

How Agri-Environmental governance can(not) help pursuing biodiversity protection

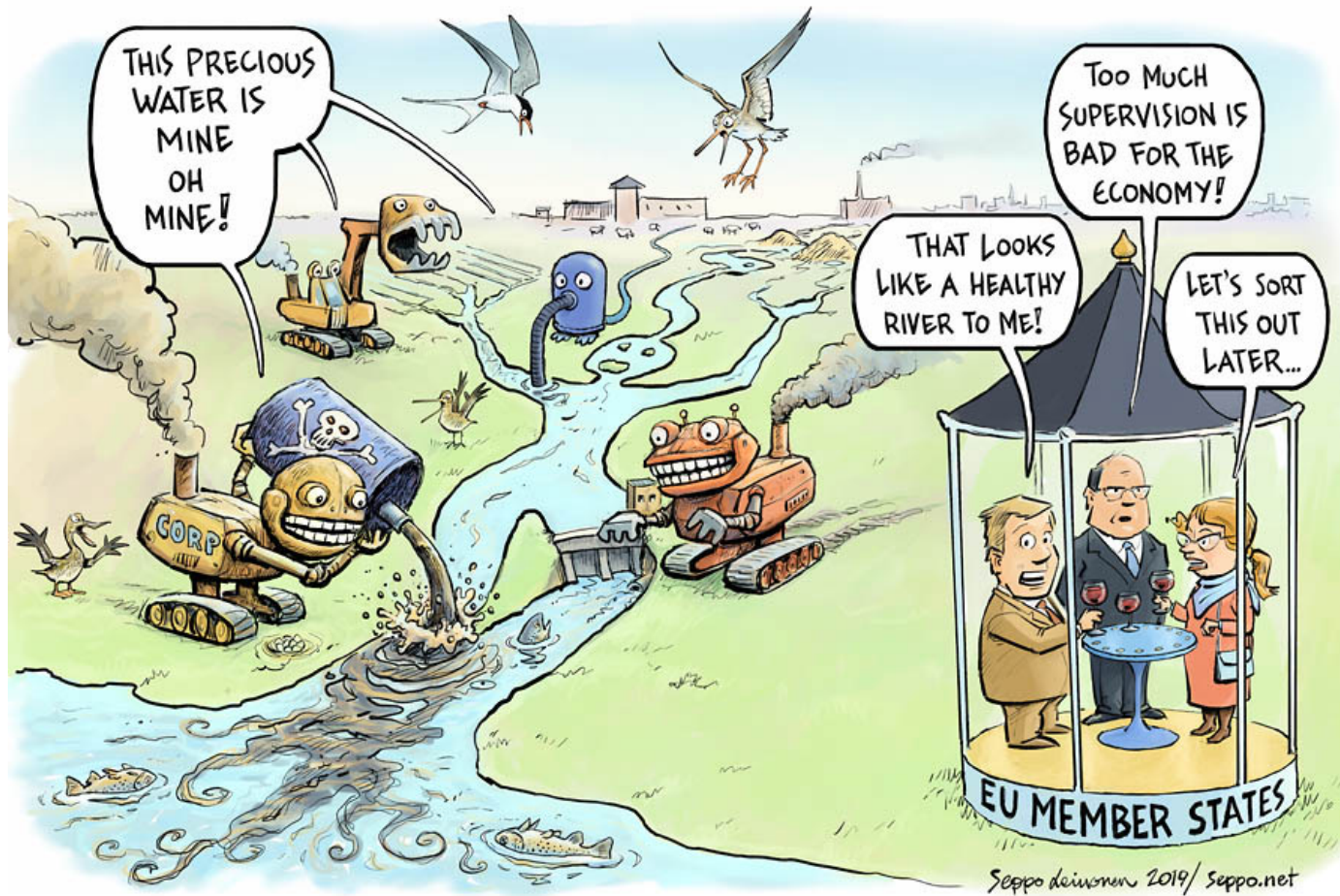
ECPR 2024 General Conference

Panel: 360 degree Activism and the Inside Activist in Politics

Presenter: Diana Borniotto

14 August 2024





Biodiversity loss has been high in policy agenda lately



Home / News / Energy & Environment / Biodiversity / New biodiversity policies demanded for EU's green, prosperous growth

New biodiversity policies demanded for EU's green, prosperous growth



Energy, Climate change, Environment

Environment



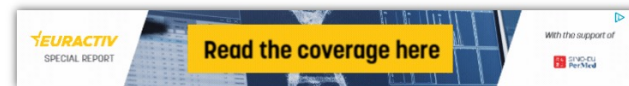
UN News
Global perspective Human stories

Biodiversity: What is it

Home > News > Halting biodiversity loss: EU outlines achievements 1 year after adoption of global plan for nature and people

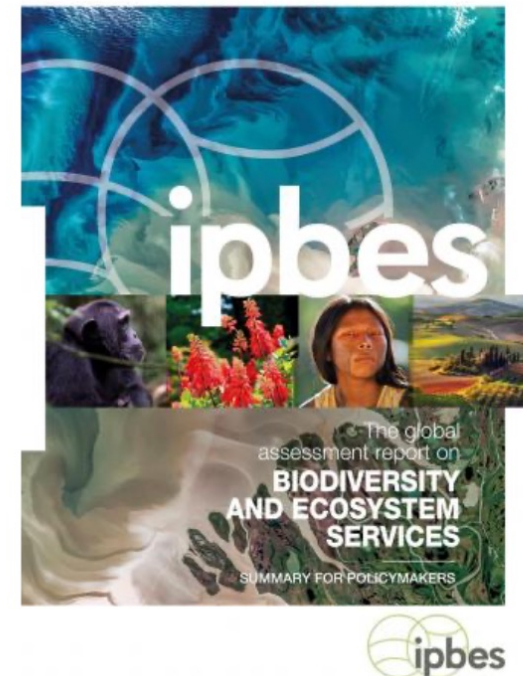
NEWS ARTICLE | 19 December 2023 | Directorate-General for Environment | 6 min read

Halting biodiversity loss: EU outlines achievements 1 year after adoption of global plan for nature and people



Home / News / Energy & Environment / European Green Deal / EU tables 'Nature Restoration Law' to reverse biodiversity loss

EU tables 'Nature Restoration Law' to reverse biodiversity loss



Agriculture as main driver of biodiversity loss

Research is pointing out that one of the main driver of biodiversity loss is agriculture and related farming practices

MINI REVIEW

Agriculture and biodiversity conservation: opportunity knocks

Ken Norris

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Keywords

Threatened species; agricultural intensification; land-use gradient; ecosystem; ecosystem services; multifunctional landscapes.

Correspondence

Abstract

The fact that the expansion and intensification of agriculture has been the major driver of past biodiversity loss and ecosystem degradation globally is beyond dispute. It is highly likely that these trends will continue through the 21st cen-

Research Paper Food system impacts on biodiversity loss for food

Articles

Agriculture and biodiversity: a review

Nigel Dudley & Sasha Alexander

Pages 45-49 | Received 04 Jul 2017, Accepted 04 Jul 2017, Published online: 28 Jul 2017

Cite this article <https://doi.org/10.1080/14888386.2017.1351892>

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Full Article Figures & data References Citations Metrics

Abstract

Agriculture is the largest contributor to biodiversity loss with expanding impacts on consumption patterns and growing populations. Agriculture destroys biodiversity habitats to intensely managed systems and by releasing pollutants, including pesticides. These chains further amplify impacts including through energy use, transport and

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n versus

CellPress

Evolution

Society

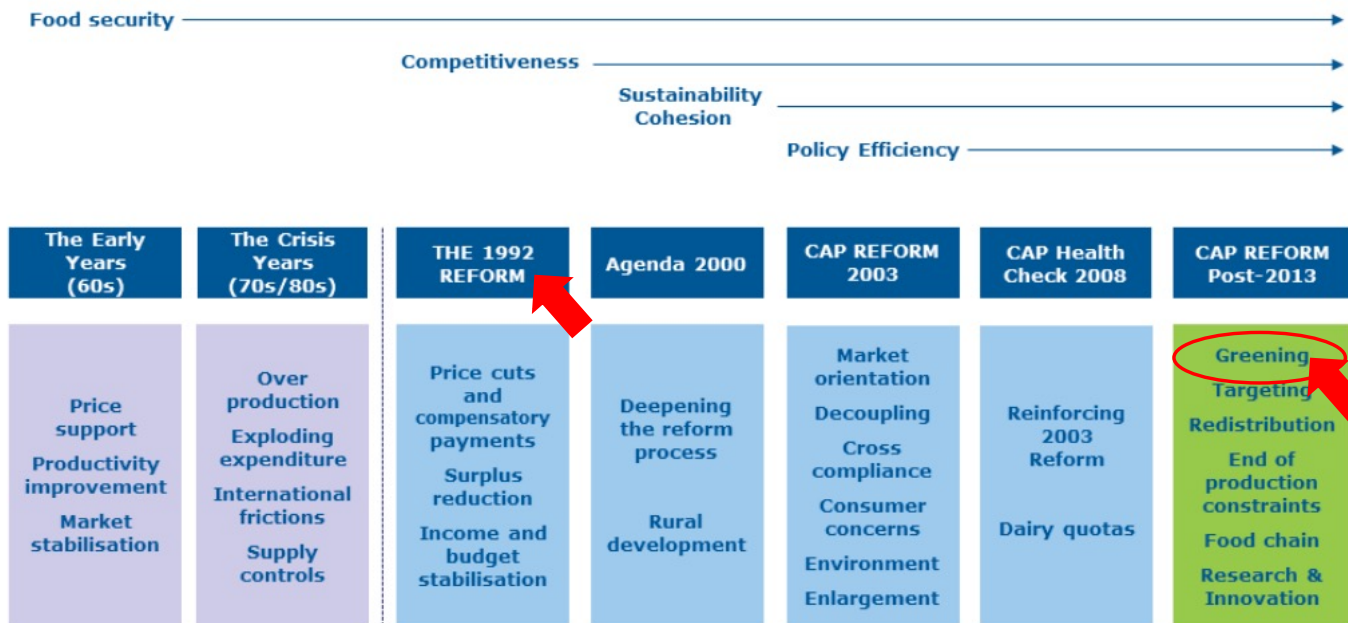
European
landscapes:
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people 1,*

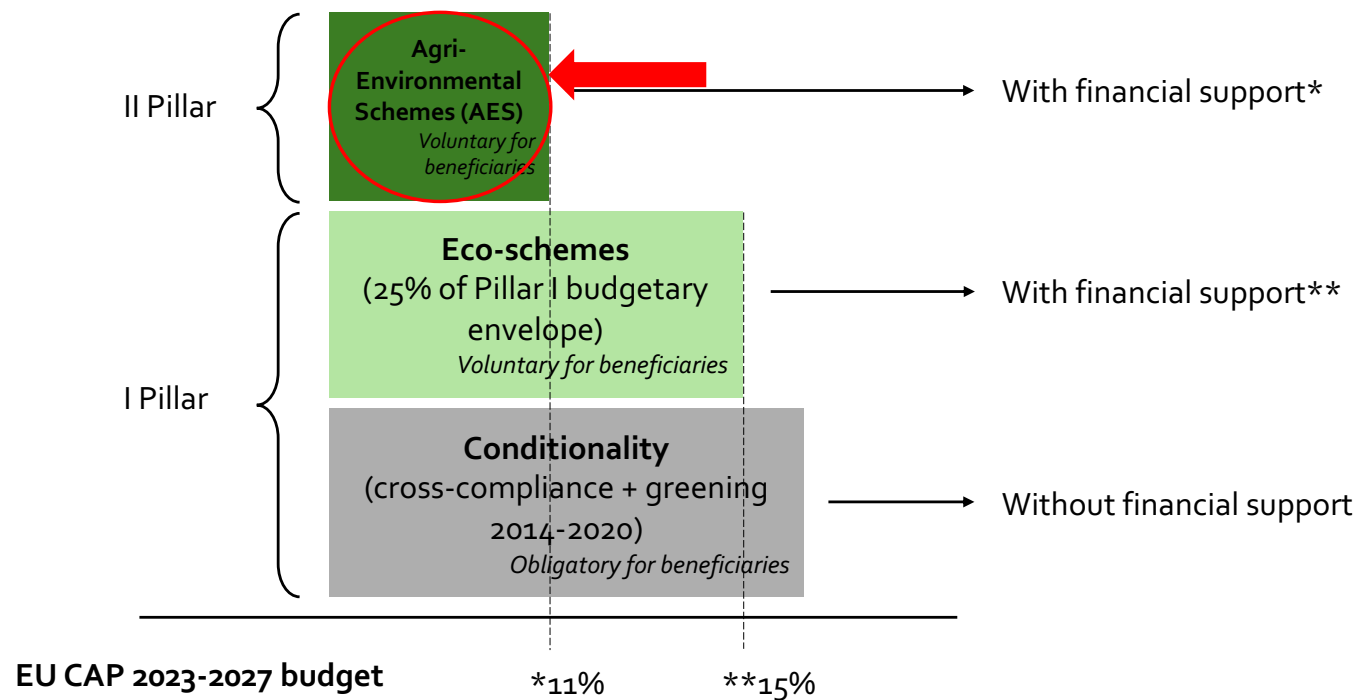
At the same time, sustainable agricultural production relies on biodiversity providing fertile soils and regulating ecosystem services [1]. Beyond the value that biodiversity has in sustaining food production, multiple other values motivate the conservation of biodiversity and these values are the foundation of well-developed ethics of conservation. At the same time, sustainable agricultural production is influenced, amongst others, by subsidies, supply, and demand. Biodiversity is an external effect and has thus no market value. At the same time, it is a public good and external benefits of pollinators, for example, sum up to several thousand US dollars per hectare at the global scale [5].

How do public policy respond to the issue?

Historical development of the CAP (1962 →)



The CAP green architecture as a way forward



But what are Agri-Environmental Schemes (AES)?

- AES are public subsidies schemes designed to compensate farmers for implementing agri-environmental measures
- They entails a series of farming practices with 'positive' environmental impact (e.g. flower strips, hedges)
- They are co-funded (at least) by EU and MS
- They are (often) managed by public administration

There has been criticism of their environmental outcomes

- Research often points out limited environmental impacts (ecological perspective)
- Critized also the efficiency of their design (economic perspective)
- Some studies mention aspects of governance affecting their environmental outcomes

The AES governance literature

- While studying AES, the focus on governance is quite recent
- An interdisciplinary setting (e.g. economics, governance and public policy, sociology, ecology)
- Some converging elements characterizing the AES governance:
 1. Diversity of actors
 2. Complex interactions
 3. Institutional arrangements
 4. Multi-level framework (*yet no formal definition of those levels...*)



How does AES governance link to AES environmental outcomes?

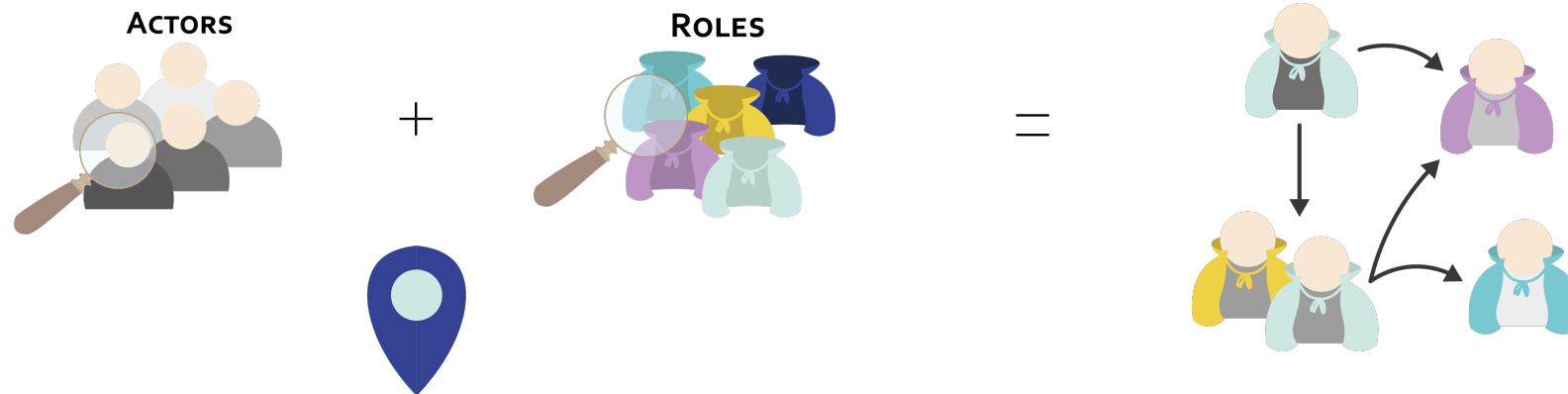
1. What the AES governance framework is
 2. A link to environmental outcomes
- o. (well, actually we also need a study area)





The first research object is the AES governance

Baseline from Sattler et al. 2023

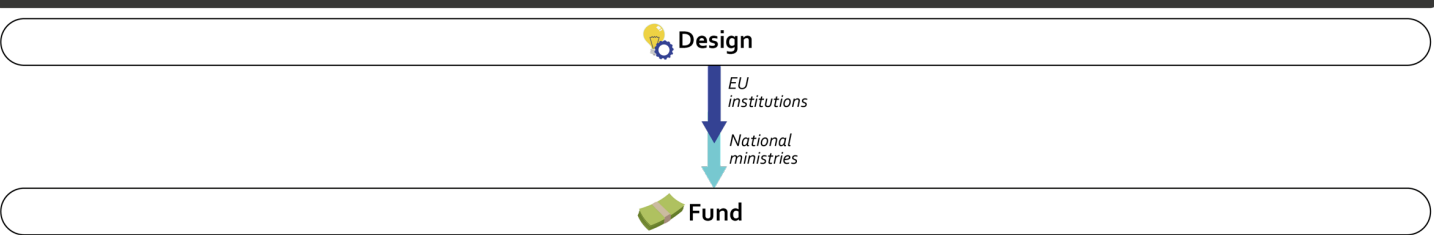


The AES governance of the Hauts-de-France is complex

- 9 roles
- 13 actor types
- 5 geographical scales



POLICY LEVEL



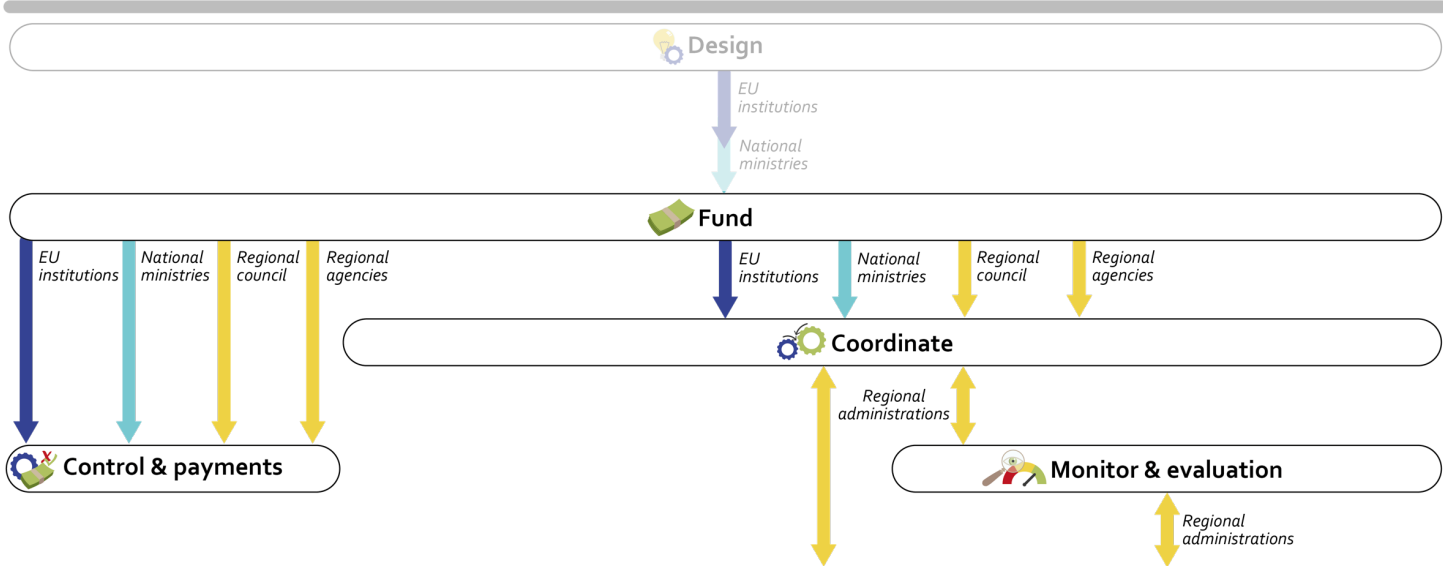
LEGEND

Geographical scale

- EU
- National
- Regional
- Departmental
- Farm



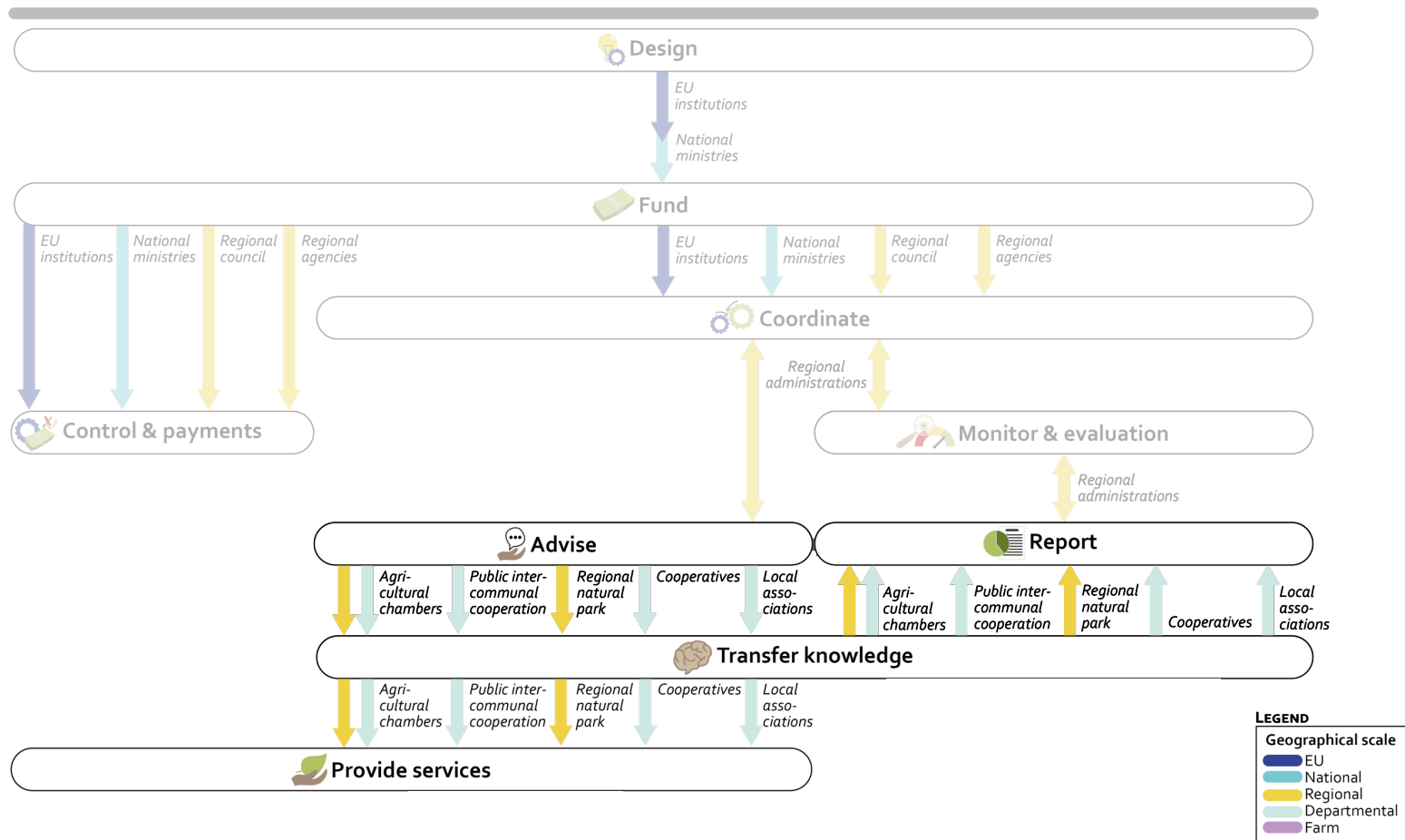
POLICY LEVEL



LEGEND

Geographical scale	
EU	Dark Blue
National	Light Blue
Regional	Yellow
Departmental	Light Green
Farm	Purple

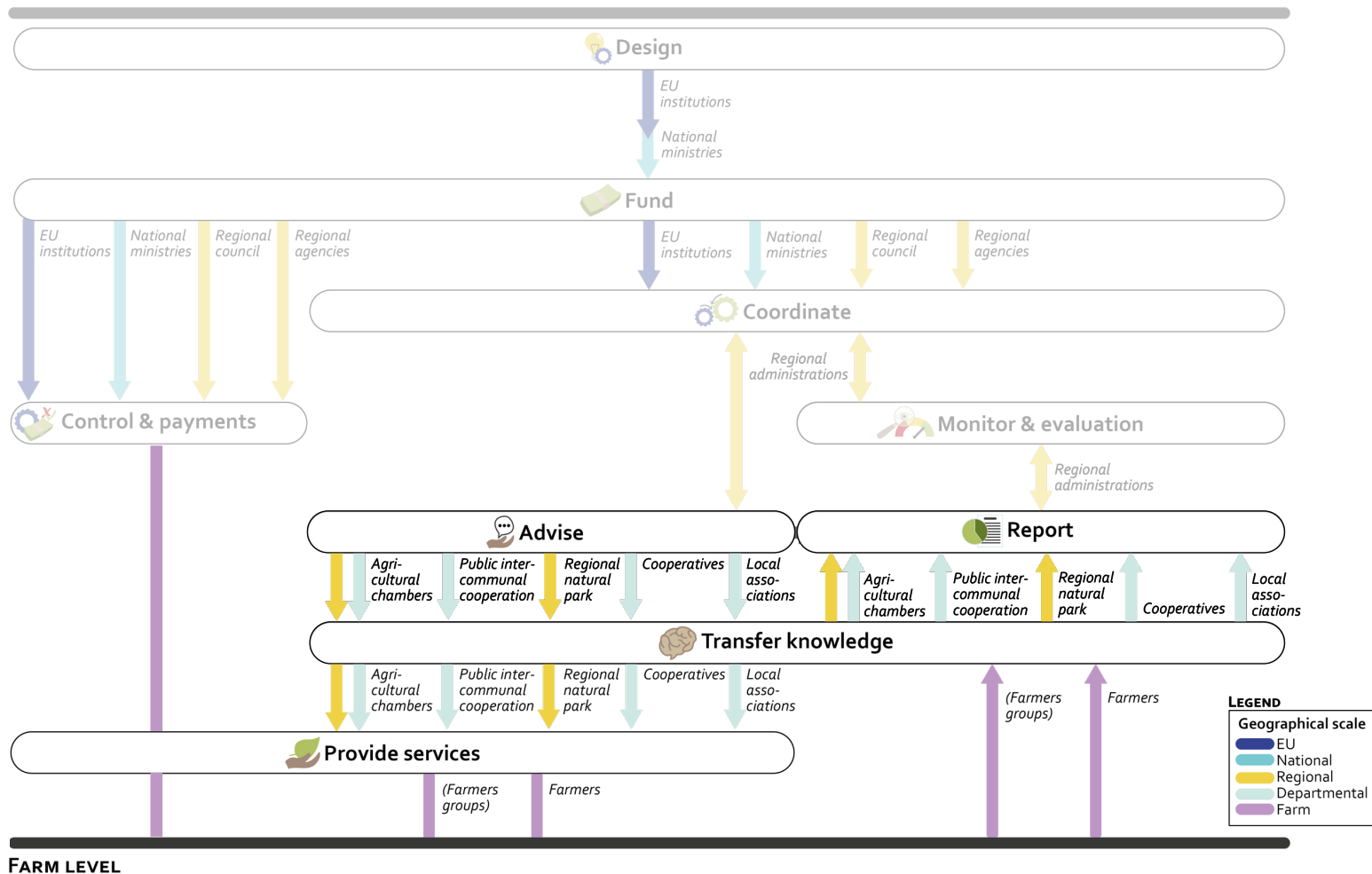
POLICY LEVEL



FARM LEVEL



POLICY LEVEL



FARM LEVEL



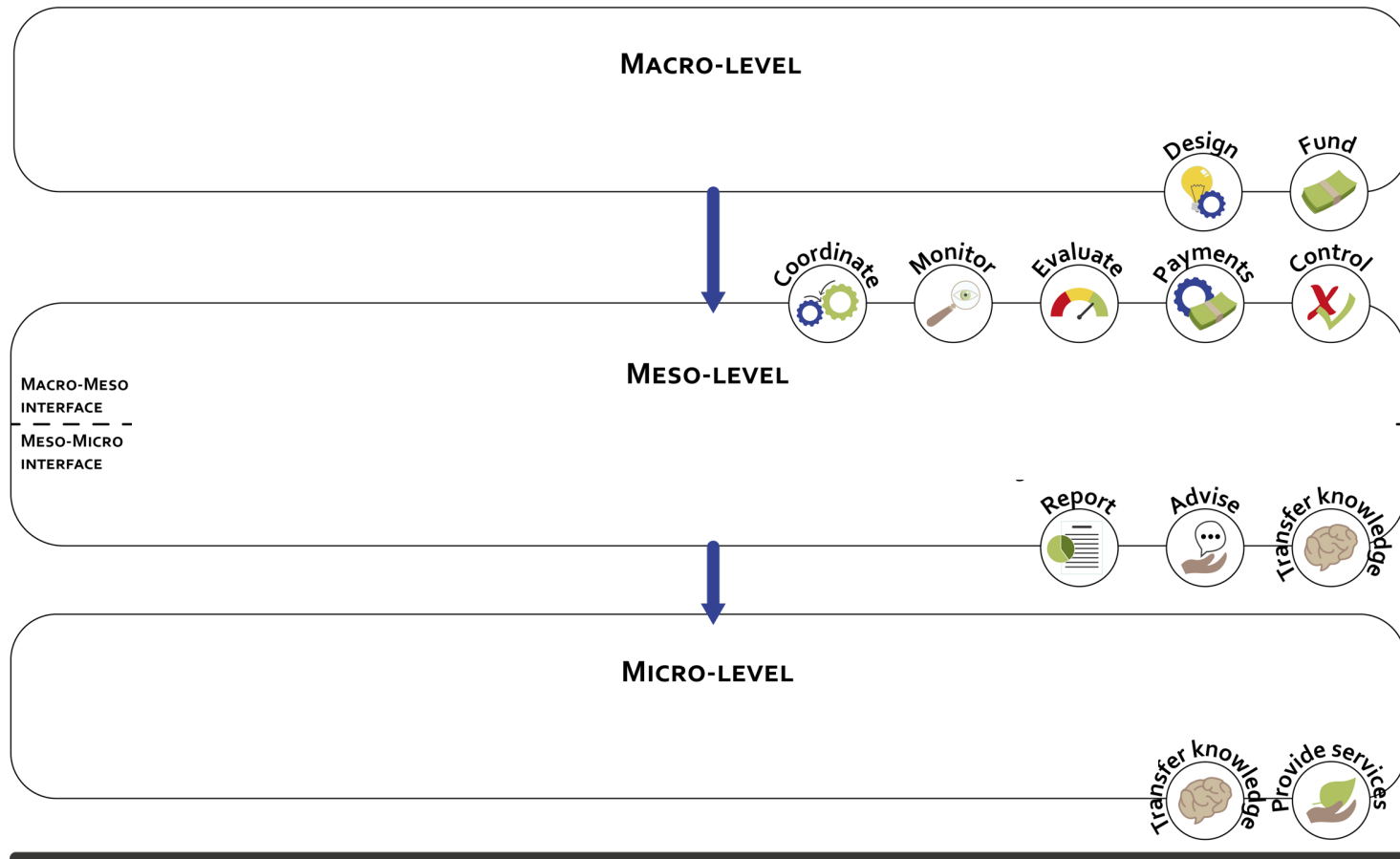
Building a common framework

Multi-level governance	External validity
<i>Geographical levels</i>	
<i>Actor levels</i>	
<i>Institutional levels (i.e. based on roles)</i>	



There are three levels in the AES governance

POLICY LEVEL



FARM LEVEL

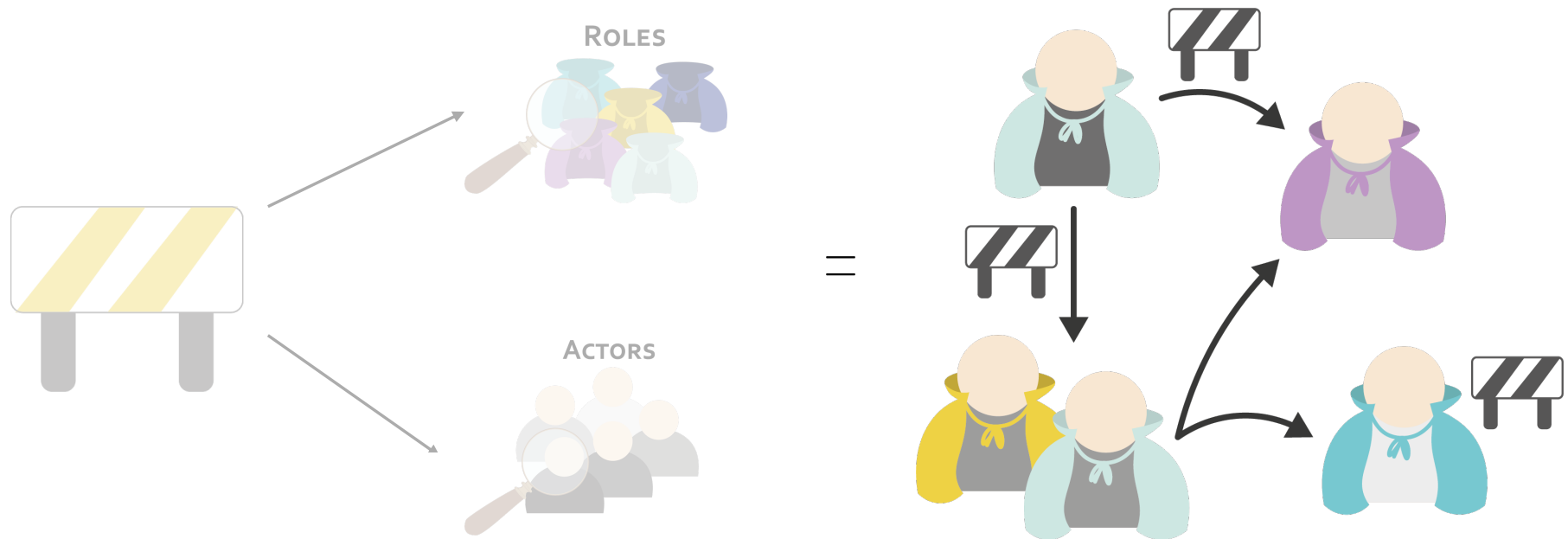


To summarize, the AES governance

- Is composed by many actors and a variety of roles
- It entails complex interactions (both vertical and horizontal) across actors performing different roles
- It is affected by decision-making at different geographical scale
- Can be organized under a three-level framework



The second research object is the barriers



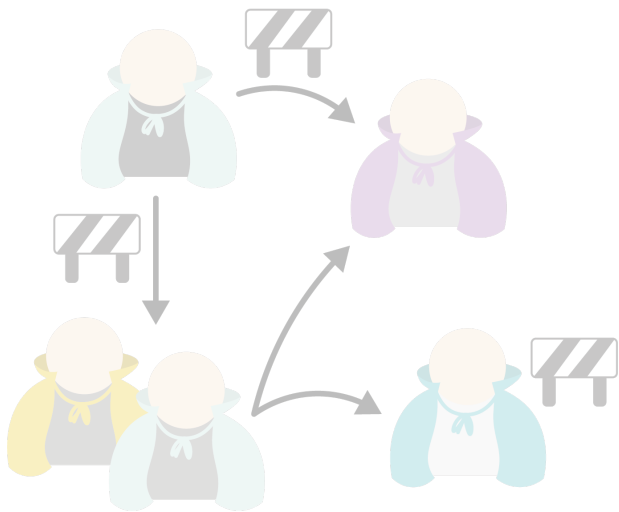
The barriers are multiple and of different types

- 41 barriers
- 7 categories



The barriers are multiple and of different types

	ID	Category of barriers	Number of barriers	Share
	1	Cultural	10	24%
	2	Knowledge	8	20%
	3	Organizational	7	17%
	4	Institutional	7	17%
	5	Financial	4	10%
	6	Technical	3	7%
	7	Power dynamics	2	5%
		Total	41	100%

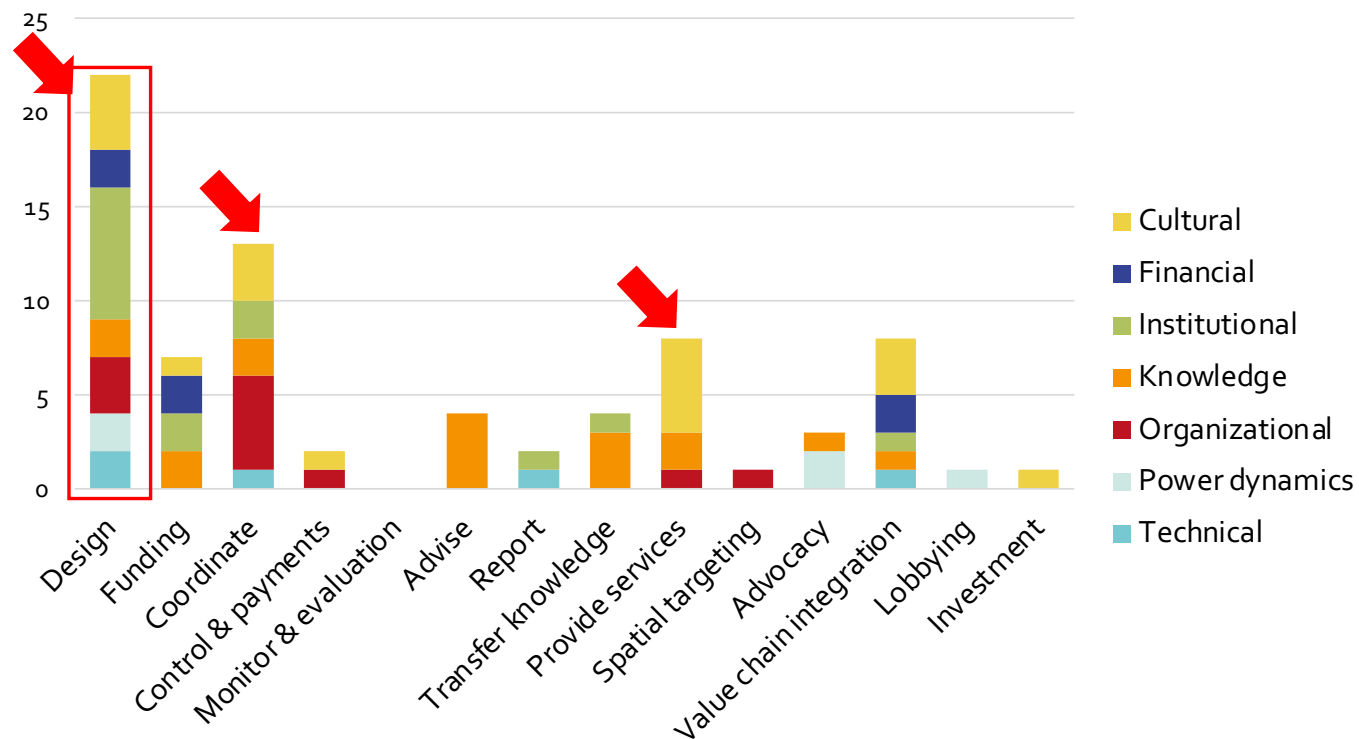


BOOLEAN MATRIX

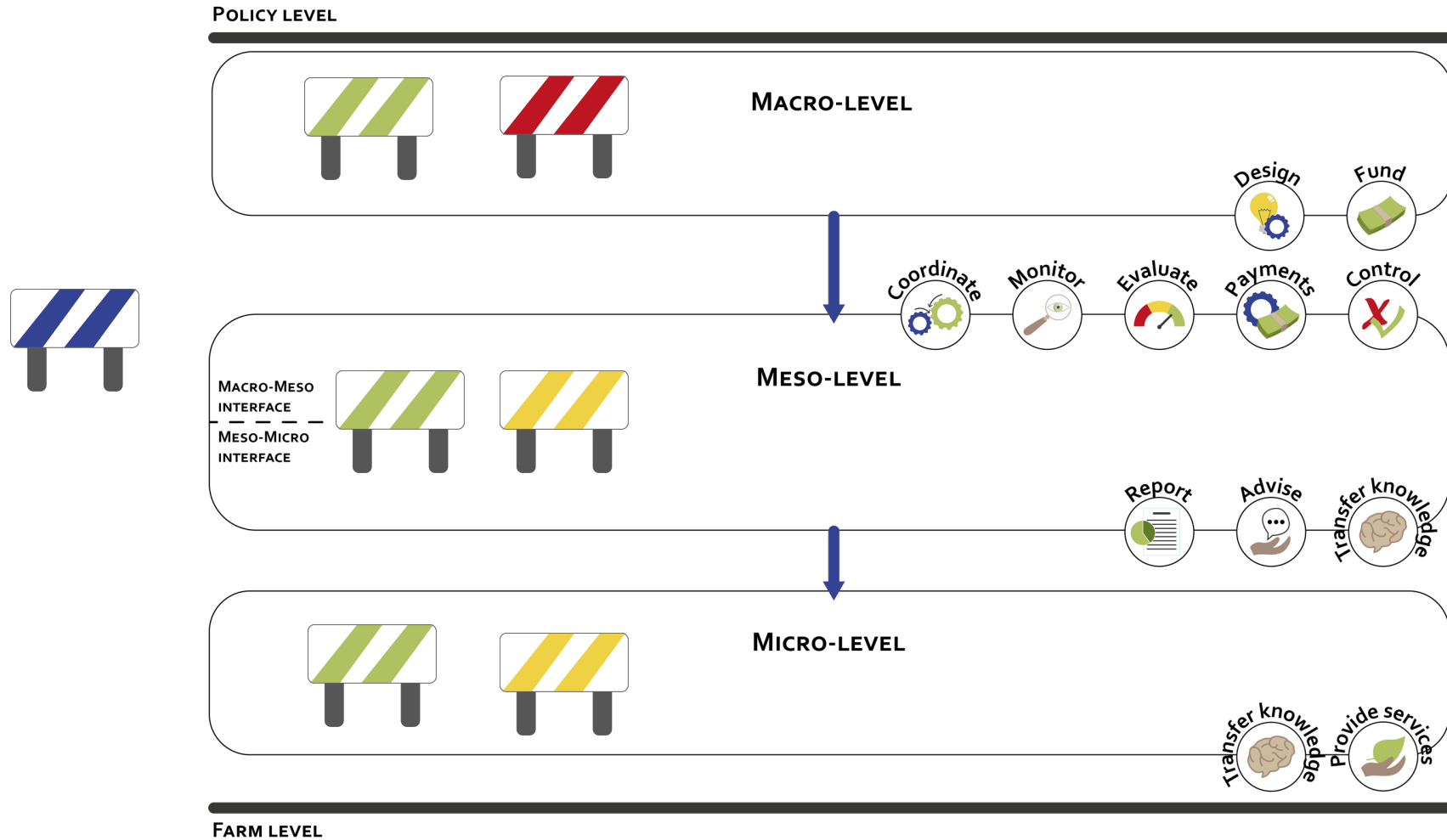
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The barriers are unevenly distributed across AES roles



Barriers distribute both within and between levels



And here some results...

- 16 barriers at only one level and 13 barriers at more than one level
 - The macro level makes most of the 16 barriers
 - 10 barriers across two levels, per each interface, but of different types (macro-meso *coordination* mainly, meso-micro *knowledge* mainly)
- Some barriers go beyond roles within the AES governance, touching upon decision-making outside the framework



To summarize

- Roles are often linked to a variety of barriers
- Some barriers are cross-cutting various levels, underlying the strong interlinkages across roles
- There are barriers which entail agency beyond the AES governance roles



To conclude - AES governance a barrier or a lever?

- The AES governance entails a complex system of interaction of actors and their related agency through roles
- Achieving environmental objectives goes beyond the availability of resources (e.g. financial, knowledge) and entails governance mechanisms
- Horizontal and vertical governance features is a “make-or-break” factor
- No lever stands alone, as diversity of barriers mean diversity of levers
- A strategy of levers should be grounded in a deep understanding of the governance



Thank you for your attention!

Want to get in touch?

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Research gate

Check also our work on food system transition at Sytra



transition of
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