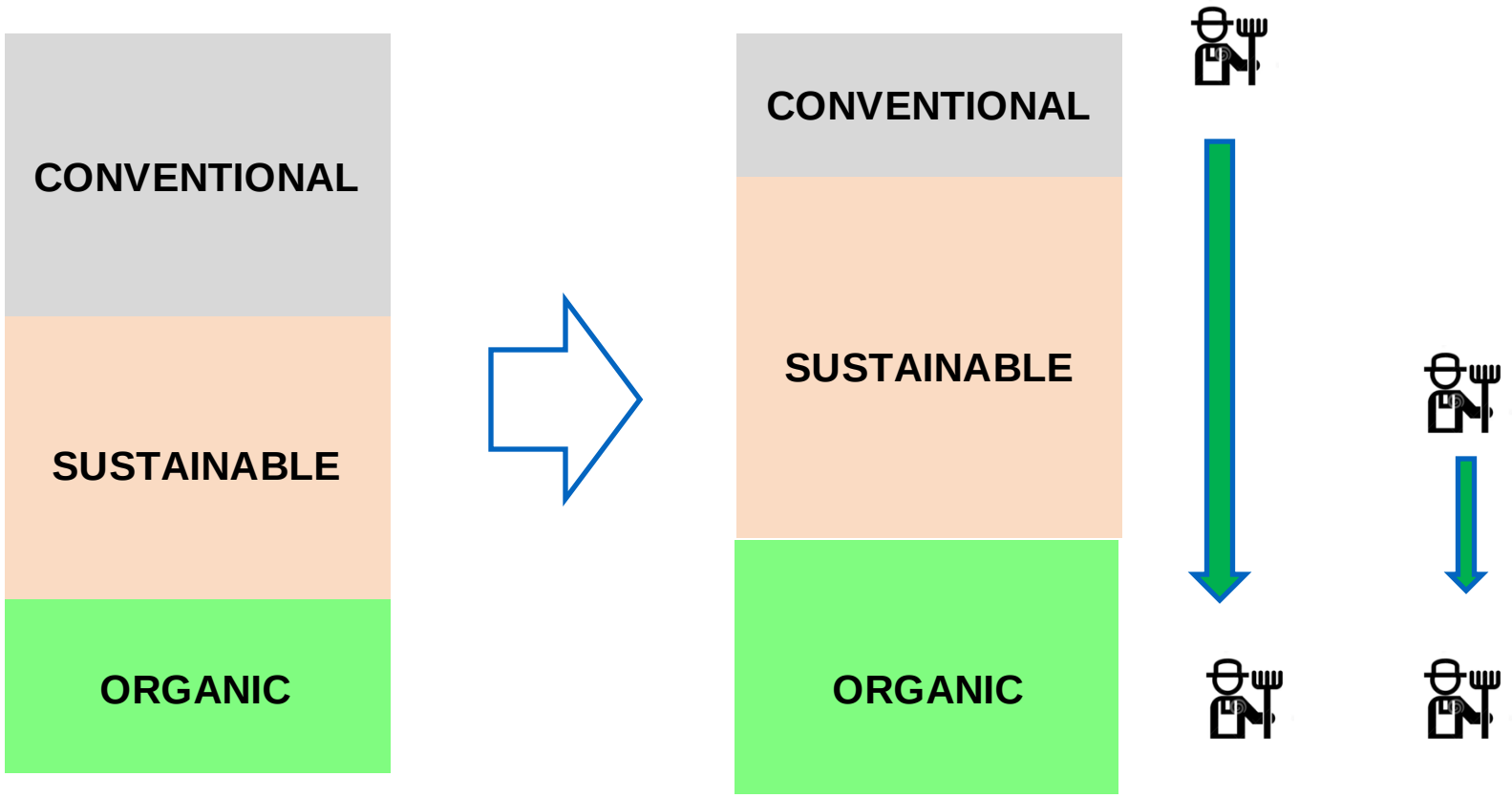


	Acreage	Production	Pesticides
Organic	3%	2%	0%
Agroecological	9%	7%	4%
Sustainable	71%	72%	70%
Conventional	17%	19%	26%

Change the share of models, to decrease impacts



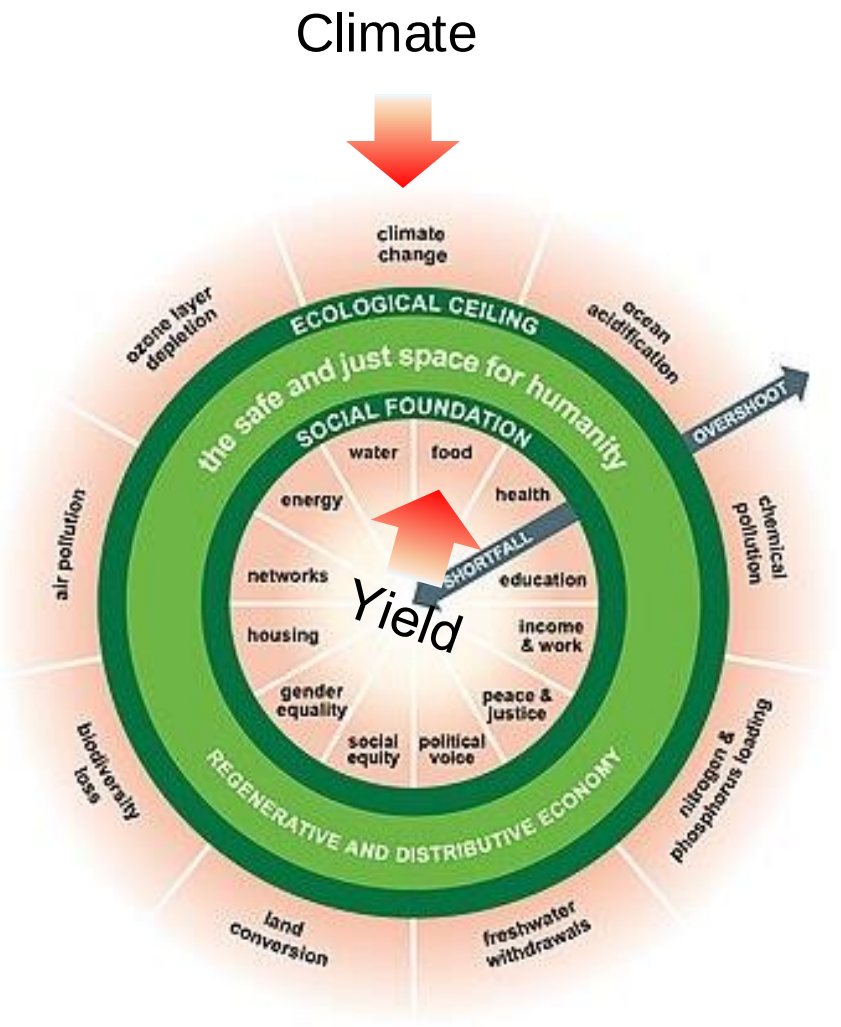
Differential impacts



Be serious

- **Conversation such as …**
  - **« Organic farming is not productive enough »**
  - **« Organic farming is not the most efficient solution for climate issue «**

  … are useless as we need a comprehensive approach.



The target

- **One target**

30 %
organic

2030

- **Why 30 %, for three reasons**
  - **It will contribute to a more sustainable global food system**
  - **It is future proofed**
  - **It is feasible**

It is feasible

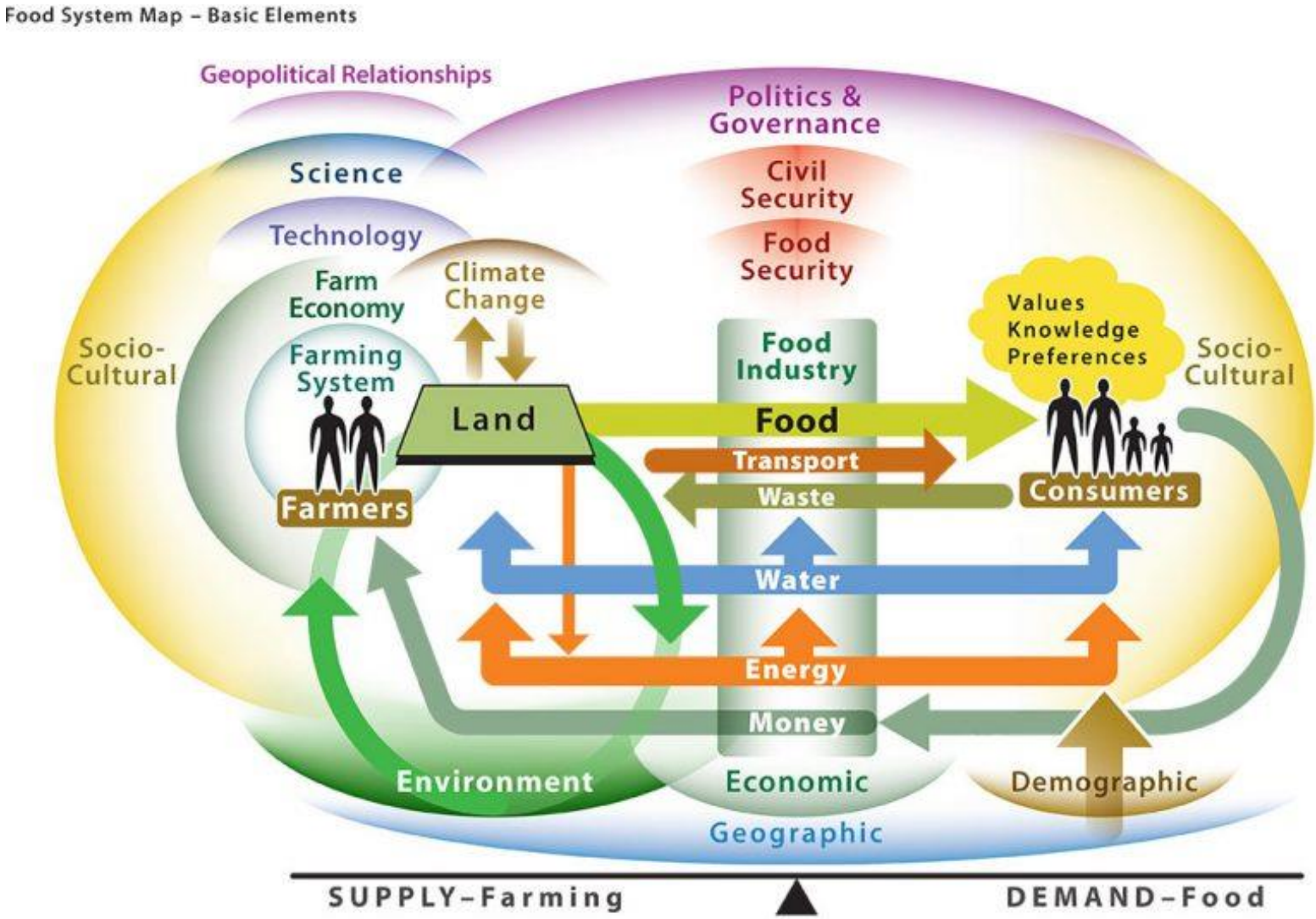
- **More organic will improve our sustainability**
- **More organic farming requires a shift of usage :**
  - **new diets,**
  - **new consumption pattern,**
  - **less exportation,**
  - **less waste**
- **More organic will increase our food sovereignty**

Key messages

- **Challenges are diverses**
- **Addressing all challenges suppose to shift from a linear approach (yield) to a systemic approach**
- **Organic model is addressing a lot of challenges, not creating new problems and future proofed.**
- **Organic model is not the perfect model but all agricultural models are based on tradeoffs.**

- **Adressing the challenges suppose to increase the SHARE of organic models in our farm and FOOD systems -> 30 %**
- **Another big issue is the pathway of the 70 other percent : the models of today are**

Food systems



How ?

How to reach 30 % in 2030

- **Create relevant alternatives**
- **Pressure the unsustainabilities of the system**
- **Increase the share of relevant farm and food systems**

ELSEVIER

Research Policy
Volume 36, Issue 3, April 2007, Pages 399-417

Typology of sociotechnical transition pathways

Frank W. Geels, Johan Schot
Show more

https://doi.org/10.1016/j.respol.2007.01.003

Abstract

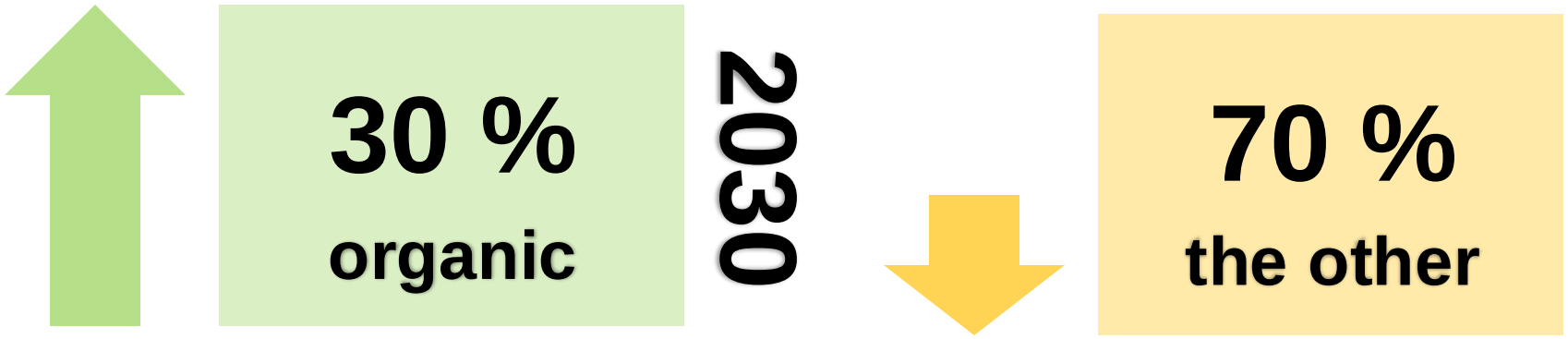
Contributing to debates about transitions and system changes, this article has two aims. First, it uses criticisms on the multi-level perspective as stepping stones for further conceptual refinements. Second, it develops a typology of four transition pathways: transformation, reconfiguration, technological substitution, and de-alignment and re-alignment. These pathways differ in combinations of *timing* and *nature* of multi-level interactions. They are illustrated with historical examples.

Create relevant alternatives

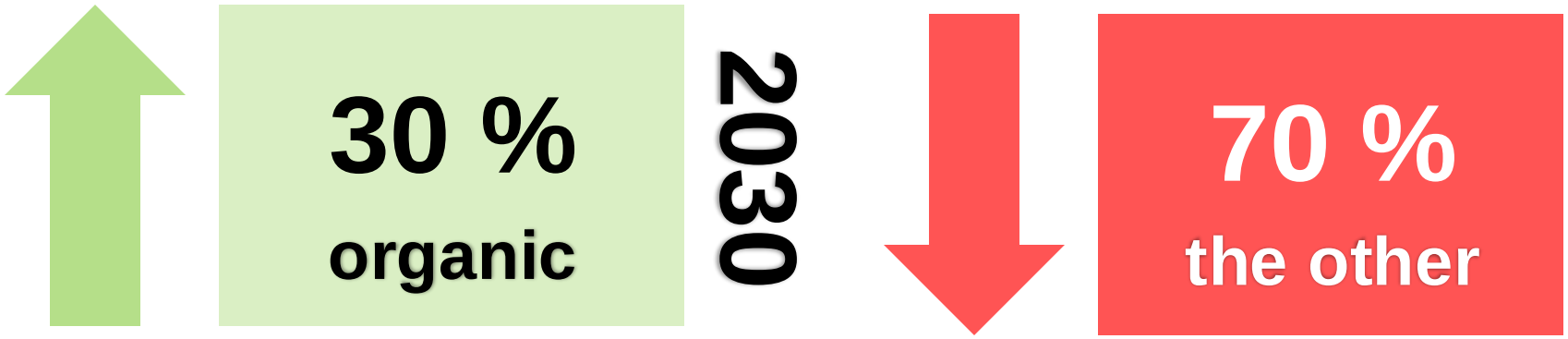
- **Embed the technical »performance » in a global assessment of the food systems sustainability**
- **Two criteria :**
  - **Relevance -> doesn't create new problems**
  - **Impact -> contribute to a global best**

- **Most of the lock ins to the development of organic food systems are at the value chain level and are underexplored**

Pressure the unsustainabilities of the system

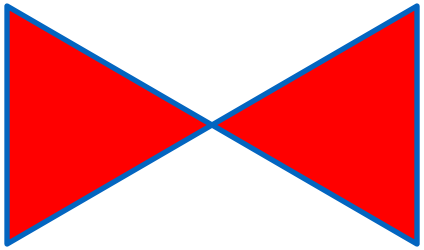


Pressure the unsustainabilities of the system



Pressure the unsustainabilities of the system

30 %
organic



70 %
the other

A battle of narratives

More local food - Belgian pears

Upward trend of Candidates for Substitution residues in fruits produced in Europe from 2011 to 2019

Pears

Trend

Between 2011 and 2019, 9,409 pears were tested for pesticides. In 2011, 25% of the pears were contaminated with one or more Candidates for Substitution. Contamination increased to 47% in 2019. Based on the trendline, there has been a doubling (+103%) of contamination with Candidates for Substitution (Figure 12).

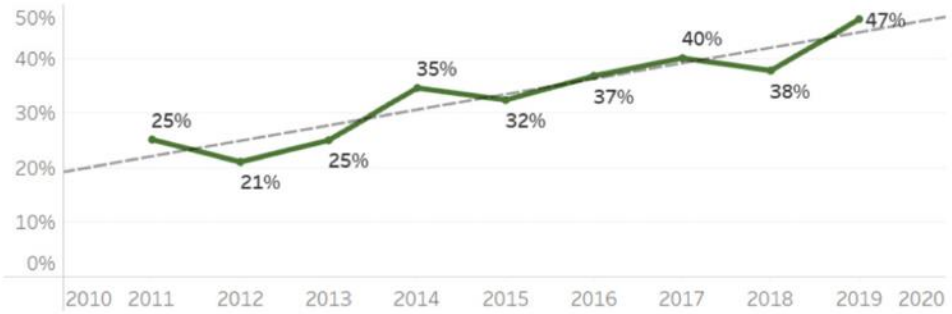
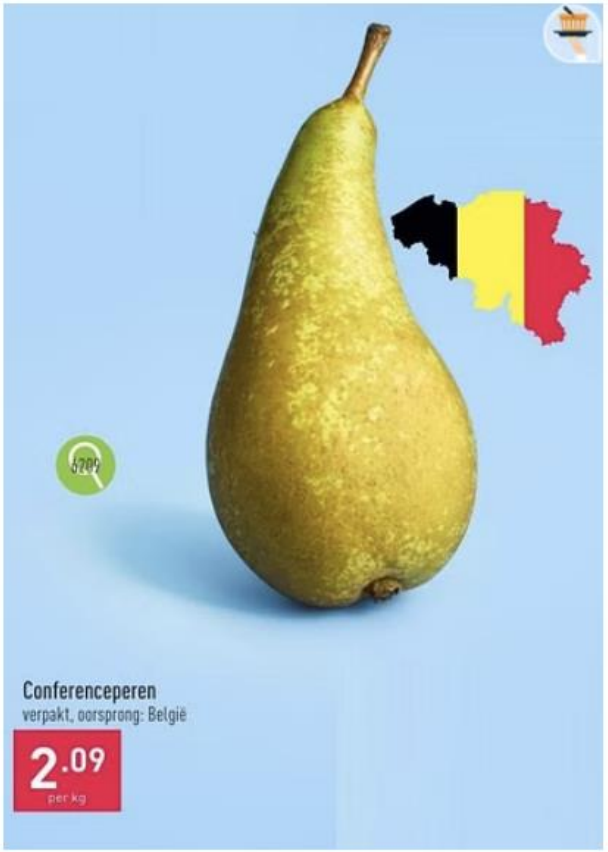


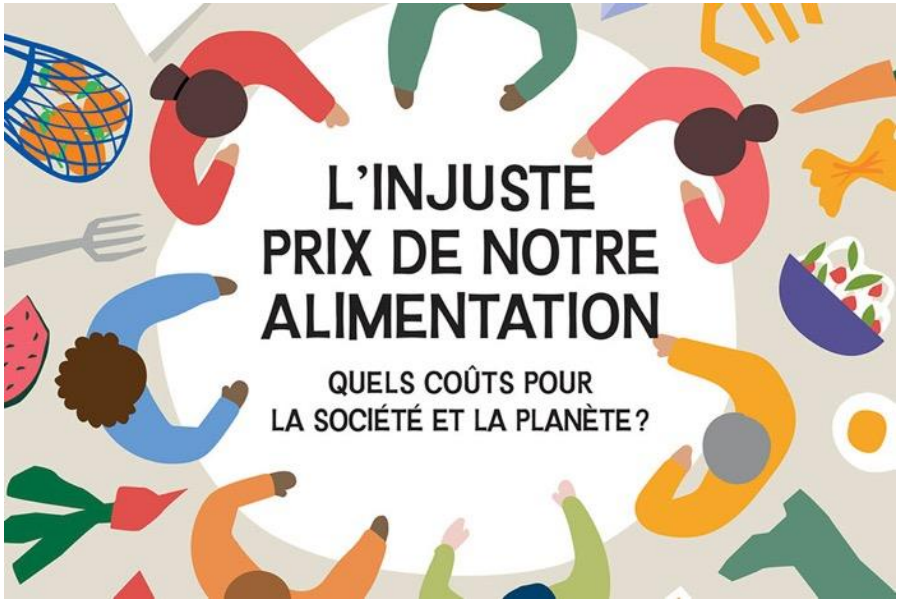
Figure 12. *Increase of the % of pears contaminated with Candidates for Substitution*



https://www.pan-europe.info/sites/paneurope.info/files/public/resources/reports/ForbiddenFruit_01.pdf

»We sell what they want to buy «

Consumers are not free !



5.5 billions €

Marketing expenses in agri-food

France - 2023

»We sell what they want to buy «

5.5 billions €

Marketing expenses in agri-food

France - 2023

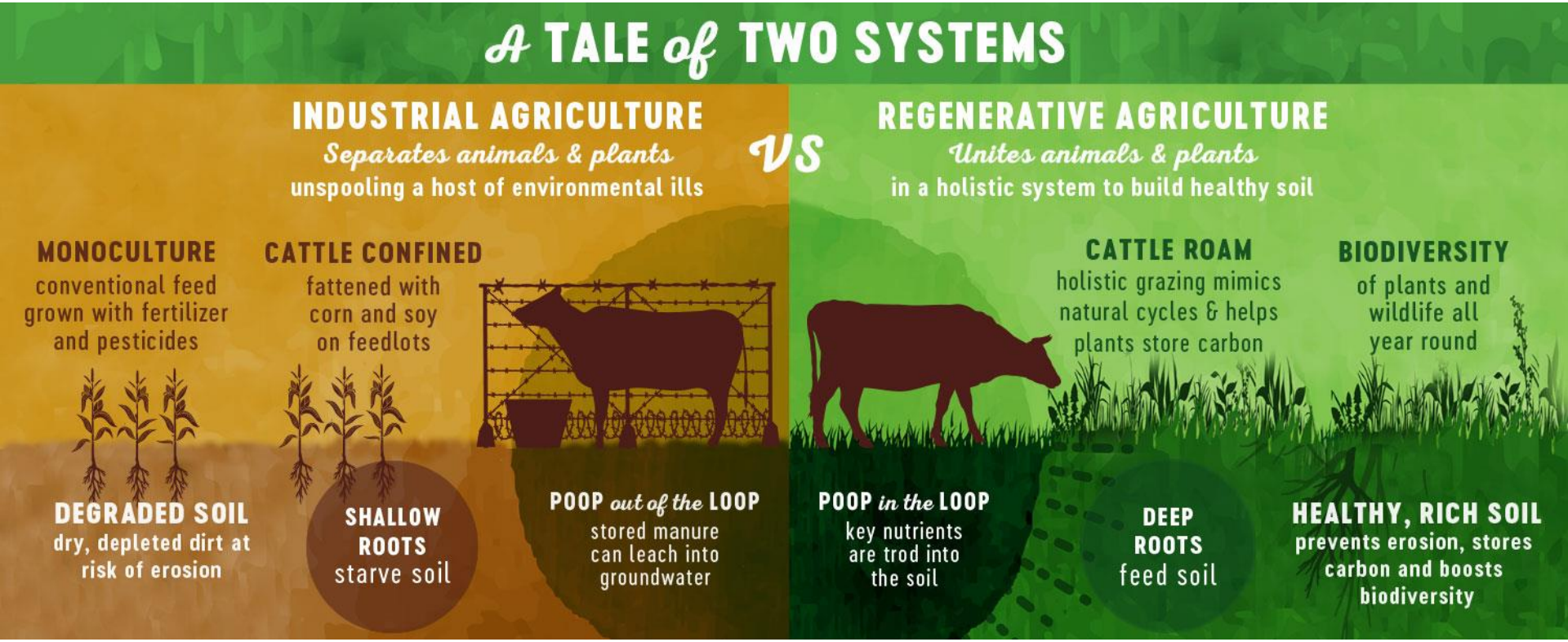
11 billions €

Health impacts of food systems

France - 2023

The climate – conservation agriculture plot

The regenerative farming poto poto



The regenerative farming poto poto

100%

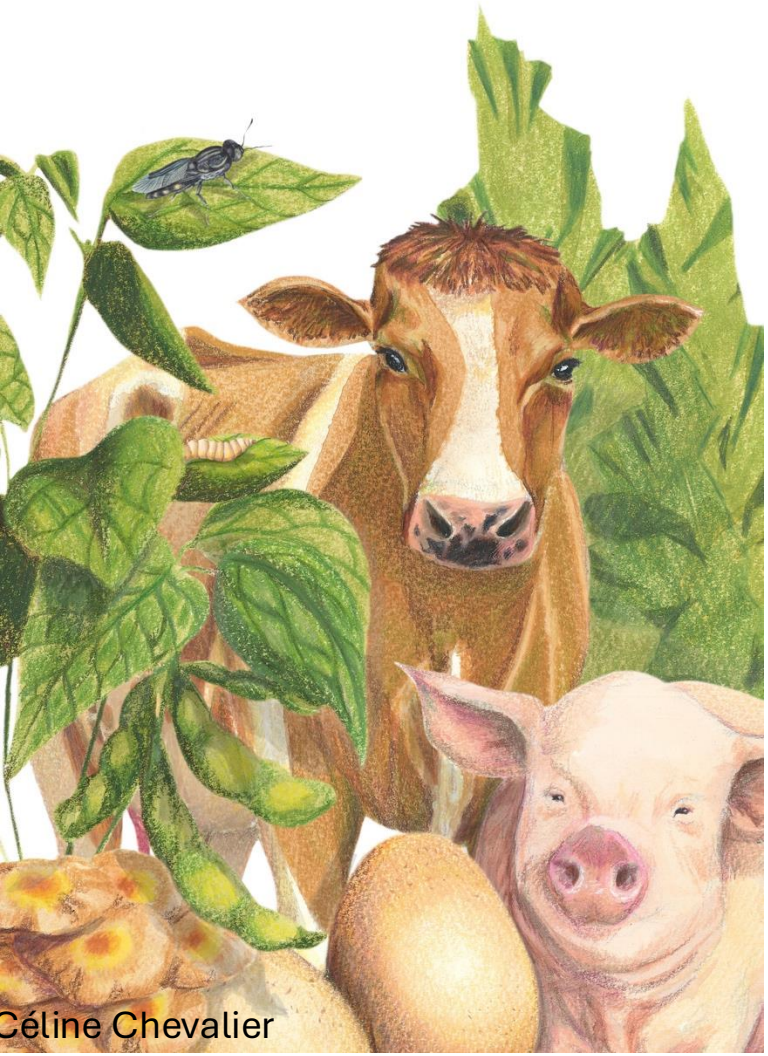
DES MATIÈRES PREMIÈRES DE DANONE CULTIVÉES EN FRANCE SERONT ISSUES DE L'AGRICULTURE RÉGÉNÉRATRICE

The regenerative farming poto poto

Organic regenerative farming is the option

Absolute requirements

- **A value chain approach**
- **Integration of the overconsumption**
- **Multi criteria – donut model**
- **Global consistency**


Céline Chevalier

The paradoxes of the protein transition

Duluins Océane (Presenter) & Philippe Baret

187th Seminar of European Association of Agricultural Economists

12-14 June 2024

Overconsumption & exportation are key elements

Perspective https://doi.org/10.1038/s43016-024-01036-4

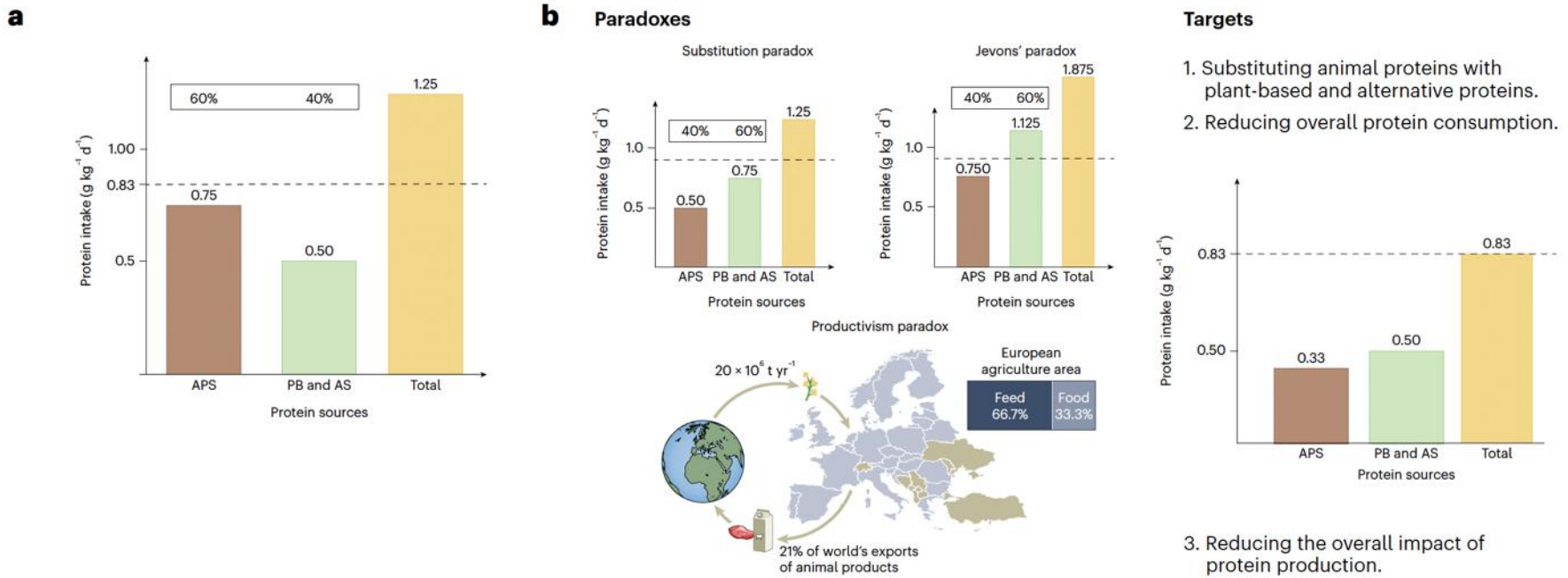
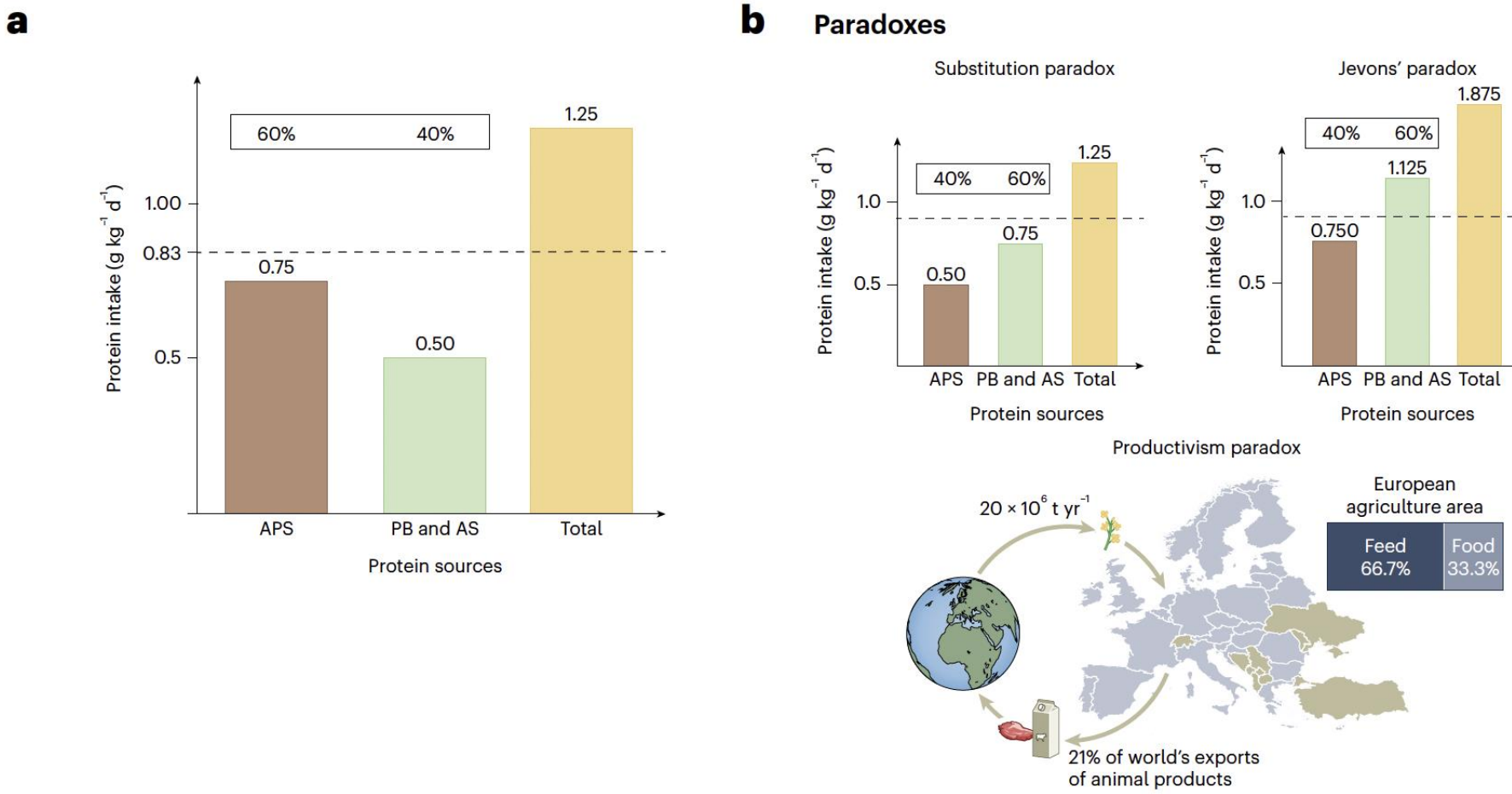


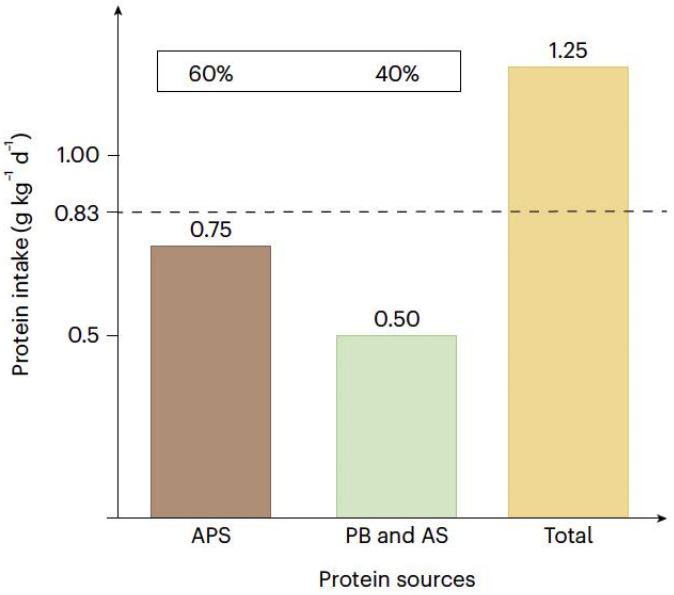
Fig. 1 | The paradoxes of the protein transition. a, The current situation. **b**, The paradoxes (left) and targets (right) of the protein transition. The recommended protein intake (dashed horizontal line in all plots) is from the European Food Safety Authority and Food and Agriculture Organization recommendations[15,16]. The targets are derived from multiple sources, including refs. 1,17,20. APS, animal protein sources (including meat from domesticated animals, fish and seafood, dairy products, eggs, and game meat); AS, alternative protein sources (including novel plant-based substitutes (often referred to as meat mimics or analogues), lab-grown proteins (such as cultivated or cellular proteins) and processed products from insects); PB, plant-based protein sources (including traditional protein preparations such as tofu and seitan, whole foods, legumes, grains, seeds or mushrooms).

Overconsumption & exportation are key elements



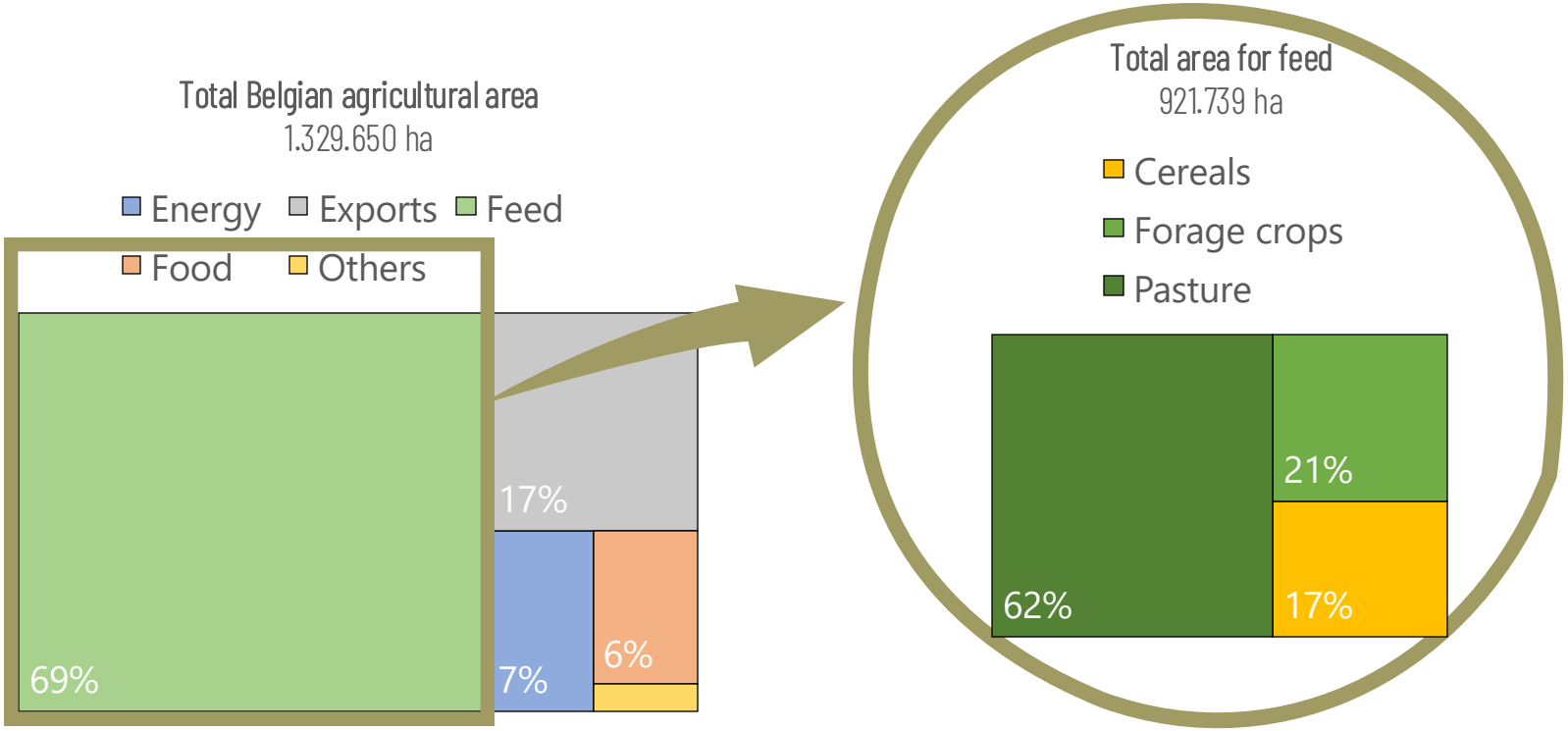
Overconsumption is the elephant in the room

a



Use of production – current situation

Nearly 70% of agricultural land is used for animal feed (>900.000 ha) while only 6% are directly destined for used for food production.



Key issues for research

- **Research for framing research**
- **Global assesment of farm and food systems**
- **Rebalance research investment in favor of more systemic approach**
- **Improve the science policy interface**

- **A barometer of food systems including the impact of the « share of organic »**

What is missing ?

We miss ….

An articulation between the level of policies and the level of farming practices

A comprehensive approach of organic farming

A competitive and relevant narrative

SYTRA

transition of
food systems

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