

172nd EAAE Seminar

Agricultural policy for the environment or
environmental policy for agriculture?

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Identifying behavioural barriers to changing farming practices

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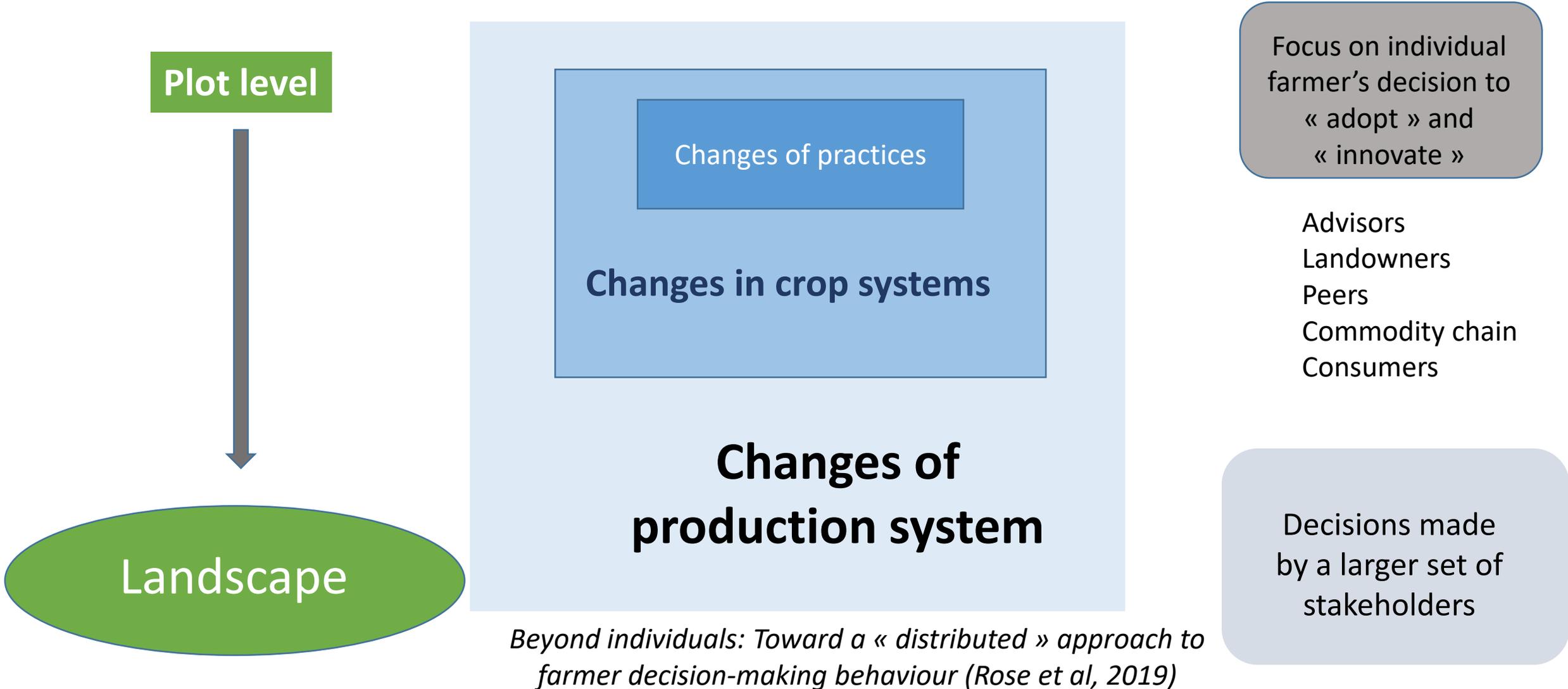
IRSTEA - Center for Environmental Economics - Montpellier



Research network on Economic Experiments
for the Common Agricultural Policy



Different levels of changes towards more sustainability

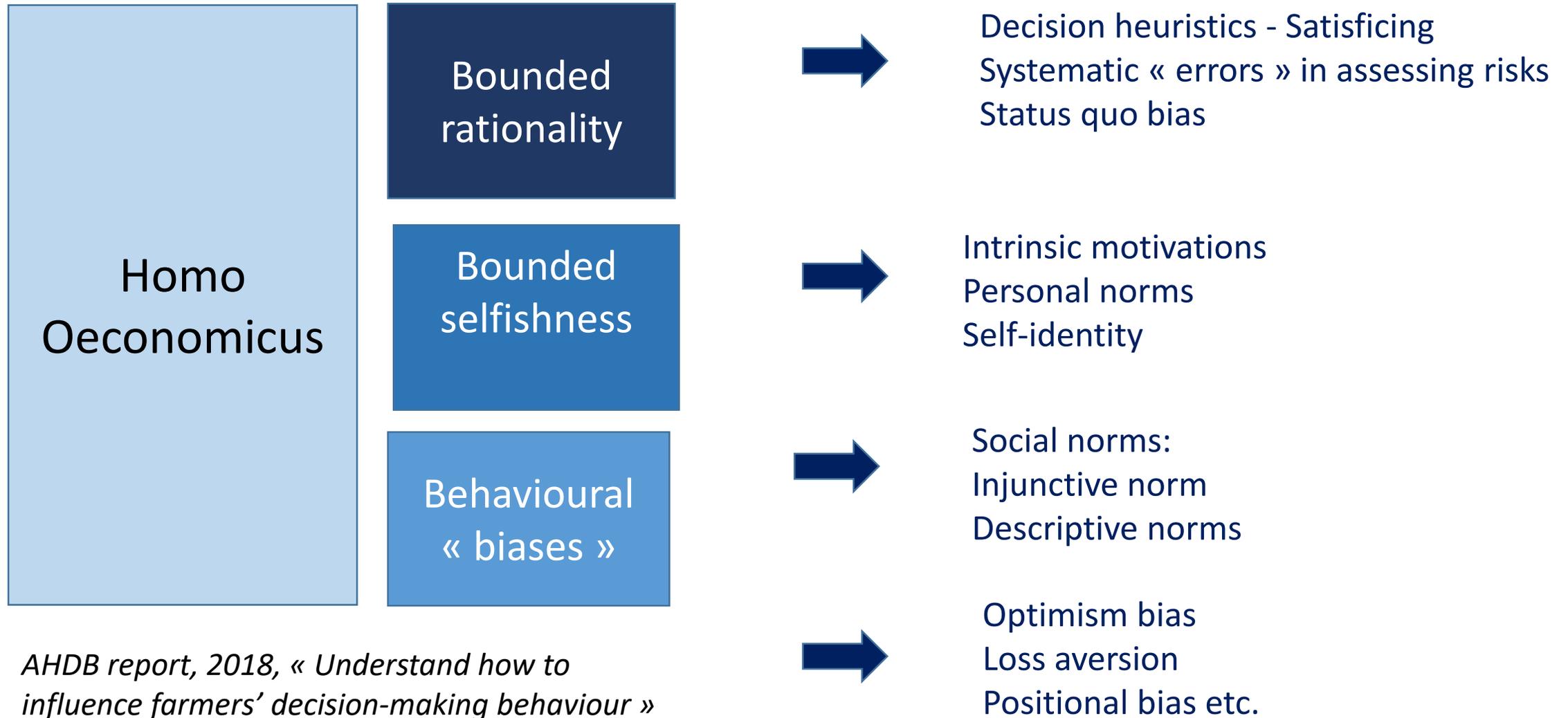


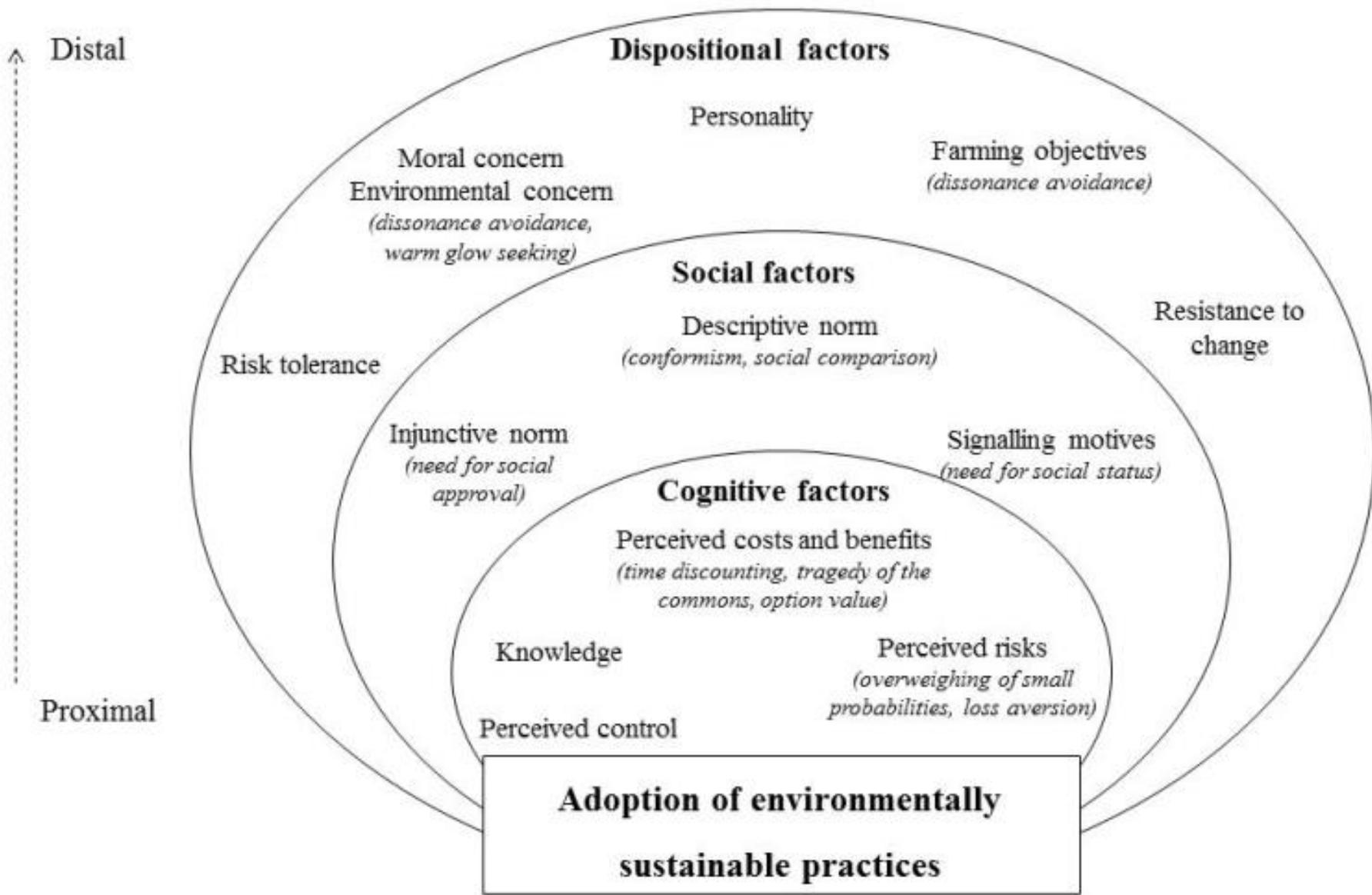
Socio-economic barriers to changes of practices and adoption of innovation

- Relative prices
Policies
Changing risks
- Rigidity of production and commercialization structures, available technologies, market rule constraints, consumer demand: socio-technical and market lock-in
- Knowledge and access to training
Access to technology
- Capacity to invest, sunk costs, path dependency

*Yet large diversity of practices for farmers facing similar constraints because behaviour comes into play
(Lozano-Vita et al, 2018)*

The role of behavioural factors in the adoption of environmentally sustainable practice





Dessart, Barreiro-Hurlé and van Bavel, "Behavioural factors affecting the adoption of sustainable farming practices: a policy-oriented review et al, ERAE 2019

Current issues with the adoption of environmentally-sustainable practices

- Disappointing response to CAP-incentives: undersubscription of agri-environment-climate measures when change of practice is demanding
- CAP measures resented by farmers: control aversion, lack of flexibility, perceived as unfair
- Need for spatially coordinated change in order to reach a minimum threshold of sustainable practice and induce environmental benefits
- Issue of permanence of change: reversibility of practices when incentives / constraints change



What role for behavioural insights in policy-making?

A few suggestions to be tested in the context of CAP reform

New delivery model:

- More flexibility to Member States
- Tailor-made approach adjusted to needs and targets of each MS/Region
- Result-based
- Potentially, more room to innovate with pillar 1- financed Eco-schemes

Boost motivations for change

- **Change the mindset** : frame policy differently to convey a different message, more appealing to farmers' self-identities
- Clarify and explain the **causal pathways** justifying recommended practices
- **Involve farmers** when designing agri-environmental schemes and tailor for specific target groups – Provide feedback and references on costs and benefits
- **Evaluate** environmental progress made and **provide feedback** / share conclusions at local level with farmers : take care of reference points
- Use **champion peers and symbolic rewards** and praise
- Restore **trust** between farmers and public/control authorities: change the messenger, change control set-up

Use social norms to induce change

« *No change* » trap

(Le Coent et al, 2019)

Conformity

Perception of the norm

Saliency of the norm

Social comparison nudges
(Raineau, 2017) / Signalling nudges

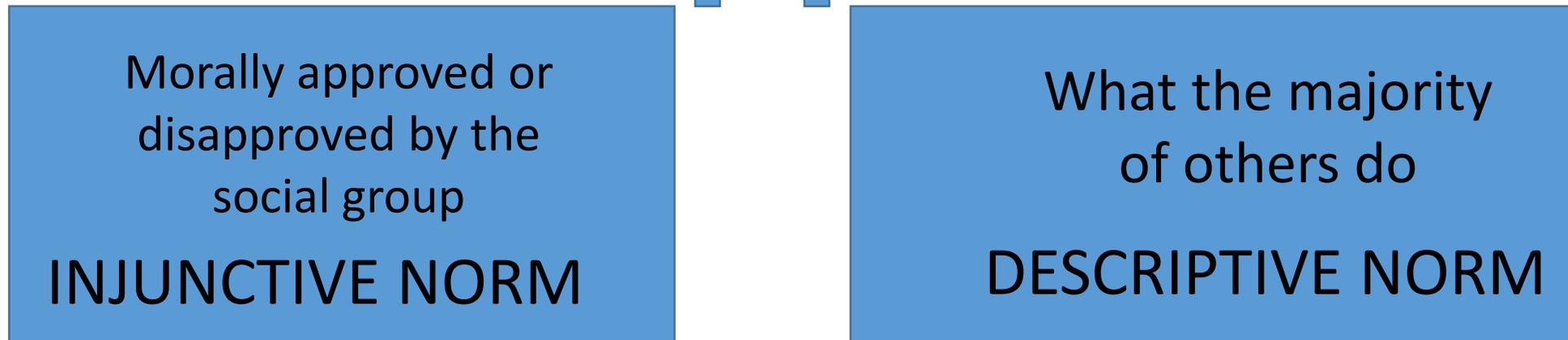
Informational nudges

Morally approved or disapproved by the social group

INJUNCTIVE NORM

What the majority of others do

DESCRIPTIVE NORM



Design incentives with behavioural insights

Kuhfuss, Préget, Thoyer and Hanley, 2016, Nudging farmers to enrol land into agri-environmental schemes: the role of a collective bonus, ERAE, 43(4), 609-636

Motivations: What design of contract could increase the take-up rate of a herbicide reduction agri-environmental measure open to wine-growers in the South of France

Question: would the introduction of a collective incentive in the AEM have a positive effect on farmers' participation?



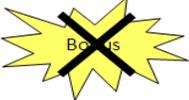
Discrete choice experiment conducted with 317 winegrowers

Different attributes characterizing the herbicide reduction contract

One attribute is the **conditional bonus** paid to each enrolled farmer per hectare enrolled, at the end of the 5-year contract **if** 50% of the area of the local vineyard is enrolled in the AES

Results: stated choices show that winegrowers value the inclusion of the collective bonus option (108 to 138€/ha more than its actual financial magnitude). They also increase their vineyard area under contract.

Interpretation: Consistent with the hypothesis that farmers are more willing to provide environmental efforts when their neighbours also do so: signal of a social norm?

	Alternative A	Alternative B	Current situation
Reduction of herbicides use in proportion of present use 	30 % reduction 	60% reduction 	
Supplementary localized use of herbicides (max 10% of the committed area) 	Allowed 	Allowed 	
Collective and final bonus for each farmer committed if 50% of 		Final bonus 	
Administrative and technical assistance 	Not included 	Included 	
Payment per year and per hectare subscribed 	170 €/ha/an	330 €/ha/an	
Choose your preferred option →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As a conclusion

Do not overestimate the behavioural explanation and the power of nudges: farmers are not consumers in a supermarket

But do not overlook them either: cheap, often easy to implement and adjust, and can reinforce public interventions such as subsidies or farm advisory services

No « one size fits all » behavioural solution: need for tailored and targeted interventions (or risks of behavioural spillovers)

Need to understand and evaluate better: evidence-based policy

Experimental approaches can complement the traditional CAP evaluation tool-box: lab experiments, field experiments, randomized controlled trials, and discrete choice experiments



JRC SCIENCE AND POLICY REPORTS

(How) can economic experiments inform EU agricultural policy?

Authors: Liesbeth Colen, Sergio Gomez-y-Paloma, Uwe Latacz-Lohmann, Marianne Lefebvre, Raphaële Préget, Sophie Thoyer

2015



Colen, L., Gomez y Paloma S., Latacz-Lohmann U., Lefebvre M., Preget R., Thoyer S., 2015, **How can economic experiments inform EU agricultural policy?**, JRC Science and Policy Report, 78 pages, doi: 10.279/17634



REE CAP

Research network on Economic Experiments for the Common Agricultural Policy

www.reecap.org

JRC report "(How) can experiments inform EU agricultural policy?"

Creation of REECAP as an informal consortium

2015

2017

2018

2019

Meetings

Angers

Vienna

Osnabrück

To bring together researchers, experts and policy makers interested in the use of economic experimental approaches to evaluate and improve the CAP

Four primary inter-related objectives

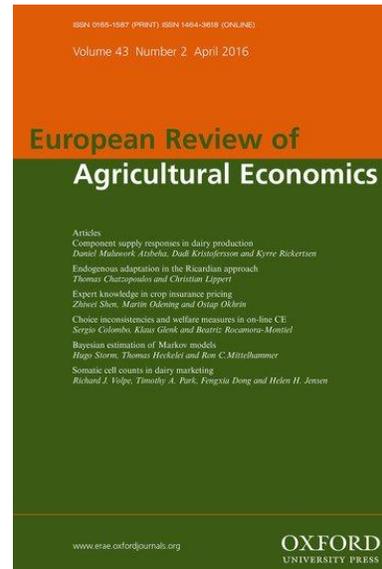
- 1. to promote research on agricultural policy using experimental economics, including the organization of joint experiments across EU countries,
2. to advocate the use of economic experiments for CAP evaluation, and provide evidence on the positive complementarity between experimental approaches and other evaluation tools,
3. to create an information platform on research teams in Europe working on the design of innovative policy measures and conducting economic experiments for local or national authorities willing to evaluate their policies,
4. to disseminate research results in a way that is more understandable by policy-makers.

www.reecap.org

ERAE special issue (Vol 46 Issue 3)

Enriching the CAP evaluation toolbox with experimental approaches

1. Thoyer S and R. Préget, . Introduction to the special issue
2. Dessart F, Barreiro-Hurlé J and R. van Bavel, "Behavioural factors affecting the adoption of sustainable farming practices: a policy-oriented review."
3. Thomas F, Midler E, Lefebvre M and S. Engel "Greening the common agricultural policy: a behavioural perspective and lab-in-the-field experiment in Germany"
4. Latacz-Lohmann, U. and Breustedt, G. "Using choice experiments to improve the design of agri-environmental schemes"
5. Behaghel L, Macours K. and J. Subervie "How can randomised controlled trials help improve the design of the common agricultural policy?"
6. Chabé-Ferret, Le Coent, Reynaud, Subervie and Lepercq "Can we nudge farmers into saving water? Evidence from a randomized experiment



THANK YOU

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