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Acceptance and Motivational Impact of the Organic Certification System

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Abstract:

In recent years the institutional framework of the organic certification system has step by step become a more formal and state run system. Our research shows that although the majority of the farmers accept the system, they are not convinced of its cost-benefit relationship. Farmers prefer a more association- and advice-oriented control of the organic certification process.

Introduction and objectives:

In Europe the reliability of organic agriculture is secured by a special EU regulation, which was introduced in 1992 (EEC No. 2092/91). Main part of this regulation is a third party certification system to control the whole organic supply chain. Currently the structure and the accomplishments of this scheme are critically discussed. On a national level, the introduction of a German "organic production law" ("Ökolandbaugesetz", June 17, 2005) has reformed some important aspects of the system, but, however, did not simplify the system. In contrast, its excessive bureaucratic requirements are openly criticized. Against this background some authors call for a private quality assurance scheme. In other agribusiness sectors a variety of new private systems for quality certification such as EurepGAP, IFS, BRC or QS have emerged. These systems pursue similar targets. As a consequence of this situation, the question arises whether a private control scheme could be less bureaucratic.

On the other side the Agricultural Council agreed on a proposal of the European Commission for a new regulation on organic production and labelling of organic products (COM(2005)0671 final, December 19, 2006). The new regulation aims at integrating organic certification deeper into national control plans and tries to have a stronger link to the state-run food and feed control regulation (No. 882/2004). Certification procedures by private bodies should be supervised more strictly. In general, the regulation can be interpreted as a step towards a more state-controlled system.

All in all, the institutional framework of the certification scheme is a crucial factor for the future success of the organic market. The following paper tries to contribute to this aspect by taking the viewpoint of the supervised enterprises. In a farmer survey the experiences and attitudes of organic farmers are revealed. A better understanding of farmers' attitudes is necessary to increase acceptance and to guarantee the confidence of the consumers in organic certification in the long run. So far, only a few studies have dealt with farmers' attitudes towards quality assurance systems in the food sector. A first research question deals with the preferred institutional framework, i. e., whether the farmers favour a private or a state-run certification system. The second topic is the understanding of farmers' attitudes towards the organic certification scheme. Acceptance and positive motivation are important because a scheme which is recognized as a bureaucratic burden will not lead to quality improvements.

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Methods:

The analysis reported in this paper was conducted on data obtained from a sample of 126 organic farmers in Germany. In July 2005, farmers were questioned via an online survey. The average interview took about 12 minutes. All in all, the sample includes larger sized farms (81.5 hectare per farm) than the average organic farm in Germany (57.4 hectare per farm, SBD 2006). The respondents were on average 45 years old and 81.6 % of them had a further agricultural education. The majority of these farmers (60 %) were members of the leading German organic associations (Bioland; Demeter = 16 %). All in all the sample is a "convenience sample" and does not fulfil all the criteria of representativeness. It includes more "future-oriented" and bigger farms than the average in Germany. However, these farms might be decisive for future developments as larger farms gain more importance due to the structural changes in German agriculture.

Public or private certification:

To answer the question about the preferred institutional framework, i. e. whether the farmers favour a private or a state-run certification system, we used a frequency analysis (Tab. 1).

Tab. 1: Frequency analysis of the preferred institutional framework.

| Statement | μ | σ | Frequency in % | | |
|---|-------|----------|-------------------|-------------|----------------|
| | | | (Partly) disagree | Neither/nor | (Partly) agree |
| I would prefer it if only the government conducted the control. | -1.69 | 1.49 | 84.94 | 6.35 | 8.73 |
| Supervising by organic associations is more effective than organic certification. | 0.52 | 1.85 | 30.65 | 20.16 | 49.19 |
| A control by colleagues or by organic associations would be completely sufficient to guarantee the quality of organic products. | -0.31 | 1.99 | 57.14 | 10.32 | 32.54 |
| I would prefer a more advice-oriented type of quality control in organic production. | 1.57 | 1.36 | 5.56 | 15.08 | 79.37 |

σ = standard deviation; μ = mean; scale from +3 = totally agree to -3 = totally disagree

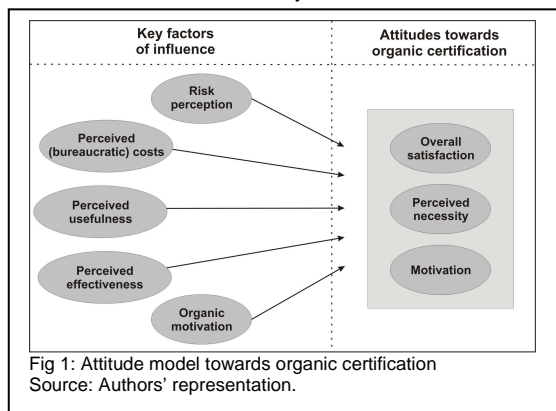
Source: Authors' calculation.

Only 8.73 % of the farmers were of the opinion that the government should be responsible for the organic certification system. The results indicate that the majority of the farmers prefers a more association- and advice-oriented control. Hence, the attempt of the EU to strengthen the influence of public authorities in the scheme is rejected by the farmers. The other questions deal with alternative institutional forms of regulation, i. e., should the control process be organized by organic associations like it was before the EU regulation had been introduced, or should it be a process of self-supervising (by colleagues) or a kind of Total Quality Management. In these cases farmers are mostly insecure, but they clearly prefer certifiers who are able to support farms in case of quality or production problems.

Acceptance and motivational impact:

The second topic of our paper is the understanding of farmers' attitudes towards the organic certification scheme. Only little is known about the actual factors provoking it. So far, only few studies have dealt with farmers' attitudes towards quality assurance systems in the food sector. Referring to first studies, two main problems have been revealed: (1) the cost-benefit ratio is often negatively evaluated, and (2) communication, which is necessary for successful implementation, is neglected (JAHN & SPILLER 2005, BÖCKER et al. 2003). As a consequence, a "gap of acceptance" has been revealed in the literature.

Our theoretical foundations are primarily based on behavioural research, cost-benefits analyses and especially on the Technology Acceptance Model (TAM) developed by DAVIS (1989). TAM is a well-known and important modification of the Fishbein and Ajzen Theory of Planned Behaviour and the Theory of Reasoned Action (AJZEN 1991, FISHBEIN & AJZEN 1975). It is aimed at explaining and predicting the acceptance and use of information systems.



While the basic TAM represents a suitable starting point for the development of a re-research model for organic certification, some characteristics specific to the current situation associated with the implementation of quality assurance systems must be considered. The key difference is the fact that the adoption of organic certification is not voluntary, but a necessary requirement for market

access. Therefore we analysed the attitudes towards organic certification. On the one side, we defined three dependent variables which characterized the main attitudes towards the system, the overall satisfaction, the perceived necessity and the motivation. On the other side we introduced five determinants which influence the attitudes towards organic certification (Fig. 1).

The first part of the analysis was aimed at gaining insight into the pattern of farmers' attitudes towards organic certification. The result shows on the one side that 91.2 % thought that the system is important. On the other side only 41.1 % of the farmers were satisfied with the system and only 36.5 % agreed with the statement that the certification system is motivating. These results indicate that there is, compared to other certification systems in the food sector (e. g. QS, IFS or QM), a high acceptance for the organic system. However, it is not motivating for the farmers. We used three regression models to get a deeper look into this controversial situation (Tab. 2).

Tab. 2: Results of the regression analysis.

| Independent Variable | Dependent Variable | | |
|--------------------------------|--|---|--|
| | Model 1 Overall satisfaction | Model 2 Perceived necessity | Model 3 Motivation |
| Perceived (bureaucratic) costs | -0.298*** (-4.507) | -0.187 (-2.292)* | -0.277*** (-3.995) |
| Perceived effectiveness | 0.211** (3.187) | 0.280*** (3.423) | 0.284*** (4.097) |
| Perceived usefulness | 0.575*** (8.690) | 0.273** (3.335) | 0.478*** (6.900) |
| Organic motivation | 0.071 (1.076) | 0.123 (1.499) | 0.195* (2.817) |
| Risk perception | -0.065 (-0.984) | -0.002 (-0.022) | 0.052 (0.748) |
| | adj. R ² = 0.452 F = 21.624*** | adj. R ² = 0.171 F = 6.116*** | adj. R ² = 0.405 F = 17.848*** |

*** = $p < 0.001$. ** = $p < 0.01$ * = $p < 0.05$; first value = beta value; second value = t-value

Source: Authors' calculation.

Interpreting the results of the regression model, the farmers' overall satisfaction towards organic certification is higher, if they perceive an increased usefulness of the

system. Perceived effectiveness considerations are less important for the evaluation of organic certification than the bureaucratic costs.

The analysis of the perceived necessity pointed out that the most important factor is the perceived effectiveness of the organic certification system. Only a system which is credible will be able to convince the farmers of its necessity. With regard to future strategies for organic certification, the relation of product and process management should be linked more closely in order to prevent pure "give-me-paper" procedures. For that purpose, laboratory analyses of organic quality and management metasystems can be combined. A negative influence on motivation is associated with the bureaucratic burden involved in the documentation and formalisation procedures of organic certification. Two factors could reduce this: a better usefulness and effectiveness of the system. However, farmers with a higher organic motivation have also a high motivation towards organic certification.

Conclusions:

The results clearly demonstrate that the theoretical transfer of the Technology Acceptance Model to the attitudes towards organic certification is possible and applicable. Our research shows that although the majority of the farmers accept the organic certification system, they are not convinced of its cost-benefit relationship. Especially the perceived bureaucratic burden of organic certification decreases its acceptance. A higher conviction and motivation are necessary to ensure farmers' diligence in the implementation of the guidelines. Such changes should be accompanied by a proper communication of the costs and benefits incurred in organic certification. However, the farmers prefer a more association- and advice-oriented control of the organic certification process. In addition the farmers favour a privately run certification system as an institutional framework.

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