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EXPLORING FARMERS' CONDITIONS, STRATEGIES AND SUSTAINABILITY PERFORMANCES WITH THE CSP MODEL

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Abstract

A common challenge in agri-economic analyses and in the related conceptual and analytical frameworks is to deal with the complexity and multidimensionality of contemporary challenges and policy frameworks in adequate ways. Our paper presents a theoretical and methodological approach aimed at informing policy development in the agri-food industry. A particular focus is on addressing market imperfections. The model focusses on **C**onditions, **f**armers' **S**trategies and sustainability **P**erformances (CSP).

Keywords: policy, commodity markets, farming conditions, sustainability performance, farmers' strategies, methodology

1 Introduction

Market mechanisms, policy instruments and legal frameworks have a major influence on the agricultural sector, production and food markets on the international, European and regional level. The Common Agricultural Policy (CAP), market regulation and policy in general continue to have a significant influence on volumes and prices of e.g. cereals, fruit, or dairy, beef and fish production in spite of policy reforms aimed at deregulating and reducing negative policy impacts. In order to steer developments in directions that are desirable in societal terms, and to foster the sustainability of agriculture in Europe's regions, more carefully planned, targeted interventions might be needed.

In the context of evidence-informed policy development, decision makers ask stakeholders and analysts for policy advice. Examples of questions are: How can we prepare farmers for changes caused by new trade agreements? Which measures help to reduce nitrate emissions in threatened water bodies? Why do innovative soil protection methods spread so slowly? Scientists develop models, apply scenario analyses and ex-ante assessments related to adjustments in relevant policy frameworks. Computational models tend to have the problem that simplifications of the often much more complex and heterogeneous farming reality are inevitable in particular because only limited data are available. Farmers' decision-making processes as well as potentially very relevant environmental, socio-economic or cultural issues tend to be underestimated. Modelling outcomes also tend to be hard to communicate in their complexity, and sometimes the underlying assumptions limit policy-relevance. The influence of initiatives, for example, is a new challenge for projections. Due to the growing complexity of contemporary challenges and the rapidly increasing need for a more sustainable use and equitable sharing of limited resources, pressure on analysts is increasing to produce assessments that are more in line with the complexity and heterogeneity of situations.

2 Development of the CSP model

Our poster presents an analytical approach that explores the interplay between **C**onditions, **f**armers' **S**trategies and sustainability **P**erformances (CSP). The CSP model is a mixed-methods approach that focusses on capturing the variety of socio-economic, biophysical and territorial factors affecting farmers and the other entrepreneurs of the EU agro-food sector. The CSP model is inspired by Porter's 'diamond of determinants' that create a sector's competitive advantage (Porter 1990). Particular attention in the CSP model is paid to the inter-relationships between different factors on a (micro-)regional basis.

The main objectives of the CSP model are:

- To identify and gain an improved understanding of market imperfections and policy requirements, which hamper the establishment of sustainable agri-food production.
- To test different policy interventions and inform policy development by implementing exploratory and participatory scenario analyses.

In our poster, we present the CSP model, its development process with the SUFISA project¹, and some first results from its testing. The analysis we use for the presentation of the approach focusses on commodities that are typical for a particular region such as sugar beet in the Hildesheim plain or dairy farming in Brittany. An advisory group that is established based on the particular questions addressed and the most appropriate spatial scale is central to the application of the CSP model.

The discussion and description of given conditions is the first important point for the application of the CSP model: in- and output markets, governance structures, rules and regulations, regional and sector-specific infrastructure and relevant policy frameworks – all at the most relevant geographical and institutional levels. Since conditions, strategies and impacts are constantly evolving, it is important to pay particular attention to trends, dynamics and feedbacks in the system. In the analysis, it also needs to be ensured that the diversity in farm-level resource conditions (climate, soil, facilities, labour, finance etc.) is adequately addressed. Limited access to finance, risk adversity and inertia impact on farmers' strategic planning and affect the realisation of strategies, and thus sustainability impacts (or performance). Other complicating factors are that performance is always relative, and thus the result of actions taken currently and in the past. Moreover, performances are not only a consequence of farmers' strategies. Higher-level events like the financial crisis or the unexpectedly low oil prices also influence the sector's performances.

3 Experiences from the application of the model

A first testing of the CSP model in an ex-post analysis showed that the approach could effectively support the analysis of market imperfections and policy requirements. A clear delineation of the subject of investigation is a crucial first step and the related boundary issues need to be addressed in consultation with policy clients and stakeholders. Subsequently, it is important to systematise the description of conditions and strategies in order to not neglect interrelations. An apparent incomprehensibility of farmers' strategies can indicate that the analyst ignored particular conditions or was unable to identify e.g. crucial cultural conditions. The distinction between conditions and strategies can be a challenge. An effective interaction with the advisory group plays a central role in the analysis, in particular in explaining longer-term strategic adjustments. Moreover, this group can grow into a local/sectoral knowledge network. The dynamic character of the approach is a challenge and an opportunity: snapshots of certain points in time allow connecting conditions and strategies. However, sustainability performances result from long-/medium-term as well as from current actions. Ex-post analyses using the CSP model can effectively support the development of policy and market projections. During the on-going project work, more testing and further refinement will take place. Related discussions at conferences can effectively support this process.

References

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