Key policy questions for the impact assessment of European agricultural and rural policies

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Outline of the presentation

• Our work on the key policy questions/objectives
• Have these policy objectives changed?
• Policy coherence, governance and future challenges
The Background

- **What do we mean by policy question?**
- The Project: H2020 Modelling INdividual Decisions to Support The European Policies related to agriculture - MIND STEP
- **Objective:** To **support public decision-making** in agricultural, rural, & environmental policies via impact assessment considering the behaviour of individual decision-making units.
- Ex-ante impact assessment
- Further aspects: Coderoni et al. 2021

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N° 817566
The Study

- Involved different research tools and key stakeholders
- **Expert sampling:** we selected who could provide the best information to achieve the study objectives
  - *People who champion, oversee or guide agricultural-policy processes in high-level institutions to foster the dialogue between science and politics*
- The final stakeholder group → **10** people:
  - 4 researchers, 2 EU policy-makers (from DG Agri and Climate), 1 regional authority, 1 farmers’ association, 1 consulting company and 1 cooperative bank.
The stakeholders’ contribution

- **Individual** semi-structured (online) **interviews** (May - June 2020).
  - Among the proposed **post-2020 CAP objectives**, which one you consider to be most relevant?
  - What agricultural **policy objectives** do you consider relevant and worth of investigation today?
- **Focus group** meeting on 24/06/2020, online.
  - 22 participants: 8/10 stakeholders, 5 researchers of the research group and 9 members of the policy team.
Results: post-2020 CAP objectives

- Each respondent could indicate more than one objective
- Clear focus on environmental objectives
The stakeholders’ contribution

The stakeholders’ engagement brought up two major indications:

1. Prioritising environmental and climate objectives
2. Jointly analysing economic and environmental performances

Definition of one key policy objective:

“Provision of enough healthy food with minimal impact on the environment & reduced reliance on subsidies, increasing efficiency, climate change adaptation, and resilience.”
The Influence of the Policy Context

2015
- Paris 2015
- The SDGs

2019
- The EU Green Deal
- The EU sustainable investment plan

2020
- F2F
- Biodiversity Strategy

2021
- The EU climate law Fit for 55
- CAP reform
- Sustainable Carbon Cycles

2022
- Voting the fit for 55 package
- Regulatory framework certification of C credits
Have these policy objectives changed?

• The war in Ukraine has raised global attention to food security
• ... But the situation was already changed with respect to past years
• The combined effects of conflicts, climate change, the COVID-19 pandemic, and economic shocks, undermined decades of progress towards improving food security globally
A coming (food) catastrophe?

In the short-term:
• Trade rerouting seems to be not enough
• Energy & fertilizers prices are climbing
• Food security, trade, food prices, inflation

In the long-term:
• Unknown/unpredictable longer-term impacts
• How long is going to last?
What is the “real” policy question?

- **Food security and systemic concerns** are “strongly” back into the policy agenda, also for developed countries.

- In **Europe**,  
  - The **availability of food**, feed and fertilizers is **not a primary concern** (this year and the next).  
  - There are **concerns** regarding **affordability** due to high market prices and **inflationary** trends.  
  - The sanctions imposed on Belarus and Russia will impact **potash** flows to international markets in the short term (JRC, 2022).

Source. “Short-term Outlook for EU agricultural markets in 2022” (EC, 2022a)
The short term replies

- **Some measures** taken to contrast the short-term effects seem to be at odds with climate change and environmental objectives:
  
  - Fuel subsidies (tax reduction)
  
  - Derogation to greening practices
The “eternal dilemma”

• Are environmental sustainability and food security (economic growth) at odds?
The Real Question

Can food security (FS) objectives be met without tackling environmental sustainability (ES) challenges?

NO
1. There cannot be FS without higher ES
   • Climate change and biodiversity loss are major threats FS (…)
   • Less air pollution leads to higher crop yields (Lobell et al., 2022)

2. Food & energy security concerns should reinforce efforts towards ES of food systems
   • Renewable energy targets under the Fit for 55 package could be increased due to the current situation.
   • 08/06/2022: EU Parliament has voted down proposals for the “Fit for 55 package” rather than allowing a weakened version to pass + LULUCF directive with higher ambition has been approved
“The **context** in which MS have designed their draft Plans has **changed** [...] , bringing to the forefront the **integral link between climate action and food security.**”

This new situation has been considered in the analysis and the Plans will require a further **review** to exploit all opportunities to:

- **a)** reduce **dependence** on **synthetic fertilizers** and scale up the production of **renewable energy** without undermining food production;

- **b)** more **sustainable** production methods.

Source: Summary overview for 19 Member States (EC, 2022b)
Policy Coherence & Governance

• EU policy objectives dealing with FS and ES belong to different policy areas sub-ordinate to different authorities with partially contradictory interests
  • Turn possible contradictions into complementarities, being grounded on science (Haniotis, 2020)

• Evidence-informed policy-making EIP
  • Policy decisions should be based on, or informed by, rigorously established objective evidence (Baron, 2018).
  • The EU Better regulation for better results COM(2015)215
  • Better regulation: Joining forces to make better laws COM(2021)219
Policy Coherence & Governance

- **Goal-based governance**

  - **Global** targets **aligned** with **local** contexts, and progressively **adjusting** the ambition of targets over time, can help strengthen governance
  
  - Better **tools** for **multi-sectoral** scenario planning and **modelling** can help map pathways to simultaneously achieve the multiple goals (Pascual, 2022)
  
  - **Impact assessment**
Policy Coherence

Within
- The CAP
- The scale of analysis

Between
- Synergies/Trade-offs

GOVERNANCE PROBLEMS
Within Policy Coherence – The CAP

• The agricultural sector in the EU is key to reaching the GD targets, but the CAP is not an environmental policy!
• The CAP approach remains an exception in some fields to the EU Environmental policy:
  • **Polluter Pays Principle** (PPP): diffuse water pollution (ECA, 2021)
  • The CE, in reply, considers the application of the PPP in the agricultural policy → by the end of 2023, a study on **GHGs**
• ...but
Within Policy Coherence – The CAP

• Difficult to establish the environmental baseline separating ‘polluter pays’ from ‘provider gets’

  • Responses from farmers to the same agro-environmental policy can be highly heterogeneous (Coderoni, Esposti & Varacca, 2021)
  • GHGs are biologically embedded in the agricultural processes, a tailored baseline?
  • Digitalisation: new instruments for sustainability monitoring (Ehlers et al., 2021)
  • Many data are already available, but not fully exploited (e.g., tractors, …)
Within Policy Coherence

- The **scale** of analysis/policy implementation matters!
- The **productivity-environment nexus** in space: granularity bias, aggregation issues and spatial dependence with **farm-level** data (Baldoni et al., 2021)
  - The nexus is **scale-dependent**: may **disappear** passing from farm-level to aggregate data
  - The **direction** of the relationship can **change**
  - The scale at which these policies are designed and implemented becomes critical
- **Ecological fallacy?**
Between Policies Coherence – Synergies & Trade-offs

• PC is complex to apply in a context of synergies and trade-offs among different environmental targets

• Analysis of impacts of F2F targets on the Italian agricultural sector

• Synergies among environmental targets, but also trade-offs (Cortignani and Coderoni, 2022)

[Diagram showing relationships between environmental targets, economic impacts, fertilizers, antimicrobials, and GHGs]
Concluding remarks/question marks

• How can food security and environmental sustainability be tackled together?
  • Short-term shocks can point the attention to one objective, but in the long term, they are interlinked
  • How to reconcile short-term (counterproductive?) replies with long-term goals?

• How can policy coherence be addressed to reach this complex multi-objective?
  • How to confront issues regarding the coherence of environmental action within the CAP?
  • What is the proper scale of analysis/policy formulation?
  • How to deal with trade-offs?
Concluding remarks/question marks

• Is the European Multilevel Governance System adequate?
  • How to implement goal-based governance in an efficient way?
  • The agricultural policy can be once more the field where “new EU governance settings” are tested
Main References


Main References

• Cortignani R., Coderoni S. 2022, The Impacts of Environmental and Climate Targets on the Italian Agricultural Sector, paper presented at the AIEAA, CREA-PB event “L’analisi delle Politiche Agricole Comunitarie in Italia” online, 11/03/22.