# Methodological approaches in agricultural economics – the pros and cons of orthodoxy and heterodoxy in teaching, research and practice

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# Outline

1. Are we addressing the right policy issues?

2. Do we have the right tools to address them?

3. Are we using those tools correctly?

4. Are we finding the right ways of injecting the findings of analysis into the policy process?
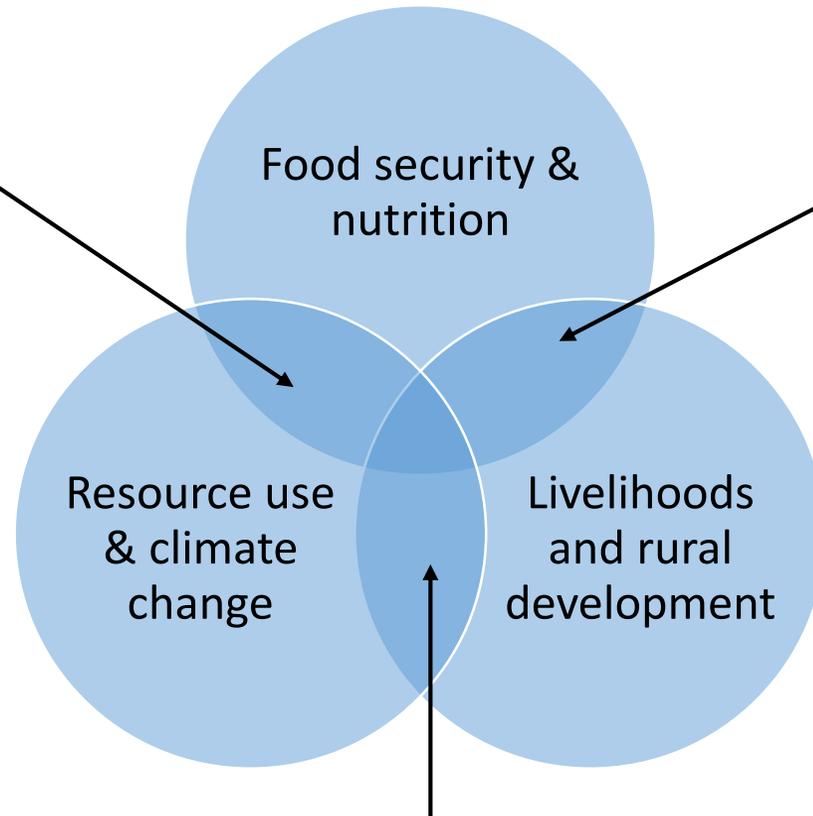
# 1. Are we addressing the right policy issues?

- Broadly yes, analysis is addressing key concerns of policymakers
  - Food security and nutrition
  - Sustainable resource use
  - Climate change adaptation and mitigation
  - Livelihoods of agents employed in the food system
- At OECD have had a heavy focus on primary agriculture and the implications of distortions to markets… but this focus has evolved
  - PSE as the main basis for policy evaluation, with "orthodox" policy recommendations

# Trade-offs and synergies across policy objectives



Lower livestock numbers and protein availability
Healthy diets and lower emissions

Higher farm incomes versus lower consumer prices
Income generation and food security

Food security & nutrition

Resource use & climate change

Livelihoods and rural development

More focus on:

Links between science and economics

Interactions across different policy areas (trade-offs)

Pricing natural capital versus farm incomes
Paying for public goods

# 2. Do we have the right tools?

- Basic toolkit has been that of neoclassical economics
- Neoclassical economics admits that markets cannot solve all social problems (Arrow, 1951)
- Many critiques of orthodox policies nevertheless use this broad toolkit to make their case (e.g. Rodrik)
- Policy analysis has been based around identifying market failures and suggesting actions to correct them in ways that do not make things worse (government failure)
- Neoclassical economics is evolving, with a development of micro foundations, literature on imperfect competition, game theory, behavioural economics
- Have not made much use of other theories (e.g. complexity economics) – but what potential insights have we been missing?

# 3. Are we using those tools correctly?

OECD employs four basic approaches:

- Data and indicators

- Simulation models

- Econometric analysis

- Case studies

…getting into some new areas (behavioural nudges)

# Data and indicators

- Measurement of producer support (indicator) has a loose link to theory – a measure of the first incidence of alternative support mechanisms

- Has been a valuable tool in its own right (cross-country comparability) and as an input into modelling work

- Less well suited to addressing issues beyond primary agriculture, or environmental externalities

# Simulation models

- A range of simulation models used this and other policy information to understand the impact of policies (CGE – Metro, GTAP; partial equilibrium – Aglink-Cosimo, PEM; ad hoc models linking to household level impacts and agro-environmental outcomes)

- Such models are always questioned, but we rely on expert review and feedback form our users

- A possible criticism is that many users of such models have been too eager to treat them as if they were ex post not ex ante results – we have been more careful than most!

# *Econometric analysis*

- Difficult: theories (e.g. the benefits of trade openness, role of agriculture in economic development) are seldom settled by one piece of analysis

- When too much confidence is placed on an econometric result it can easily look like propaganda

- We have been better off summarizing the consensus of findings from the empirical literature

- You cannot prove a hypothesis, but you can disprove one – hence a value in case studies

# Case studies

- Major effort has gone into country studies
- Look to be specific, but also for cross country comparability where possible
- Making the PSE the centerpiece of country reviews has enabled that comparability
- But the challenge is greater when seeking to measure performance against a wider range of objectives – i.e. whether they foster productivity, sustainability or resilience
- Measures of agriculture's "enabling environment" are one approach

# How are we injecting our analysis into the policy process?

- Basic toolkit is built for positive economics
- But we are also in the business of normative economics – advising governments on what they should do, e.g. to raise efficiency or improve equity
- That step involves invoking values – it is not merely technocratic
- Many dangers along the way
  - Not being explicit about those values (e.g. on health taxes)
  - Biases, e.g. wanting to believe the starting hypothesis…
  - Applying a naïve or ideological version of the neoclassical model (market fundamentalism, social Darwinism)
  - Not being clear on the target audience

# Summary of where we are

- Broadly have a set of tools that is well applied to addressing policy issues at hand
- Hypothesis: a bigger challenge to keep abreast of advances and link to other disciplines (e.g. physical sciences) than to seek out new paradigms
- Have focused on specific issues more than interactions across different policy domains and difficult trade-offs
- Have not researched deeply the obstacles to resolving those trade-offs – political economy, institutional inertia, coordination challenges etc.
- Have sometimes blurred the line between positive and normative economics
- Have not always tailored our output to the relevant policy audience – policymakers, government advisors, academics, opinion makers, general public

# Conclusions: some suggested do's and don'ts

- Do keep positive analysis focused on links between policy changes and outcomes
- Do keep a separate space for normative recommendations and be explicit about values
- Do recognize that the content of positive and normative economics is likely to differ
  - Positive: narrower focus on cause & effect; normative more likely to draw from multiple sources
- Do be clear about intended channel of impact
  - Secondary users and opinion makers (positive economics)
  - Policymakers (distilled forms of normative analysis)
- Don't oversell policy implications
- Do be wary of watering down to gain political traction
  - Greatest strength is rigorous comparable analysis