Identifying behavioural barriers to changing farming practices

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Different levels of changes towards more sustainability

Focus on individual farmer’s decision to « adopt » and « innovate »

Advisors
Landowners
Peers
Commodity chain
Consumers

Decisions made by a larger set of stakeholders

Beyond individuals: Toward a « distributed » approach to farmer decision-making behaviour (Rose et al, 2019)
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

Homo Oeconomicus

Bounded rationality
Bounded selfishness
Behavioural « biases »

Decision heuristics - Satisficing
Systematic « errors » in assessing risks
Status quo bias

Intrinsic motivations
Personal norms
Self-identity

Social norms:
Injunctive norm
Descriptive norms

Optimism bias
Loss aversion
Positional bias etc.

AHDB report, 2018, « Understand how to influence farmers’ decision-making behaviour »
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

- Social comparison nudges (Raineau, 2017)
- Signalling nudges
- Informational nudges

Conformity
- Perception of the norm
- Salience of the norm

« No change » trap
(Le Coent et al, 2019)

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?
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
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


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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