

## **Effects of European organic farming policies at sectoral and societal levels**

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### **Summary**

The paper explores the drivers for organic farming uptake and undertakes a preliminary evaluation of the effectiveness of organic farming policy against a set of 24 criteria, in a number of case study countries. Organic farming support policies were not solely responsible as external factors, such as conventional market performance and food scares, interacted with policy measures in influencing organic farming uptake rates. Organic farming schemes and measures out performed alternative agri-environment schemes in a number of criteria, such as GM traceability, natural resource conservation, diversification of farm practice and products, food quality and safety and biodiversity impacts. However, on the basis of the data it is not possible to conclude whether organic support schemes or other agri-environment support schemes perform better overall or are more cost effective.

**Key words:** Organic farming policy, evaluation

### **Introduction**

Since the early 1990s, European policies for organic farming have been developed on a number of levels. These include the EC Reg. 2092/91 defining organic production; support for organic conversion and maintaining production, processing and marketing through agri-environment, rural development and structural measures; support for research and information dissemination measures; the development of national and EU action plans for organic farming; and the continuing reforms of the main commodity elements of the Common Agricultural Policy.

The impacts and cost effectiveness of these policies is an issue of increasing importance as the size of the organic sector, and consequently their demand for funding, increases. There is in any case a formal requirement for ongoing monitoring and evaluation of policies at national and EU level (e.g. current mid-term review of rural development and structural programs). Competing claims on the funding resources are likely to become louder, and there needs to be clear evidence of benefits to justify their continuing application to organic farming. However, the evaluation of these impacts is not simple, because organic farming works on a number of different levels, with multiple, sometimes conflicting, objectives and impacts. While the benefits from supporting organic farming with respect to one particular objective may be less than can be achieved by more targeted measures, the total benefit across all objectives of adopting a systems approach such as organic farming may be sufficient to more than justify the costs of the support compared with single-objective, single-measure schemes.

In order to be able to justify continued spending on organic sector policy support it is first necessary

to establish what role organic farming policy plays in driving the uptake of organic farming and what sectoral and societal benefits are associated with it. Additionally, the effectiveness of organic farming policy in achieving these sectoral and societal objectives compared to other types of agri-environmental policies also needs to be established.

## **Materials and Methods**

A brief summary of organic farming policy development for a sample of countries including AT, CH, DE, DK, FI, FR, GR, IT, NL and UK was developed. In addition, a suite of graphs were constructed that visualise data on the number of organic holdings and land area over time, the proportion of arable, grassland and permanent crops in each country and finally, where available, expenditure data on various organic farming support policies. Additionally a key events table was developed showing when policy measures (specific to organic or general agriculture) were introduced or changed in that country (month and year), and when exogenous trigger or barrier events occurred in the organic and general agricultural sectors that may have had an influence on the uptake of organic farming. Country experts were then asked for their interpretation of the data with respect to how policy implementation and changes and exogenous events may have shaped organic farming uptake pre and post Agenda 2000. Expert responses were consolidated into a descriptive assessment of the factors responsible for the development of organic farming during the period 1997 to 2003 in their country and a summary of the key findings is provided in the results section.

Information regarding the performance of relevant policy was elicited using expert assessments. Two different variations of assessment were used; opinion based and an evidence based assessment. The opinion based assessment was used for the Wales, North East England and Canton Aargau (Switzerland) case studies. Evaluations were elicited from a group of experts using the Nominal Group Technique (NGT) in expert panel workshops. NGT, also known as ‘estimate-talk-estimate’, uses the same basic structure as the Delphi (Delbecq *et al.*, 1975) method but is applied in a group situation. Estimates are taken anonymously and presented to the group for discussion and estimates are retaken and represented. The process involves the following steps (Delbecq *et al.*, 1975): 1) Silent and individual (nominal) generation of ideas in writing; 2) Presentation of a brief summary of all ideas, and round-robin feedback on ideas; 3) Discussion of each recorded idea for clarification and evaluation; 4) Individual voting on the reactive priority of the ideas by rank-order or rating judgements - the group’s final decision is based on the aggregation of the evaluations. The evidence based expert assessment used a desk top review of relevant literature and data. This was used in the two German Länder Niedersachsen and Baden-Württemberg and in Wales. The process involved an expert assessment based on documented evidence wherever possible, of the extent to which organic farming and agri-environment schemes achieved (or otherwise) the specified objectives defined in the criteria. The scoring system reflected substantially better performance than current practice, no difference and substantially poorer performance. Data was primarily drawn from the mid-term review of the regional Rural Development Plans and supplemented by data from other evaluations or relevant research studies, including comparisons of different farming systems.

For both the opinion and evidence based assessments, the schemes for all case studies were evaluated relative to current best conventional practice against a set of 24 criteria, namely: capital investment on-farm; diversification of farm enterprises; fragmentation and other farm structure issues; farm income; uptake of regulated production systems; biodiversity impacts; control of greenhouse gases; control of pollutants; forestry; landscape impacts; natural resource conservation; energy use; GM traceability; animal welfare; employment; food quality and safety; agricultural demographic; public health impacts; occupational health; knowledge and skills development; rural community well-being; social justice and equality; rural infrastructure (incl. transport, housing)

and local consumption.

## Results and Discussion

### *Drivers to organic farming uptake*

Groups of countries shared distinct patterns of organic farming uptake, though the factors driving uptake within these groups were not always common. In France, UK, Denmark and The Netherlands positive drivers pre-Agenda 2000 included poor performance of the conventional agricultural sector, higher OFS rates (UK and Denmark) and BSE (UK and France). Administration problems with OFS schemes in the late 1990's had a negative effect on uptake in the UK and Denmark. Post Agenda 2000, organic farming uptake in the UK and France was driven by the re-opening of the existing OFS scheme and the opening of the new CTE scheme, respectively. In Denmark the oversupply of the local market with organic product was a key barrier to conversion in the early 2000's, however, investment to stimulate market growth countered this. Germany has a slightly different pattern of uptake than these countries. In Germany, increased organic farming support payments in most Länder in 2000 stimulated uptake around this period. Post Agenda 2000, despite declining growth rates, strong policy support for organic farming including increased OFS payments in many Länder, investment in marketing and research, establishment of a federal organic farming scheme and the organic label (Biosiegel) in 2001 were all seen as key drivers to the uptake of organic farming.

Austria, Switzerland and Finland had the highest growth rates prior to 1997 and relatively stable numbers of organic farms for the remainder of the study period. Pre-Agenda 2000, an increase in OFS payments stimulated organic farming uptake in Finland, but the end of the first ÖPUL contracts in Austria and uncertainty over the content of the new ÖPUL programme had a negative impact on uptake in the late 1990's. Post Agenda-2000 the inflexibility of existing OFS contracts and the inability to get new contracts negatively influenced uptake in Finland. In Austria, the establishment of Biogetreideagentur (trader of organic cereals), a strong involvement of super-market chains leading to better market possibilities and more attractive prices were seen as key drivers to conversion, especially for cereal producers.

In Greece and Italy, the existence of organic farming support payments (higher in Italy than other agri-environment schemes) was seen as the key driver to organic farming uptake pre-Agenda 2000. Price premia for organic products was also seen as a key driver in Italy. Post Agenda 2000, decreased support payments and a downturn in the organic market (causing decreased price premiums), had a negative impact on organic farming uptake in Italy. In Greece, the introduction of the national Organic Husbandry Regulation in combination with the implementation of EU Reg 1804/99 resulted large areas of land and livestock converting to organic, but the total number of holdings remained the same.

### *Policy evaluation in the case study areas*

The criteria against which all the organic schemes or measures performed well, were: GM traceability; natural resource conservation; diversification of farm practice and products; food quality and safety and biodiversity impacts. These five criteria were identified as strengths of the organic scheme or measure in all the case studies (except the Baden-Württemberg (DE) study as three of these criteria were not evaluated due to data limitations). These additional benefits are not provided (at the same level) by other agri-environment schemes in the study areas. The assessments indicate substantially higher levels of performance for each of them under the organic schemes or measures. These benefits therefore represent the greater societal level benefits of organic support schemes and the farming practices that they encourage. In considering cost effectiveness, the organic schemes outperformed the other agri-environment schemes in most cases. This was due to the relatively low expenditure per hectare of the organic schemes. The only example where the

performance of the organic support schemes was similar to the agri-environment schemes was in the North East England study using cost data from 1997, where the expenditure per hectare was similar for both schemes.

The total cost of the schemes relative to the supported area was assessed only in two of the five case studies. This limited evaluation suggests that the organic support schemes are more cost effective than the other agri-environment schemes and that they produce greater levels of public goods at a lower price per hectare. This finding is preliminary and based on very limited data and requires further studies to confirm it.

## Conclusions

It has been shown that policy supporting organic farming is one but not the only driver to organic farming uptake. A variety of external factors such as poor performance of the conventional sector, food scares and market conditions all significantly influence the number of farmers converting to organic. Additionally, administrative uncertainties related to organic farming schemes and supports have also been highlighted as a key factor to reducing uptake of organic farming. Targeted organic farming policy will have limited benefit if there are other factors undermining farmer confidence to convert. Further research of how policy and farmer confidence interact is necessary to facilitate future cost effective policy development to support the organic sector.

From the case studies, criteria in which organic farming schemes and measures out performed alternative agri-environment schemes were GM traceability, natural resource conservation, diversification of farm practice and products, food quality and safety and biodiversity impacts. However, the analyses presented in this study cannot conclude that organic support scheme or other agri-environment support schemes perform better or are more cost effective. Reasons for this include the lack of evidence available for the two German and Welsh evidence based assessments, the variability of expertise in evaluating the schemes against every criteria and the fact that the cost-effectiveness measure was based on total expenditure and not transaction costs. This is compounded by the different time frame over which benefits are derived and the costs are borne. This study has highlighted some of the benefits of organic farming schemes in relation to other agri-environmental measures, but has also highlighted the complexity of such an evaluation. One of the key issues identified is the need to collect a wider range of data reflecting the wide range of objectives in rural development and agri-environment policy in order for a more accurate evaluation to take place.

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