

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Opportunities and Obstacles Facing Organic Farmers in the Czech Republic

Sven Anders, Lukas Matejovsky



Paper prepared for presentation at the 12th EAAE Congress 'People, Food and Environments: Global Trends and European Strategies', Gent (Belgium), 26-29 August 2008

Copyright 2008 by [Sven Anders, Lukas Matejovsky]

. All rights reserved. Readers may make verbatim copies of this document for noncommercial purposes by any means, provided that this copyright notice appears on all such copies.

Opportunities and Obstacles Facing Organic Farmers in the Czech Republic

Sven Anders, Lukas Matejovsky¹

Introduction

Addressing increasing public concerns about environmental stewardship, animal welfare, human health and food safety in food production, organic agriculture has rapidly advanced in the European Union (EU) during the last two decades (Hughes, 1995, Grunert and Juhl, 1995).

Growing environmental awareness and increasing demand for organic foods across the EU have been carried forward into the new member countries, many of them on the EU's former eastern border. For instance, organic farming is a highly discussed topic in the Czech Republic as people advance views that adopting environmentally friendlier practices will improve overall environmental quality and livelihoods in the country.

This study aims at providing deeper insights and a better understanding of the current state of organic farming in the Czech Republic. In particular we investigate and discuss opportunities and obstacles that Czech farmers express when confronted with their willingness to convert to organic farming practices. Based on a survey 81 organic and conventional farm managers in the Czech Republic interviewed in 2006 information on differences in economic, socio-economic characteristics and environmental perspectives among organic and conventional farmers have been collected. Important determinants in farm managers' decision making for or against a conversion decision for or against organic agriculture, as well as specific obstacles and reasons are analyzed using logistic regression methods.

The results reveal that organic farmers overall profess friendlier attitudes towards environmental issues. In contrast, conventional farmers particularly hold economic aspects as the major barrier against organic farming practices. In general, continuous government support is found to be one of the major factors that influence Czech farmers' willingness-to-convert to organic agriculture. To our knowledge this is the first study to empirically assess farmer's attitudes towards organic agriculture in the Czech Republic.

¹ Sven Anders is Assistant Professor and Lukas Matejovsky MSc student in the Department of Rural Economy, University of Alberta, 515 General Services Building, Edmonton AB, T6G 2H1, Canada. E-mail: <u>lukasm@ualberta.ca</u>; P: (780) 492 5453.

Methodology

The study applies a three-step procedure in analyzing the survey data. Descriptive statistics are used to identify principal differences between the conventional and organic farmer sector. Then, contingency analysis is applied to test for differences between groups of farmers with regards to their willing to convert to organic practices based on selected agricultural and economic factors. The third step of analysis involves logistic regressions to gain deeper insight into individual factors' contribution in explaining difference in farming methods and attitudes between organic and conventional farm managers with regards to organic agriculture.

A binary logit model was used in the quantitative analysis (Joseph Berkson 1944, Cramer 2003). Variables included in the logit model are: gender, education, by-occupation, farm production system, geographical location in the country, attitudes towards obstacles and opportunity for organic farming, future prospects for conventional organic farm conversion.

Survey of Organic and Non-organic Farmers in the Czech Republic

Prior to sending out questionnaires, government experts in the Czech Republic specialized in organic agriculture were contacted to elicit their expert opinion on two of the study's central questions (see Table 1). Expert opinions were then included in the farm manager questionnaire in the form of multiple choice statements, to give farmers the opportunity to respond and evaluate the expert's statements. Table 1 contrasts expert's and farmer's statements to highlight discrepancies between policy makers' and practitioners' assessment of future opportunities and challenges for organic agriculture in the Czech Republic.

Question	"Policy makers"	Farmers
	1. little information;	1. lower economic return;
What are the major	 complicated rules and regulations; do not believe in organic; 	 no marketing support from government;
obstacles for conventional farmer's	 do not beneve in organic, lower economic return; 	3. doubt in success;
to convert to organic	 doubt in success; high investments 	 low expectations; decreasing production;
agriculture?	o. ingli investments	6. strict rules and regulations.
		(conventional farmers)

Table 1 Comparison of organic farmer's and policy expert's opinions on major		
obstacles and reasons for and against the conversion to organic agriculture		

Question	"Policy makers"	Farmers
What are the major reasons for conversion to organic production?	 prospective of subsidies; environmental stewardship; economic reasons wellbeing, environmental benefits. 	 environment and life style; environmental stewardship; high quality, safe, healthy products; prospective of subsidies. (organic farmers)

Summary of major findings

Based on the first-step analysis of descriptive statistics organics farmer's see the biggest future threats to Czech organic agriculture from increased bureaucracy, larger needs for investment, stricter rules and restrictions for production. Future threats voiced by conventional farmers are: increasing production costs, decreasing redemption values and increasing bureaucracy (Figure 1). Organic farmers see future opportunities in subsidies, simplifications of administrative procedures. Conventional farmers see future opportunities in increasing farm efficiency, farm development in new agricultural practices and subsidies (Figure 2).

The second-step contingency analysis reveals that conventional farm managers engaged in grassland production systems are more likely to convert to organic agriculture than farmers mainly engaged in plant production. Animal production, animal husbandry and agri-tourism remain insignificant in their impact on farm managers' decision to convert to organic practices. However, farmers located in less favorable agriculture areas show a higher willingness to switch to organic than farmers located major production area.

Finally, logistic regressions were applied to the data to reveal economic and socioeconomic factors that determine differences between farming methods. Gender, educational background and off-farm income are affecting the decision whether to farm organic or conventional. Moreover, organic farmers indicate that future threats to their farms arise from increasing bureaucracy and the need for larger investments in farming. However, Czech organic farmers also see future opportunities that arise from their organic status, such greater involvement in product marketing and a stronger focus on increasing overall product quality.

Conclusion

Our analytical results show that organic farmers in the Czech Republic profess friendlier attitude toward environment compared to their conventional colleagues. Economic aspects, on the other hand, define the strongest barriers against organic farming voiced by conventional agriculture.

A key finding of this papers analysis is that one of the central factors that determine Czech farmer's willingness to convert to organic practices is governmental support. In particular governmental subsidies are thought to offset the additional costs of organic production and necessary investments needed to successfully achieve organic farm standards. Moreover, both, conventional and organic farmer managers see an important role of financial subsidies as a contributor to the future success of their farming businesses.

Based on this study's findings a set of indirect conclusions can be drawn for the future of organic agriculture in the Czech Republic. The design and implementation of an effective marketing and promotion system for value-added and value-based labels foods, such as organic produce is needed to assist Czech organic producers to increase consume awareness and hence retail demand for organic products. This subsequently can lead to profit increases along the food supply-chain down to the farm level. Profits of farming operations have been identified as the single most critical issue of concerns to conventional farmers in the Czech Republic. Hence, realizing a significant price mark-up at the farm-gate that corroborate with their potential ecological benefits play an important role for the further development of organic agriculture in the Czech Republic.

In addition, conventional farmers need to be better informed and educated about the economic opportunities and environmental benefits of organic agriculture. This will involve systematic support to improve supply-chain structures, R&D and education. According to the action plan for developing organic farming until 2010, the Ministry of Agriculture in Czech Republic aims to increase the number of organic farmers. The question that remains to be answer therefore will be at what economic costs the Czech government may be able to influence farmers' willingness to convert to environmentally friendly practices.

References available upon request

Appendix

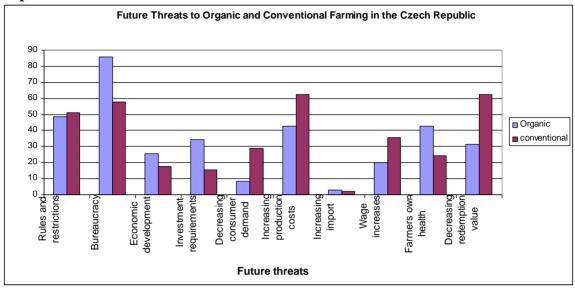
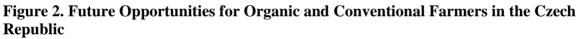
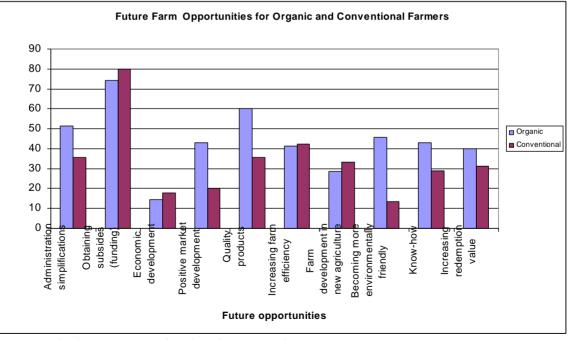


Figure 1. Future Threats to Organic and Conventional Farming in the Czech Republic

Source: Author's own computations based on survey data.





Source: Author's own computations based on survey data.