

Adina-Roxana MUNTEANU
The Bucharest University of Economic Studies

THE THIRD PARTY CERTIFICATION SYSTEM FOR ORGANIC PRODUCTS

Literature
Review

Keywords

Third party certification
Organic certification
European Union

JEL Classification

G38, L10

Abstract

In the context of an increasing organic trade worldwide, the organic standards and the certification of the organic practices are ever more important and relevant for both business and consumers. The certification by third parties of the organic operators is meant to ensure the application of an organic standard. However, the documented fraud cases are proof that the current system can undergo further improvement. The current paper gives an overview of the mechanisms of certification and inspection worldwide and discusses the issues raised by third party certification of the organic operators in the European context. Moreover, the paper reviews the major arguments for the effectiveness of the third party certification and also points to the improvement possibilities of the systems.

1. Introduction

The trends in international commerce reflect increasing international trade with organic products. In this context, both consumers and business partners want to be able to trust that the product they are buying is what the label says it is. The organic trade is built on trust that the certification system functions and the certification and inspection bodies do their work in trying to ensure quality and prevent fraud.

Consumers pay a premium price for the organic products. Can they rest assured that the purchased product is organic as stated on the label? There are organizations that aim to assure quality and to insure the protection of the consumer, such as the governmental authorities via legislation or control systems, and also private companies specialised in quality assurance, which ensure that the rules and regulations applicable are enforced.

From the field until the final consumer, organic products are checked in all stages of production and along all the steps on the value chain. The farmers, the processors and the traders, all need to be certified by an inspection and certification body in order to be able to sell products that result from “organic agriculture”. Moreover, to ensure that the certification bodies are doing their jobs properly, they are accredited by a different organism and also approved a competent authority in all the Member States of the European Union (EU).

The documented fraud cases of certified companies decrease the trust of consumers in the European organic food sector in spite of the thick regulations and governmental control in place, most of the causes were not detected until after the crises had occurred, leading to a decline in consumer confidence in the safety and quality of many food products (Jahn et. al, 2005). According to the above mentioned study investigating the reliability of certification, the authors conclude that certification systems mainly depend on trust and therefore, it is necessary to improve certification and audit procedures in order to reduce fraud cases.

The major risk when discussing the organic value chain is the risk of contamination of the product in the different stages of the production process. Some of the reasons for contamination are insufficient quality control and contamination due to fraud (Fuchshofen, 2009). Only a few cases of fraud in organic ingredients are relatively well documented incidents (Fuchshofen, 2009; Biokap, 2009) due to difficulty in proving the intentional fraud intent and insufficient data. However, there are private projects with the scope of quality assurance on the organic market. Such a project is the joint Biokap (<http://www.biokap.com>), AOEL (<http://www.aoel.org/>) and Hamburger Warenverein (<http://www.waren-verein.de/>) that

aims to develop a common Quality Management Guideline specific for the organic sector.

In a study based on an online trading platform dedicated exclusively to the commercialization of organic products, Munteanu (2014) reviewed the specific types of risks and the mitigation measures. Moreover, the study presents a new framework for risk assessment that includes a profile of the producer (organic operator), data on product traceability and general environment. In this framework, the role of the organic certification is rather small, suggesting that for an operator an organic certification is just one of the first steps to a good reputation on the market.

Overall, food products and food production at least in theory is getting safer and safer in the European Union due to increasing regulation of the sector in the last couple of years. According to Bánáti (2011) wide spread scandals of the last two decades (Bovine Spongiform Encephalopathy crisis, dioxin crisis, melamine case) focused the consumers’ and authorities’ attention on food safety. The European food policy now includes the integrated approach of risk assessment (from-farm-to-fork) through the establishment of the European Food Safety Authority since 2002 which is undertaking risk assessments along the food chain.

The scope of this paper is to provide an overview of the mechanisms of certification and inspection and to discuss the issues raised by third party certification of the organic operators in the European context. Moreover, the paper reviews the major arguments for the effectiveness of the third party certification and critiques and also points to the improvement possibilities of the systems.

After a short review regarding the role of certification in the organic market, part three of the paper presents the third party certification system in the European context. The next section reviews the critiques to the system and also a series of improvement recommendations. The last section briefly presents the conclusions.

2. The role of certification in the organic market

This section aims to review two major arguments in favour of certification, such as: certification as a way to manage the asymmetry of information between producer and consumer and certification as a signal for quality on the organic market.

Consumers or buyers of organic products cannot determine whether a product is organically or conventionally grown. The quality of being “organic” is a credence attribute, as for example the existence of pesticide residuals cannot be observed through search or experience, and furthermore it cannot be judged even after inspection and use (Albersmeier et al. 2009). In order to detect fraud with respect of credence attributes it is necessary to monitor the producer and its internal processes.

However, an endeavour of comprehensible control is not feasible.

Certification is one way to back up the claims of quality attributes. Third party certification is a mechanism that is used for social problems – such as fair trade (Getz & Shreck 2006), environmental problems, quality assurance in the food industry (Schulze et al. 2008), (Schulze et al. 2006) (Hatanaka 2010). So it seems that the TPC became some sort of norm in the global industries (Gereffi et al., 2001).

In an article on efficacy of certification (Ward et al. 2004), signalling, reputation, and certification of the farm and its growing methods are mentioned as methods to solve the problem of asymmetric information in the organic market. Along the same line, Lohr (1998) argues that certification removes asymmetric information by providing consumers assurances regarding the production methods used and ensuring producers that conventional growers will not be able to make claims to produce organically.

In order for certification to reduce information asymmetry, however, consumers should believe the certifying organization. According to Jahn et. al (2005), the task of certification can be fulfilled only if these institutions are successful in reassuring certification quality, therefore proving the validity of the audit signal. Given that these organisations succeed in establishing a quality reputation in markets, the corresponding labels may be accepted as a quality surrogate.

Several studies argue the significant role played by the third-party certifiers in the global food system (Deaton 2004, Jahn et.al 2005) as they provide market signals concerning food quality claims. A successful third-party certification system ensures the buyers of food quality and reduces asymmetry of the information in the market.

3. The third party certification system

This section will briefly present the third party certification system. First, let's clarify the definition of certification. According to Meuwissen et al. (2003) "certification is the (voluntary) assessment and approval by an (accredited) party on an (accredited) standard" meaning the operators choose to voluntarily enrol in the TPC system.

This system of third party certification (TPC) involves an independent body that is responsible for assessing the activity of the operator in accordance to a standard. It is important to point out that inspections are carried out by independent bodies (third party audit) while standards are laid down by external organisations (Luning et al. 2002).

The basis of the TPC is the perceived objectivity (meaning independence, measurement and

verification) which legitimizes it as governance mechanism (Hatanaka et al. 2005).

The third party certification implies three steps (1) auditing suppliers and verifying that the standards are implemented; (2) issuing certification; and (3) making periodic audits to ensure continued compliance (Hatanaka & Busch 2008). The third party certification system is based on two audits, one external, usually once a year, and one internal, which is the responsibility of the certified party to create an effective internal control system. The external auditor inspects the internal control system and its efficacy. Thus, using this dual auditing mechanism, TPC is designed to verify whether suppliers are complying with a particular standard (Hatanaka 2010).

(Tanner 2000) argues that third party certification is often considered to be a product of scientific and technical practices and therefore, is regarded as objective and unbiased. As an enforcement mechanism, TPC implies the independence of auditors, the tangible evidence as the basis of audits and that which is being audited must be clearly identifiable and independently verifiable. These three characteristics are the basis for claiming the objectivity of TPC and its legitimacy as a governance mechanism (Hatanaka et al. 2005).

Konefal & Hatanaka (2011) mention that a critical factor behind the widespread adoption of TPC is the understanding of it as a science-based and objective form of governance. This understanding of TPC is an outcome of it having a complex set of technical rules and procedures designed to ensure that undue influence does not occur and stakeholder participation takes place in the standard-development process, and audits are objective and transparent. While we concur that TPC is a form of science-based governance, we also argue that TPC is a political and power-laden form of governance.

3.1. The third party certification system in the EU context

Let's now have a more detailed look on the third party certification system in the European Union. In the EU the system of certification is governed by Council Regulation (EC) No 834/2007. According to this regulation, the EU certification system involves the following actors: a local certification and/ or inspection body, an accreditation body, a competent authority at the level of the member state, and the organic operators. The certification body is the organization that controls the organic operators regarding the compliance with EU organic regulations against Council Regulation (EC) No 834/2007.

In order to be able to use the organic labelling in the EU, the organic operator must be certified against the above mentioned regulation.

Furthermore, every organic operator can voluntarily decide to certify for one or more private standards, e.g. standards from farmers' associations such as Soil Association (UK) or Naturland (Germany). The last two mentioned private standards have gained enough popularity and have such a good reputation in the market that some commercial transactions are required at the request of the buyer, usually.

Accreditation is the formal recognition by a relevant body (accreditation body) that a conformity assessment body meets the particular requirements applying to that body in terms of qualification and equipment and may thus be deemed competent. The accreditation body is responsible for confirming that the certification bodies comply with ISO 45011: 2001 General Criteria for Certification Bodies Operating Products Certification. However, the critique formulated by Jahn et al. (2005) refers to the fact that accreditation is largely a formal act and does not include supervision of the real working process. It is becoming increasingly apparent that accreditation is a necessary prerequisite for successfully competing at the international level but it should be noted that in the EU it is mandatory. Regulation (EC) No 765/2008 provides a legal framework for the provision of accreditation services across Europe. The Regulation specifies that accreditation may only be granted by a (single) national accreditation body, which shall be member of the European Cooperation for Accreditation (ECA) and shall have successfully undergone peer evaluation.

The ECA is an association of national accreditation bodies in Europe that are officially recognised by their national Governments to assess and verify—against international standards—organisations that carry out evaluation services such as certification, verification, inspection, testing and calibration. Most EU member states have designated official accreditation bodies which are affiliated to the International Accreditation Forum (IAF).

By their very nature, the surveillance activities carried out on control bodies by the national accreditation body overlap, to a certain extent, with the supervisory activities carried out by the competent authorities. (EC, 2013). This entails a duplication of activities and increases the cost of the control system especially because there are no specific rules in the organic legal framework with regards to cooperation and exchange of information between Member States' competent authorities and accreditation bodies. In this context, the collaboration between all the relevant stakeholders on the certification market in order to share information and increase market transparency, may lead to increasing trust among operators and this might stimulate organic trade.

EU certification procedure for organic products Certification of organic products within the EU, whether produced domestically or imported, is regulated by the Council Regulation No. Regulation No 1235/2008, regarding the rules for implementation of Council Regulation (EC) No 834/2007 as regards the arrangements for imports of organic products from third countries. The Annex III to the above mentioned regulation mentions the issue of certificate equivalents with third countries. This annex mentions that 11 countries as equivalent: Australia, New Zealand, Argentina, Costa Rica, India, Israel, Tunisia, Switzerland, United States, Canada and Japan. While in general these agreements are unilateral, in recent years the Commission has developed mutual equivalence arrangements with third countries, notably with the U.S., Canada, Switzerland and Japan. Moreover, the assessment of equivalence with more countries is underway.

For countries that are part of Annex III, the exporting process is greatly facilitated since the level of paperwork and bureaucracy involved in the process is reduced (Barrett et al. 2002). However, if the EU has no equivalence agreement with a country, like for example Chile, the impact of EU organic certification legislation on organic exports from Chile is that it forces Chilean organic exports to enter the EU through the 'back door' (Garcia Martinez & Banados 2004).

Several studies (Garcia Martinez & Banados 2004, Engel 2004) underlined the importance of technical trade barriers in the agricultural sector. Mandatory certification schemes are in fact non-tariff trade barriers. Moreover, public subsidies and public and private standards affect competition, since they are highly relevant in the trade context, often acting as international trade barriers (Hammoudi et al. 2009, Henson 2008). In addition, it is worth mentioning that the requirements on accreditation are not the same for control bodies in the EU and in Third Countries and that this issue may justify the strict protocol of the EU in certification equivalence.

The EU organic market is accessible only if strict standards are followed. Therefore some regional groups of stakeholders created initiatives for regional organic standards in Pacific island countries and territories, East Africa, Central America and the Dominican Republic, South and South-East Asia. These regional standards are based on public-private partnerships and gather political support via multilateral agreements. Such standards try to obtain recognition from the EU law makers as to provide more market opportunities for the operators certified under the regional standards.

4. Improving the third party certification system

After the review on the TPC system, the following section of the current article will review some of

the critiques related to the audit process, quality of inspection, independence of the certification bodies, politics and the price level. In addition, some of the proposed measures for improvement for each critique are highlighted.

On the certification market the price can vary consistently for the certification services. The different price level practiced on the market may suggest the differences between certification and inspection bodies, with some being more lenient than others and others more severe. The price level is dependent on the cost of inspection and audit.

One of the main issues that are raised by the TPC system is that auditors use proxy measures to verify compliance, meaning they check documentation not the practices of farmers/ suppliers. Hatanaka (2010) studying the organic shrimp network in Indonesia, concludes that farmers' practices and records are not always congruent and that audits largely check suppliers' documentation. Hatanaka (2010) concludes for his study of organic shrimp network that auditing documentation can be problematic because simply checking the records of suppliers does not mean they are adhering to the standards.

Another sensitive issue in the TPC is that the certification quality is mainly due to the inspection quality. The study of Jahn et. al (2005) mentions that the management of the organic operator, which at the end of the day pays the bill for the certification services, has no interest in a high inspection quality as this would be reflected in the price of the certification and also would enhance the risk of not meeting the standard.

As an improvement in inspection technology, there is the risk based approach in inspection (Jahn, et. al 2005). Three risk factors are taken into account for the risk evaluation: (1) the results of previous controls, (2) the quantity of products concerned and (3) the risk of exchange of products (EC, 2013).

In a study on the reliability of certification quality, Jahn et al. (2005) create a model that shows inherent risks in the certification procedures with the following factors influencing the inspection quality: the model of audit effectiveness, liability of the inspectors, reputational effect over the certification body, independence and protecting quasi-rents of the certification body, inspection technology. The study of Jahn et. al (2005) argues that these are points that suggest the need to increase the quality of auditing.

In financial auditing, the risk-oriented auditing is already a popular method used to improve the inspection quality (Jahn et al. 2005). In the organic sector, risk-oriented auditing involves a specific classification of organic operators according to the probability of fraud. The results of this approach refer to the classification of low-risk and high-risk operators, and therefore a more dynamic approach of the control process. In case of high risk, the

frequencies of audit increase and also the intensity, while in the case of low risk operators, the audits are made at longer intervals.

In 2013, public consultations were organised by the European Commission - Directorate General for Agriculture and Rural Development regarding the review of the EU policy on organic agriculture (EC, 2013). A risk-based method was discussed during the public consultation and it received both favourable and critical reviews. Supporters of the risk-based control system were FiBL, Dakks and Evira. Main suggestions for the risk-based approach were focusing on 10 % of operators with risk of irregularities and reducing the burden for compliant operators by removing the obligation for a mandatory annual inspection (FiBL). The IFOAM representatives stated that the focus on the risk-based approach should not undermine the audit approach (announced inspection) of each operator; moreover, parameters for risk classification as well as possible risk orientated control measures need to be pre-defined at EU level in a consistent way (EC, 2013).

The resistance to moving towards a fully risk-based control system can be explained by the need to re-think the control system, which can be seen as challenging. Some member states and stakeholders consider that the mandatory physical inspection of all operators prevents the full implementation of the risk-based approach (EC, 2013).

The risk-based method is not compatible with the static approach of the mandatory annual control visit as currently implemented. According to article 27 of Regulation No 834/2007, all operators shall be subject to verification of compliance at least once per year. The implementing rules regulation (article 65 of Regulation No 889/2008) qualifies this annual verification of compliance as a physical inspection. However, this regulation also states that in addition to the annual inspections, the control body or control authority shall carry out random control visits, primarily unannounced, based on the general evaluation of the risk of non-compliance with the organic production rules.

Other critics of the TPC system argue that it is about politics and relations of power (Konefal & Hatanaka 2011) and more of a political and power-laden process (Brown & Getz 2008). On the other side, (Konefal & Hatanaka 2011) argue that TPC should be understood from both perspectives, as both science based and objective (TPC is governed by technical rules and procedures) and also as political form of government (as there is space for politicking, manoeuvring and negotiating).

Tanner (2000, pg. 415) mentions some of the benefits of the third-party certification system: the reducing of the risk and liability; strengthened due diligence' defence, greater confidence in regulatory compliance, competitive advantage, improved access to markets; national/ international

acceptance, reduced costs and improved profitability, reduced insurance costs; and more effective management. The caveat Tanner (2000) suggests refers to the fact that to achieve the benefits mentioned above third-party certifiers' "true independence" is essential. However, a theoretical framework for examining third-party certifiers, their perceived independence, or the role of international standardizing bodies is not provided in the study.

The reputation effects that the certification has on the operator and the certifier are mentioned by (Jahn et al., 2005). If reputation is to be maintained and improved, higher market transparency is needed and more information on the performance of different certifying bodies is to be provided, especially to consumers. This is also why the third level control (meta-control) is in place. In this context, the good reputation certification bodies can ask for a higher price for certification.

Keeping in mind that the operator who chooses to certify can also choose the certifier and thus the auditor, there is the incentive to choose a cheap certification, as it can be a decisive competitive advantage in the certification market. However, charging less for the same type of service – meaning certification, can significantly affect the quality of inspections (Barrett et al., 2002). On the other hand, according to the study of (Jahn et al. 2005) there are negative welfare effects of enhancing the level of audit quality which are related to the higher auditing costs. A higher price leads to decreasing demand for products with high information asymmetry. In the end, a correct price level on the market will allow for the correct amount of inspection and audits, with no over inspection or risks of under-inspection.

5. Conclusions

All in all, there are benefits of the third party certification system and also issues that need improvement. Given the rapid growth of the certification market at the EU level, caution is advised as the market still presents problems and for less experienced stakeholders, fraud is likely to occur.

This paper gave an overview of the mechanisms of certification and inspection: starting from the operators, moving to the certification and inspection bodies, and the organisation that accredited them.

There are a number of benefits that come from the TPC such as signalling quality, offering confidence that there is regulatory compliance, competitive advantage just to mention a few. However, given the fact that fraud cases still appear, the TPC system is obviously not perfect.

The scientific literature has many suggestions to improve the system. The proposed solutions refer

to improving audits by adopting a risk-based approach, more transparency on the market through collaboration of the relevant actors.

Further research could be in the direction of in-depth study of the interconnectivity of all the institutions on the certification market in order to identify synergies and improve the overall efficiency of the market.

References

- [1] Albersmeier, F., Schulze, H., Jahn, G., & Spiller, A. (2009). The reliability of third-party certification in the food chain: From checklists to risk-oriented auditing. *Food Control*, 20(10), 927-935.
- [2] Bánáti, D. (2011). Consumer response to food scandals and scares. *Trends in Food Science and Technology*, 22(2), pp.56–60.
- [3] Barrett, H. R., Browne, A. W., Harris, P. J. C., & Cadoret, K. (2002). Organic certification and the UK market: organic imports from developing countries. *Food policy*, 27(4), 301-318.
- [4] BIOKAP. (2009). Positive test results: fraud or error; Available at http://www.organic-integrity.org/fileadmin/afi/docs/afi4/residues-in-organic-products_fraud-or-error_2009-12-02.pdf [accessed April 2014]
- [5] Brown, S., & Getz, C. (2008). Privatizing farm worker justice: Regulating labor through voluntary certification and labeling. *Geoforum*, 39(3), 1184-1196.
- [6] Deaton, B.J. (2004). A theoretical framework for examining the role of third-party certifiers. *Food Control*, 15, pp.615–619.
- [7] EC. (2013). European Commission - Directorate-General for Agriculture and Rural Development - Report on the results of the public consultation on the review of the EU policy on organic agriculture conducted by the directorate general for agriculture and rural development (15 January-10 April 2013), Brussels. Retrieved from http://ec.europa.eu/agriculture/organic/documents/eu-policy/of-public-consultation-final-report_en.pdf [accessed September 2014]
- [8] Engel, S. (2004). Achieving environmental goals in a world of trade and hidden action: The role of trade policies and eco-labeling. *Journal of Environmental Economics and Management*, 48, pp.1122–1145.
- [9] Fuchshofen, W. (2009). Risk Management for Organic Ingredients. *Organic Processing Magazine*.
- [10] Garcia Martinez, M. & Banados, F. (2004). Impact of EU organic product certification legislation on Chile organic exports. *Food Policy*, 29, pp.1–14.
- [11] Gereffi, G., Garcia-Johnson, R., & Sasser, E. (2001). The NGO-industrial complex. *Foreign Policy*, 125(4), 56-65.

- [12] Getz, C. & Shreck, A., 2006. What organic and Fair Trade labels do not tell us: towards a place-based understanding of certification. *International Journal of Consumer Studies*, 30(5), pp.490–501.
- [13] Hammoudi, A., Hoffmann, R., & Surry, Y. (2009). Food safety standards and agri-food supply chains: an introductory overview. *European Review of Agricultural Economics*, 36(4), 469-478.
- [14] Hatanaka, M. (2010). Certification, partnership, and morality in an organic shrimp network: rethinking transnational alternative agrifood networks. *World Development*, 38(5), 706-716.
- [15] Hatanaka, M., Bain, C., & Busch, L. (2005). Third-party certification in the global agrifood system. *Food policy*, 30(3), 354-369.
- [16] Hatanaka, M., & Busch, L. (2008). Third-Party Certification in the Global Agrifood System: An Objective or Socially Mediated Governance Mechanism?. *Sociologia Ruralis*, 48(1), 73-91.
- [17] Henson, S. (2008). The role of public and private standards in regulating international food markets. *Journal of International Agricultural Trade and Development*, 4(1), 63-81.
- [18] Jahn, G., Schramm, M., & Spiller, A. (2005). The reliability of certification: Quality labels as a consumer policy tool. *Journal of Consumer Policy*, 28(1), 53-73.
- [19] Konefal, J., & Hatanaka, M. (2011). Enacting third-party certification: A case study of science and politics in organic shrimp certification. *Journal of Rural Studies*, 27(2), 125-133.
- [20] Lohr, L. (1998). Implications of organic certification for market structure and trade. *American Journal of Agricultural Economics*, 1125-1129.
- [21] Luning, P. A., Marcelis, W. J., & Jongen, W. M. (2002). *Food quality management: a techno-managerial approach*. Wageningen Pers.
- [22] Meuwissen, M. P., Velthuis, A. G., Hogeveen, H., & Huirne, R. B. (2003). Traceability and certification in meat supply chains. *Journal of Agribusiness*, 21(2), 167-182.
- [23] Munteanu, A.R. (2014). The Risk Management Of Organic Products Along The Value Chain, 2014 In *Proceedings of the "International Conference on Production Research – Africa, Europe and Middle East - 3rd International Conference on Quality and Innovation in Engineering and Management"*, 340-345
- [24] Schulze, H., Albersmeier, F., Spiller, A., & Jahn, G. (2006, June). Checklist Governance: Risk-oriented audits to improve the quality of certification standards in the food sector. In *Proceedings of the „16th Annual World Food and Agribusiness Forum, Symposium and Case Conference "IAMA (International Food and Agribusiness Management Association)"Agribusiness, Food, Health, and Nutrition* (Vol. 10, p. 13).
- [25] Schulze, H., Gyau, A., Albersmeier, F., Spiller, A., Nagatsuka, T., & Ninomiya, S. (2008). Improving the Quality of Certification Standards: The Application of Information Management Systems in the Food Sector. In *World conference on agricultural information and IT, IAALD AFITA WCCA 2008, Tokyo University of Agriculture, Tokyo, Japan, 24-27 August, 2008*. (pp. 911-919). Tokyo University of Agriculture.
- [26] Tanner, B. (2000). Independent assessment by third-party certification bodies. *Food control*, 11(5), 415-417.
- [27] Ward, R., Hunnicutt, L., & Keith, J. (2004). If you can't trust the farmer, who can you trust? The effect of certification types on purchases of organic produce. *International Food and Agribusiness Management Review*, 7(1), 60-77.