"A review of impact assessment tools for Common **Agricultural Policy measures**" Chistina Moulogianni and Thomas Bournaris

Aristotle University of Thessaloniki - Greece

Abstract

European Commission (EC) uses Impact Assessment as a key process to examine the advantages and disadvantages of its policies. One of the main EC policy instruments regarding agriculture is the Common Agricultural Policy (CAP). In recent years, many researches have been conducted and a variety of tools have been developed to assess the impacts of the CAP. In this study a review of the tools used for assessing the impacts of specific CAP measures was carried out. These tools were analysed and classified using different criteria. Reviewing the policy area and the level of the application of the IA tools we can conclude that there is a wide diversity of tool types involved in IA processes for Common Agricultural Policy measures. This paper reviewed published studies carried out in European Union countries, during the last decade (2002-2015).

Introduction

From 2002 the European Commission (EC) uses Impact Assessment (IA) process as part of a broader initiative to make European policies measurable in order to improve the legislative output of the Union (Thiel 2009). Impact assessment is a procedure that helps decision-makers by presenting the advantages and disadvantages of the possible policy options and by assessing their potential economic, social and environmental impacts (European Commission 2009).

The Common Agricultural Policy (CAP) is a system of instruments, such as direct payments and rural development measures, that has been put through an ongoing reform process in recent decades (Uthes, Fricke et al. 2010). For each CAP period or reform, a series of evaluations and impact assessment processes have been conducted and a variety of tools have been developed to assess the impacts of the CAP measures. The aim of this paper is to provide a categorization of impact assessment tools that have been used for Common Agricultural Policy measures within the broader objective to classify them using different criteria.

Impact Assessment for CAP measures

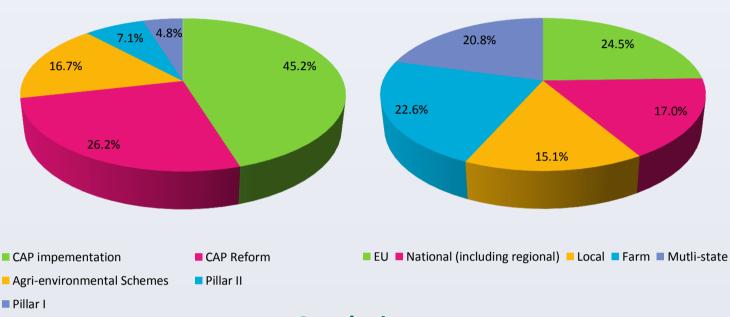
The implementation of CAP measures faces many problems because of the different national and regional characteristics of the rural areas across Europe (Aggelopoulos and Arabatzis 2010). The assessment of CAP measures helps policy makers to receive all the available evidence on how these policies affect the rural areas for the selection of possible policy options in the future (Bournaris, Moulogianni et al. 2014). These types of impact assessment cannot ignore the level of implementation because this can be crucial for the selection of the appropriate impact assessment tool. It is essential, therefore, to carry out a literature review in order to analyze for which CAP policy areas impact assessments have been applied, the level of the application and the impact assessment tools that have been used. For this reason a literature review was conducted for published studies carried out in European Union countries for assessing the impacts of CAP measures, during the last decade (2002-2015). Studies included in the literature review were selected by using keywords regarding CAP, IA and IA tools. The search indexed 229 papers but the final decision resulted 42 articles that covered our search criteria (e.g. to use tools to support the CAP assessment process). Finally, the impact assessment tools of these 42 studies were analysed and classified using different criteria.

Policy Areas and Level of Implementation

The 42 studies conducted for five Common Agricultural Policy areas. The majority of them assessed the impacts of CAP as an integrated policy (45.2%) while the 26.2% predicted the impacts of possible CAP reforms. The 16.7% of the studies used agrienvironmental schemes as their assessment goal while very few studies assessed the specific impacts of Pillar I (4.8%) and Pillar II (7.1%) of the CAP.

Impact Assessments in European Union are implemented for a wide variety of levels (Achtnicht, Rennings et al. 2009). We chose the following five distinguished levels for the comparison (EU, National (including regional), Local, Farm and Multi-state). We can say that there is an equipartition between the levels. The majority of the studies were conducted at EU level (24.5%) while at local and farm levels were conducted (15.1%) and (17%) respectively.

Figures 1 and 2. Policy Areas and Level of Implementation



Conclusions

The aim of this paper was to provide a categorization of impact assessment tools that have been used for Common Agricultural Policy measures within the broader objective to classify them using different criteria. The most important challenge however, will be to further analyse and classify the developed tools of IA and to try to suggest specific tool categories for specific policy areas and levels of implementation. For this reason, this preliminary analysis was conducted in order to measure the participation of each impact assessment tool in the CAP evaluation process.

Impact Assessment tools

We used the definition for IA tools given by Podhora (Podhora, Helming et al. 2013) "as methodological approaches to one or more steps of the IA process". There is a wide variety of different tool types that can be used in IA processes. There is also a variety on impact assessment tools classification. The van Herwijnen and de Ridder (2007), classify them to the following categories:

1. Physical assessment tools - tools that assess some physical parameter (e.g. Life Cycle Analysis, etc.);

2. Monetary assessment tools - tools that assess some economic parameters (e.g Cost-Benefit Analysis);

- 3. Models tools that used a model (e.g. integrated assessment models etc.);
- 4. Scenario analysis tools with a prospective character;
- 5. Multi-criteria analysis tools that help with the consideration of various criteria;
- 6. Simple tools (e.g. Indicators, Impact Matrix, checklists etc.);

7. Participatory tools - tools that aim to involve stakeholders (e.g. Focus Groups etc.);

Table 1 provides an overview of the tools used for impact assessment processes for CAP measures. For the 42 studies analysed, 66 different tools were used as single tools or in combination with other tools.

	Frequency	%
Simple Tools	14	21.2
Participatory Tools	8	12.1
Modeling	24	36.4
MCA	7	10.6
Scenario Analysis	13	19.7
Total	66	100.0



19.7% 21.2% 10.6% 12.1% 36.4%

The literature review revealed a number of important findings. Results show that IA tools have a wide application in the IA process in relation to the specific CAP policy areas. The analysis of IA tools also reveals a wide diversity as regards the implementation level. Several key points have been identified. Firstly, it is shown that EU level is the most used level of implementation while the CAP impacts as an integrated policy is the most common area of the studies. Finally, regarding the tool types used for these impact assessment processes, modelling tools and a combination of modelling and Multi Criteria Decision Analysis are the main tools applied by the researchers.

References

Achtnicht, M., K. Rennings, et al. (2009). "Experiences with integrated impact assessment - empirical evidence from a survey in three European member states." Environmental Policy and Governance 19(5): 321-335.

Aggelopoulos, S. and G. Arabatzis (2010). "European Union young farmers program: a Greek case study." New Medit: Mediterranean Journal of Economics, Agriculture and Environment 2: 50-55.

Bournaris, T., C. Moulogianni, et al. (2014). "A multicriteria model for the assessment of rural development plans in Greece." Land Use Policy 38: 1-8.

European Commission (2009). Impact Assessment Guidelines. Brussels.

Podhora, A., K. Helming, et al. (2013). "The policy-relevancy of impact assessment tools: Evaluating nine years of European research funding." Environmental science & policy 31(0): 85-95.

Thiel, A. (2009). "The use of ex-ante modelling tools in European Impact Assessment: What role does land use play?" Land Use Policy 26(4): 1138-1148.

Uthes, S., K. Fricke, et al. (2010). "Policy relevance of three integrated assessment tools-A comparison with specific reference to agricultural policies." Ecological modelling 221(18): 2136-2152.

van Herwijnen, M. and W. de Ridder (2007). The Selection of Suitable Tools for Sustainability Impact Assessment. Impact Assessment and Sustainable Development European Practice and Experience. G. Clive and C. Kirkpatrick. Cheltenham, UK, 'Edward Elgar Publishing, Inc.'.

CONTACT INFORMATION

Department of Agricultural Economics, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece

Corresponding author. Tel.: +30 2310998423; fax: +30 2310998828.

E-mail: kristin@agro.auth.gr (C. Moulogianni), tbournar@agro.auth.gr (T. Bournaris).