

## Certification and Accreditation of Organics in Austria: Implementation, Strengths and Weaknesses

*Ika Darnhofer<sup>1</sup> and Christian R. Vogl<sup>2</sup>*

Over the past few years, policy makers have supported the development of organic farming at the European and national level as a process that contributes to environmentally sound farming practices. In Austria, about 9% of farms are currently under certified organic management, the highest percentage in the European Union (EU). Several factors have contributed to this: the activities of organic farmers' associations; the early inclusion of guidelines for organic crop production and animal husbandry in the Austrian Codex Alimentarius; government support through direct payments for organic farms during and after conversion; the early commitment of supermarket chains; and the establishment of a private organic marketing company (Vogl and Hess, 1999).

Within the EU, the ongoing changes in the Common Agricultural Policy have shifted farm income support from product price intervention to direct payments not linked to production (Dunne and O'Connell, 2003). However, if direct payments for organic farming are seen by European governments as a necessary tool to reward farmers for the preservation of public goods, they are at the same time the subject of critical discussions. As a result, market instruments that support demand, such as labels for organic products and the marketing of these products, are gaining importance. Because organic farming currently is the only farming approach that is supported by an explicit legal definition and international agreements, it has an edge over other ecolabels. The defined standards are intended to promote consumer confidence and prevent an undermining of the market through fraudulent trading.

### *Structure of Certification in Austria*

#### **EU regulations**

With the European Council Regulation (EEC) Nr.

2092/91 and its amendments (henceforth called the "EU Regulation") the EU has created the regulatory framework for the organic farming sector in Europe (Lampkin et al., 1999). The EU Regulation identifies the production methods that are permitted as well as those that are prohibited, and lists all the inputs that may be used. It also includes processing rules that must be satisfied for a product to be labeled "organic."

The EU Regulation also specifies the inspection and certification regime that is obligatory for operators involved in putting organic products on the market. It requires that all operators involved in the production, processing, packaging and labeling of organic products be officially registered, inspected and certified. Member States must establish an inspection system operated either by private certification bodies satisfying the quality standard EN 45011 (the European version of ISO Guide 65), or by public certification authorities. These certification bodies must be supervised and a system of information exchange between the certification bodies and the public authorities must be set up to communicate irregularities and infringements found during inspections. Given the differences in conditions and traditions within Europe, some issues within the EU Regulation may be decided at national level.

The EU Regulation, which was passed in June 1991 and implemented as of January 1, 1993, is legally binding in all Member States and must be fulfilled by any imported product. So far, it has been amended more than 40 times in an effort to increase the specificity of the regulations and close loopholes, thus reducing the room for interpretation. One of the major amendments to date (EEC 1804/99) covers production, labeling and inspection of the most relevant livestock species (cattle, sheep, goats, horses and poultry), as the original EU Regulation covered

<sup>1</sup>Institute of Agricultural Economics, University of Agricultural Sciences Vienna, Peter Jordan Str. 82, A-1190 Vienna, Austria. Corresponding author. Email: ika.darnhofer@boku.ac.at

<sup>2</sup>Institute of Organic Farming, University of Agricultural Sciences Vienna, Gregor Mendel Str. 33, A-1180 Vienna, Austria. Email: christian.vogl@boku.ac.at

only products of plant origin. The amendment also explicitly excludes genetically modified organisms (GMOs) and products derived from them from organic production.

Organic food products can be imported from non-EU countries when it can be ascertained that the production rules and the inspection measures for organic foods comply with or are equivalent to the EU Regulation. This can be ensured by access to the "List of Third Countries." To be included in this list, the applicant country must already have enacted organic farming legislation and have a fully functional system of inspection and monitoring. By the end of 2002 the list comprised Argentina, Australia, the Czech Republic, Hungary, Israel, New Zealand, and Switzerland. Exporters from countries not on this list need an import permit. To be granted such a permit, exporters apply for inspection of the operators by an EU-inspection body or an EU-assessed national body (Kilcher et al., 2001).

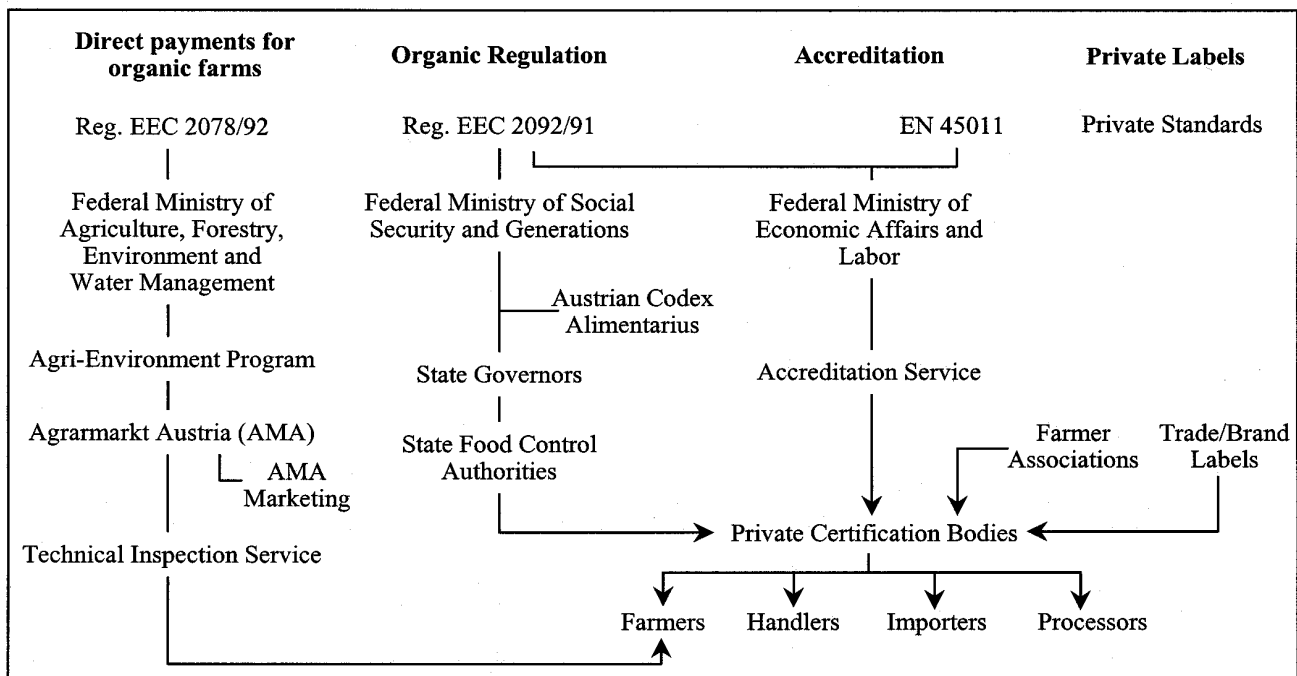
### Implementation in Austria

Since 1983 Austria has had a national legal definition of organic farming that covers both plants and live-

stock within Chapter A.8. of the Austrian Codex Alimentarius. In preparation for the accession to the EU in 1995, the EU Regulation was implemented on July 1, 1994. Whenever an amendment of the EU Regulation is published, it replaces the respective Austrian Codex Standards, as was the case when animal production was regulated by the EU in 1999.

The control and certification process for farms, products and processors and the accreditation process for certification bodies is characterized by a tripartite approach (Figure 1), where each ministry focuses on a specific agenda. First, the Federal Ministry of Social Security, as the central Competent Authority, implements the EU Regulation and focuses on its main goal of protecting consumers from fraud and producers from unfair competition. Second, the Federal Ministry for Economic Affairs and Labor ensures that inspection and certification activities comply with EN 45011. Third, the Federal Ministry for Agriculture, Forestry, Environment and Water Management focuses on environmental conservation. It administers the Agri-Environment Program of the EU (EEC 2078/92), offering direct payments to certified organic farmers participating in the program.

Figure 1. Overview of bodies involved in control, certification and standards for organic farms and products in Austria.



The **Ministry of Social Security** has a coordinating role with regard to the EU Regulation, including limited administrative and legislative powers. Actual implementation is devolved by the Austrian Food Act to the nine State Governors, acting through their respective State Food Authorities. A State Food Authority issues a provisional approval pending accreditation of the certification body. When accreditation is achieved, the certification body receives final approval from the state where its head office is located and further approvals from the other states where it intends to operate and has submitted an application. In Austria all certification bodies operate in more than one state. Supervision of the private certification bodies is carried out by each state, with the supervision of administration and documentation taking place in the state where the certification body has its head office. There is no cross-supervision between states and the intensity and approach to supervision differs from state to state (European Commission, 2001). Supervision only covers the certification of legal requirements, as private standards are not within the supervisory role of state authorities.

The State Food Authorities, as well as the Federal Agencies for the Surveillance of Food Safety, are also in charge of analyzing food samples for residues, levels of contamination, nitrate content, etc., within their food monitoring programs. These programs are not specific to organic products but may include them in their sampling procedures.

The Subcommittee for Organic Farming of the Austrian Codex Alimentarius Committee, which is located within the Federal Ministry of Social Security, plays an important role as it is the forum to discuss rules and criteria on aspects not yet covered by the EU Regulation. Its bi-monthly meetings are attended by officials from all involved authorities as well as representatives of all stakeholders (e.g., consumers, producers, and retail interest groups). The wide membership ensures that the decision process is transparent and decisions have broad support. Once consensus is reached, the Subcommittee advises the Plenary of the Austrian Codex Alimentarius Committee. This Plenary has the power to decide which standards are to be published in the Codex. These standards do not have the status of a law, but are an objective professional expert statement. The Subcommittee also advises the representatives of the Federal Ministry of Social Security in their negotiations on the EU Regulation in Brussels.

An amendment of the EU Regulation (EEC 1935/95), which took effect in 1998, was interpreted in Austria as requiring certification bodies to be accredited. Therefore the Austrian Accreditation Service, which is part of the **Ministry of Economic Affairs**, grants accreditation following an assessment of the certification body's quality management manual, a two-day office audit, and a one-day witnessed inspection, i.e., an on-the-spot inspection of an operator. The purpose of accreditation, which is granted for five years, is to confirm that the certification body has established a quality management system according to EN 45011, as well as qualified staff and the necessary resources. As part of its supervision duties, the Accreditation Service audits the certification bodies annually, which can include witnessed inspections or re-inspection of a sample of operators.

Accreditation led to a harmonization of the certifiers' operation procedures, such as the content of contracts with clients, information policy towards clients, education and training of staff and inspectors, separation between inspection and the certification decision, handling of complaints by organic farmers, and documentation requirements (Vogl, 2000).

The **Ministry of Agriculture** is in charge of implementing the Agri-Environment Program (based on EEC 2078/92), which in Austria encompasses 31 schemes, including organic farming. Farmers can take part in the program through a voluntary five-year contract. The program is administered on behalf of the Ministry by Agrarmarkt Austria (AMA), which also administers other direct payments to farmers within the Common Agricultural Policy. The Technical Inspection Service of AMA controls the proper application of the schemes, for which farmers receive direct payments. Within these controls, 5% of farmers participating in the scheme "organic farming" will be inspected each year, with farms selected according to a risk assessment system.

A subsidiary of AMA is AMA Marketing, which, among other things, licenses the AMA organic logo, administers the AMA quality seal (not organic), and is in charge of ad campaigns in support of Austrian agriculture. The AMA organic logo exists in two versions: one is colored red, white and black and indicates that the majority of its ingredients are of Austrian origin. The other is black and white and indicates that the ingredients originate mainly from foreign countries.



There are seven accredited **certification bodies** operating in Austria, which are either non-profit or for-profit private organizations. Shares are held by private citizens, by enterprises that work in the inspection business at large, or by organic farmers' associations. The inspectors visit farms annually and processors several times per year, mostly unannounced. Inspection and certification may be performed by the same body, but within the body these two steps have to be administered by two different people (inspector, certifier) in two distinct steps. A certificate is granted by the certification body only if the inspection report is complete and plausible, and fulfills all legal requirements. Farmers must have such a certificate to receive direct payments for organic farming and to be allowed to label produce as organic.

Besides the legal regulations, **private standards**, e.g. those of an organic farmer association or a private label, also are certified. The private standards reflect specific concerns and interests of the respective group. For example, farmers highly concerned with animal welfare join an organic farmers' association with regulations on animal keeping, breeding, feeding and veterinary medicine that are stricter than the EU Regulation. These farmers and their association advertise their approach to organic farming to gain a comparative advantage, for example biodynamic farmers, organic farmers of certain regions, and certain processors and retailers.



Bio Ernte Austria is the most powerful organic farmers' association, with about 50% of all Austrian organic farmers as members. Its standards are stricter than those of the Austrian Codex. As early as the 1960s, the association started to establish an inspection system and to advertise their organic brand.



'Ja! Natürlich' is the best known trade label in Austria and belongs to the supermarket chain Rewe (Billa, Merkur). Most of the products of Austrian origin sold under this label are produced by farmers belonging to Bio Ernte Austria. All organic farmers delivering to this and to other labels (e.g. 'Natur pur' of Spar) have to fulfill additional requirements that go beyond the EU Regulation, Austrian Codex standards and farmer associations' standards. Conversely, the retailers also are bound by a contract with farmer associations to purchase organic products from Austrian farmers first, and foreign products only if



domestic ones are not available.

### *Appraisal of the Austrian Implementation*

Over the four years since accreditation was implemented, inspection and certification of organics in Austria have evolved into a highly professional and transparent system, not least because of the accreditation requirement and its accompanying supervision. However, although the first steps for harmonization of the work of the certification bodies were successfully implemented, several areas of the certifying system still have potential for improvement. These include: harmonization of certifiers' internal guidelines and procedures for sanctions; improved information exchange between state and federal authorities; and tighter supervision in certain areas.

### **Harmonization**

Although certification bodies do not define their own set of standards, there can be differences in the interpretation of the EU Regulation because of several imprecisely worded passages, resulting in internal guidelines drafted by the certifiers. These are cleared with the State Authority, but might not be shared with other certification bodies, leading to differences in interpretation and application of the regulations. However, standardized certification requirements based upon harmonized guidelines and sanctions are necessary, given that the certifiers are in competition with each other. This competition can result in a pressure to take advantage of the latitude left in the EU Regulation and lead to a customer-friendly interpretation and leniency. This is particularly tempting when the customer is not a small family farm, but a large operation or retailer, as inspection fees are based on the size of the operation. It therefore is important that supervision also ensures that the certification bodies are economically independent so as to be able to exclude a large customer (Vogl, 1998).

### **Communication**

Currently there is limited communication, coordination and data exchange between state and federal authorities involved in supervising certification bodies or analyzing food along the food chain. This not only inhibits the prompt tracing of irregularities, it also impairs the forwarding of relevant information to concerned authorities and agencies. An example is that according to EN 45011 a list of certified products must be published, but because of data privacy concerns, these lists are not made public in their entirety in a timely fashion. Another example is that

currently each certification body provides the State Authority with a confidential list of all operators it certified. The data regarding termination of a certification contract is thus kept up to date by the State Authority, but not publicized or communicated to relevant bodies (e.g., AMA, as farms are only eligible for direct payments for organic farming if they have a valid contract with a certifying body). A major impediment to the free flow of data are the strict provisions of data privacy protection; currently there is no consensus on how they should be interpreted in the context of organic certification.

### Supervision

Two authorities are currently in charge of supervising certification bodies: the Accreditation Service and the State Authorities. Based on a supervision plan and using a specially trained team, the Accreditation Service audits certification bodies every year to ensure they comply with EN 45011. Although this supervision focuses primarily on issues of quality management and documentation, two technical experts for organic farming ensure that quality management and operation procedures reflect and respect the EU Regulation and Austrian Codex Standards.

Supervision by the State Authorities does not have such clearly defined procedures. For example, an EU evaluation mission noted that there were no written supervision plans for 2001 (European Commission, 2001). Also, the State Authorities barely challenge or assess the quality of the technical work of the certification bodies, either through evaluation of operators' files or certification decisions or through witnessed inspections or re-inspection of a sample of operators.

However, given several potential conflicts of interest involving certification bodies, there is a need for tight supervision. For example, because some farmers' associations hold shares of certification bodies, there can be a perception that organic farmers inspect themselves. This would contradict the requirement that certification bodies be independent, that is, that they cannot be influenced by the interests of farmers, associations, traders, processors or retailers, even if these are their customers. Indeed, unless close contacts between certifiers and processors or retailers are avoided or supervised, it is conceivable that a potential problem is covered up by quietly withdrawing the products from the shelves to avoid negative publicity. These issues currently are partially addressed through the supervision by the Accreditation Service, which includes procedures to assess the independence of

certification bodies and their employees from farmer associations, institutions, and dealers in organic products or inputs for organic farms (Vogl, 1998).

### Regulations

Some of the problems in the certification of organic products are due not to flaws in the organization of accreditation, certification and supervision, but to loopholes left in the EU Regulations or the methods of inspection defined there. Indeed, not all organizations involved in the market for organic foods are included in the certification system, particularly the trade, which does not yet fall under the scope of the EU Regulation as long as it does not produce, pack, process or label organic products (The Organic Standard, Nov. 2001, p. 8). Also, the EU Regulation does not include specific statements regarding the inspection procedures to be followed with regard to trade and processing of animal feed (KdK, 2002).

The EU Regulation, acknowledging the possibility of supply shortages in the still-developing organic market, includes the provision that to some extent conventional products can be used in feedstuffs until December 2003. This provision creates a gray zone that can lead to errors and even entice fraudulent behavior, as recent incidents in Austria have shown (Purkarthofer, 2002)

The methods of inspection stipulated in the EU Regulations, such as the requirement that each operator be visited once a year, have also been criticized. The current system can mean that too much time is spent inspecting production that is fully compliant, while too little is spent on cases with real problems (Rundgren, 1999). It might be more efficient to visit some operators frequently, but others only every 18 months. This could go hand-in-hand with the introduction of a risk-oriented system such as the HACCP principle (Hazard Analyses Critical Control Point), that is, points where there is a high probability that improper inspection may allow or contribute to a loss of organic integrity (Heinonen, 2001).

Another aspect that could be considered is the internal quality management of operators (Rundgren, 1999). Indeed, if operators implement regular internal sampling and analysis as well as complete traceability of products, the burden of inspection costs could be reduced. Inspections at enterprises that are certified according to a quality management norm, such as the ISO family, already offer certification bodies a deeper and more detailed insight into the flow of

organic goods through the enterprise. Operators might prefer such cooperation to complete legal regulation (Browne et al., 2000).

However, while including quality management systems at the trader and processor level are a promising approach, similar calls at the farm level (Bradley and van Houten, 2000) do not seem helpful in Austria. Indeed, because most organic farms are family farms, the farmer has limited time and training. Also, the farmer's management decisions are highly dependent on unpredictable external factors such as the weather or market developments, making it unlikely that a farm plan spanning several years and covering both general management practices as well as planting patterns and animal husbandry can be adhered to. Thus, the AMA presently requires crop plans only for the current year, since these are necessary to calculate various direct payments.

### *Consumers' and Farmers' Perspectives*

#### **Limits of certification in ensuring consumer confidence**

Because consumers may be buying organic products for reasons of health as well as environmental concerns, high profile news stories of contaminated or unsafe conventional food increase the demand for them. It is then crucial to preserve the credibility of organic labels so as not to undermine consumers' trust in organic products. Certification has a key role to play in ensuring that incidents similar to those reported from conventional foods do not occur in the organic food chain.

At the same time, the limits of certification as a way to prevent loss of consumer confidence must also be clear. Indeed, several legal provisions made to accommodate industry needs and interests in a still-developing market are a potential source of consumer disillusionment. For example the AMA Marketing organic logo, in accordance with the EU Regulation, allows up to 5% of selected ingredients to originate from conventional production, although the logo can be perceived as implying 100% organic. Also, if the product contains raw ingredients that cannot be produced in Austria, up to 30% of foreign organic ingredients can be used, although the logo implies an organic product of Austrian origin. Although these provisions are necessary to allow some leeway for processors as long as the market cannot ensure a continuous supply of organic products of the required origin and quality, most consumers are not aware of

them and may feel cheated. In addition, AMA Marketing was heavily criticized by environmental organizations and the organic movement for its choice of advertisements promoting regional and national labels that could be perceived by consumers as being organic although they are not.

A similar unresolved issue is the fact that the EU Regulation stipulates that organic products must be GMO-free. However what "GMO free" means has not been clearly defined in many European countries, leaving room for interpretation. In Austria the limit for "GMO free" is 0.1 % of the total DNA within the framework of "inevitable contamination," which is not the zero-tolerance policy that consumers might expect.

Another potential source of consumer insecurity are organic products revealing traces of prohibited chemicals. Because organic products are routinely stored next to conventional products, cross contamination is bound to occur, as is commingling when the two kinds are processed in the same plant.

Besides these issues based on legal tolerance margins and poor practices by processors and retailers, another source of confusion is misleading labeling. The EU Regulation states that words like "organic," "ecological," "biological," and shortened forms like "bio" and "eco" must refer to organic production methods; if that is not the case, the matter might be handled as fraud. This also includes all terms that might be understood by consumers as similar to the above mentioned terms, e.g. "controlled," "integrated" or "natural." This has led to a significant reduction of misleading and fraudulent advertising on the Austrian market. Nevertheless, several companies try to use the positive image of organic farming by designing labels positioning their products close to the organics.

This is especially true for companies with a trademark that contain the terms "bio" or "öko" and that was registered before January 1, 1995. They can use this trademark until 2006, although it must be clearly mentioned on the product that it originated from conventional farming. However this is not always enforced (Mergili, 2002). The likelihood of consumer confusion is particularly high if the brand sells both conventional and organic foods with little difference in package design.

Finally, confusing labeling also occurs because several product groups, such as flowers, wine, textiles, wild fish, and wild animals, are not included in the

EU Regulation, so that organic claims can be made with impunity. As a response, the Austrian Codex Alimentarius Committee started to regulate these sectors through national standards, as is the case for the organic production of deer and fish.

### **Farmers' need for clarity**

Several farmers' associations, although appreciating the need for inspection and thorough documentation as part of the special status of organic farming, have criticized the lack of harmonization in the documentation requirements and the farm inspection methods. Indeed, the criteria used and the sanctions imposed by the Ministry of Agriculture differ in several points from those of the Ministry of Social Security. The differences are mainly due to the fact that the Ministry of Agriculture focuses on environmental protection, whereas the Ministry of Social Security focuses on consumer protection. The situation is worsened by the poor communication policy of AMA, because the AMA Technical Inspection Service does not have to follow EN 45011 and keeps its criteria for sanctions confidential.

The AMA is thus often perceived by farmers as a kind of "black box," since they do not understand the reasons for the differences in sanctions by AMA and by certification bodies for the same facts (Vogl, 1998). It would be advantageous to design one uniform structure and harmonize the required records that farmers must keep. Inspection procedures of organic certification and Agri-Environment Program controls also could be harmonized. This would increase the efficiency and effectiveness of inspections and ease farmers' administrative burden.

The multiple inspection of farms can also be a burden. Each organic farm is inspected at least once per year by a certification body. In addition it may be sampled and controlled by AMA or by inspection services of brand labels. Finally, it may be sampled for inspection as part of the supervisory activities of various authorities. Overall it has been estimated that an organic farm could be inspected up to 11 times in a year (Vogl, 1998). And that does not include inspections in the framework of regulations that are separate from organic farming, such as water laws, food safety, hygiene standards, veterinary medicine, and taxes. The possibility of coordinating such inspections should be investigated.

Insufficient extension services are also a pressing issue in light of the ongoing updates of the EU Regulation as well as the Austrian specifications

within the Agri-Environment Program. Although these updates lead to a sustained improvement of regulations, they also create a constant source of uncertainty over whether a specific standard has been changed, whether that change has taken effect, and whether the farmer is risking sanctions. To secure objectivity, independence, and the quality of decisions, EN 45011 mandates that the certification bodies cannot be involved in advisory services. The need to inform organic farmers of regulations, standards and their amendments is thus primarily covered by employees of the organic farmers' associations and by the District Authorities for Agriculture. The District Authorities especially may have a very varied understanding and interest in organic farming, resulting in an uneven level of information made available to farmers.

### **Discussion and Conclusion**

In Austria, the densely woven web of inspection, certification, accreditation and supervision ensures that legal and private standards are adhered to. However, it must be recognized that certification is no guarantee in itself and that ultimately its role is to reconfirm that the producers and the processors are keeping their guarantees (Rundgren, 1999). Certification is thus no panacea, but only one part of a quality assurance system ensuring the smooth functioning of the organic market. This is all the more true when considering that certification can only be as good as the standards it is based on. The standards, however, are only compromises between aims and their technically and economically sound implementation (Heinonen, 2001). At the same time, it is not possible to develop standards to cover all situations, nor to standardize the handling of all possible violations (Rundgren, 1999).

The question, then, is how to ensure appropriate inspection and certification while considering the costs and administration involved. Indeed, consumers will not continue to pay a premium if the certification of organic products primarily ends up feeding a growing bureaucracy and producing excess paper (Baumann, 2001).

The regulations, both at the EU and the Austrian level, have so far focused on regulating production at the farm level. However, most of the publicized irregularities have involved organic products after they left the farm. The initial focus on the production aspect can be seen as a response to an image where organic farming was primarily made up of family



farms engaged in on-farm processing and direct selling. However, this image is being overrun by reality: as the market for organic products grows, industries and supermarkets get involved and the volume of organic products being transported, stored, and industrially processed and retailed grows considerably.

Thus the instruments needed to ensure organic quality have changed; in particular, the need for a centralized database has been voiced (KdK, 2002). Such a database would combine the piecemeal information that is available at various authorities and agencies. The goal is to improve transparency and allow a comprehensive analysis of the flow of organic goods, which could then be traced along the complete food chain, from farm inputs and production, through traders and storage, to processing and retail. This would allow plausibility, product integrity and traceability to be checked more easily and would dramatically increase the efficiency of inspections.

To accommodate concerns about privacy of data, the access to the database could be restricted to a limited number of federal agents. A database alone cannot be sufficient to address the issue. It is indispensable to have dedicated government employees whose objective is not only to analyze the data but also to inquire in cases of suspected irregularities as well as routine tracing of product flows along the food chain. Such an authority would address the weakest point of the current certification system, namely organic product flows across boundaries: between states, operators, certification bodies, etc.

This authority should be at the federal level, as only a government entity has the necessary legal authority to enforce minimum standards (Lohr, 1998) as well as the independence to ensure objectivity and uniformity. Also, volume flow controls are about baseline requirements, thus there is no need to adjust to regional and local circumstances, which could be a challenge to a central authority.

Despite some flaws in overall coordination, the current system of private certification bodies has proven robust. Indeed, as found in Sweden (Baumann, 2001), a private certification body has advantages over a state one. First, in Austria most certification bodies were created by organic farmers' associations or organizations rooted in the organic movement. They therefore tend to be committed to the values of organic farming. This is a benefit compared to certification by public authorities, who tend to focus on administrative matters rather than the correspon-

dence of values and regulation, as reported from Denmark (Michelsen, 2001). Second, private certifiers in Austria also tend to have employees residing in their assigned region. This allows them a more accurate assessment of a specific situation, such as a drought that reduces seed availability. It also allows certifiers to deal with the need to develop different solutions to similar problems in different environments, which is an integral part of organic farming (Michelsen, 2001).

Local roots also ensure certifiers a better level of information through their involvement in both formal and informal communication networks. Thus operator peer-control can play a role in identifying potential problems, and not limit control of an organic farm or processor to the yearly visit(s). As long as supervision ensures impartiality of the certifiers, these are valuable features of a certification system that aims at doing justice to the needs of organic farming.

For it must be acknowledged that organic farming cannot be reduced to checklists, since it is also a social and ecological movement. Standardized production method and regulations have difficulties coping with such a phenomenon (Rundgren, 1997). Thus there is a great need for clarity and simplification in our understanding of what organic farming really stands for, so that it stands out as a real production alternative and not simply as a production method that complies with a set of more or less transparent regulations (DARCOF, 2000).

In the present situation, where consumers in increasing numbers are concerned about degradation of standards, food quality, and so forth, it is easy to ask for strict rules, high standards, and efficient inspection in organic agriculture. But often what consumers expect is a higher moral standard: just as the organic farmer should not exploit the soil or the livestock, so, too, the consumers hope that they are not exploited when buying organically produced food (Kettlitz, 2002). Indeed, even if organic growth is based on short-term concerns about health and food security, it also responds to long-term concerns about our society, a quest for old and new values, a search for the truth behind notions such as "natural" (Haest, 2000), and a need for authentic products (Kelterborn, 2000). Therefore if standards, regulations and certification procedures betray the core of what organic farming stands for, it might well also betray the expectation of consumers who are searching for an alternative.



## References

- Baumann, P. 2001. Securing against fraud. In Proceedings of the conference "Organic Food and Farming – Towards Partnership and Action in Europe." The Danish Ministry of Food, Agriculture and Fisheries. pp. 98-100. Available on-line: [http://www.fvm.dk/kundeupload/konferencer/organic\\_food\\_farming/index.htm](http://www.fvm.dk/kundeupload/konferencer/organic_food_farming/index.htm)
- Bradley, R., and K. van Houten. 2000. Inclusion of management systems requirements into organic production standards. In T. Alföldi, W. Lockeretz, and U. Niggli (eds). IFOAM 2000 – The World Grows Organic. Proceedings of the 13th International IFOAM Scientific Conf., 28-31 August 2000, Basel. Vdf Hochschulverlag, Zurich. p. 585.
- Browne, A.W., P.J.C. Harris, H. Hofny-Collins, N. Pasiecznik and R.R. Wallace. 2000. Organic production and ethical trade: definition, practice and links. *Food Policy* 25:69-89.
- DARCOF. 2000. Principles of organic farming. Discussion document prepared for the DARCOF Users Committee. Danish Research Centre for Organic Farming, Foulum. Available on-line: <http://www.foejo.dk>
- Dunne, W., and J.J. O'Connell. 2003. Evolving EU food production policy: implications for ecolabeling. In W. Lockeretz (ed). *Ecolabels and the Greening of the Food Market*. Proceedings of a Conference, November 7-9, 2002. Tufts University, Boston, Massachusetts. pp. 1-10.
- European Commission. 2001. Final report on a mission carried out in Austria from 5 to 9 March 2001 in order to evaluate the application of Council Regulation (EEC) No 2092/91 to organic farming in Austria. DG Health and Consumer Protection, Directorate F – Food and Veterinary Office.
- Haest, C. 2000. Organic agriculture, a durable trend. In C. Haest and U. Meier (eds). Proceedings of the IFOAM 2nd International Seminar "Organic in the Supermarket," August 25, 2002, Basel. Available on-line: <http://www.fibl.ch/buehne/archiv/haest-meier-2000-supermarkt.html>
- Heinonen, S. 2001. The role of legislation. In Proceedings of the conference "Organic Food and Farming - Towards Partnership and Action in Europe." The Danish Ministry of Food, Agriculture and Fisheries. pp. 91-94. Available on-line: [http://www.fvm.dk/kundeupload/konferencer/organic\\_food\\_farming/index.htm](http://www.fvm.dk/kundeupload/konferencer/organic_food_farming/index.htm)
- KdK. 2002. Positionspapier der Konferenz der Kontrollstelle e.V. zum Kontrollsystem und Verfahren nach Verordnung (EWG) Nr. 2092/91 (EG-Öko-VO) (Position paper of the Conference of Control Bodies on the control system and methods according to EU Regulation 2092/91). Konferenz der Kontrollstellen e.V., Göttingen, Germany. Available on-line: <http://www.bioland.de/presse/PositionspapierKdK.pdf>
- Kelterborn, L. 2000. Positionierung von Bioprodukten im Supermarkt (Positioning of organic products in the supermarket). In C. Haest and U. Meier (eds). Proceedings of the IFOAM 2nd International Seminar "Organic in the Supermarket." August 25, 2002, Basel. Available on-line: <http://www.fibl.ch/buehne/archiv/haest-meier-2000-supermarkt.html>
- Kettlitz, B. 2002. The expectations of European consumers. Presentation at the seminar "Labelling and marketing of organic farming products in the EU: Increasing confusion or more transparency?" organized by the European Institute of Public Administration (EIPA), Maastricht, 1-2 July 2002.
- Kilcher, L., B. Landau, T. Richter, and O. Schmid. 2001. The Organic Market in Switzerland and the European Union. SIPPO (Swiss Import Promotion), Zurich, and FiBL (Research Institute of Organic Agriculture), Frick, Switzerland.
- Lampkin, N., C. Foster, S. Padel, and P. Midmore. 1999. The Policy and Regulatory Environment of Organic Farming in Europe. *Organic Farming in Europe: Economics and Policy*, Volume 1. University of Hohenheim, Institut für Landwirtschaftliche Betriebslehre 410A. Hohenheim, Germany.
- Lohr, L. 1998. Implications of organic certification for market structure and trade. *American Journal of Agricultural Economics* 80:1125-1129.
- Mergili, S. 2002. Irreführende Etikettierung und Pseudo-Bioprodukte (Misleading labeling and pseudo-organic products). Unpublished seminar paper. Institute of Organic Farming, University of Agriculture Vienna.
- Michelsen, J. 2001. Organic farming in a regulatory perspective: the Danish case. *Sociologia Ruralis* 41:62-84.
- Purkarthofer, F-J. 2002. Fehler und Betrug wurde aufgedeckt (Mistakes and fraud was disclosed). *Ernte – Zeitschrift für Ökologie und Landwirtschaft* 4(02):7.
- Rundgren, G. 1997. Accreditation: the key to making global standards work? Paper presented at the 5th IFOAM Trade Conference in Oxford, UK. Available on-line: <http://www.grolink.se/studies/oxford.htm>

- Rundgren, G. 1999. Future perspectives for organic certification. In D. Foguelman and W. Lockeretz (eds). *Organic Agriculture: The Credible Solution for the XXIst Century*. Proceedings of the 12th International IFOAM Scientific Conference, November 15-19, 1998, Mar del Plata, Argentina. IFOAM, Tholey-Theley, Germany. pp. 10-16. Available on-line: <http://www.grolink.se/studies/future.htm>
- Vogl, C. 1998. Zertifizierung und Akkreditierung in der biologischen Landwirtschaft in Österreich (Certification and accreditation in organic farming in Austria). Report of a research project commissioned by the Accreditation Office of the Ministry of Economic Affairs.
- Vogl, C. 2000. Certification and accreditation in organic farming in Austria. In T. Alföldi, W. Lockeretz, and U. Niggli (eds). *IFOAM 2000 – The World Grows Organic*. Proceedings of the 13th International IFOAM Scientific Conf., 28-31 August 2000, Basel. Vdf Hochschulverlag, Zurich. p. 587.
- Vogl, C., and J. Hess. 1999. Organic farming in Austria. *American Journal of Alternative Agriculture* 14:137-143.

**March 2003**

***ECOLABELS AND THE  
GREENING OF THE FOOD MARKET***

*William Lockeretz, editor*

Proceedings of a conference held in Boston, Massachusetts, November 7-9, 2002, organized by the Friedman School of Nutrition Science and Policy, Tufts University, and supported by the Economic Research Service and Agricultural Marketing Service of the US Department of Agriculture.

## Contents

<i>Preface</i>	v
NATIONAL AND INTERNATIONAL POLICIES FOR ORGANIC AND OTHER ECOLABELS	
Evolving EU Food Production Policy: Implications for Ecolabeling <i>W. Dunne and J.J. O’Connell</i>	1
Certification and Accreditation of Organics in Austria: Implementation, Strengths and Weaknesses <i>Ika Darnhofer and Christian R. Vogl</i>	11
Going National: Potentials and Pitfalls of Introducing a National Organic Label in Germany <i>Lucia A. Reisch</i>	21
Managing the Confusion over Labels in the Emerging Organic Food Market in Bosnia and Herzegovina <i>Aleksandra Nikolic and Esma Velagic Habul</i>	29
The Organic Label: Does the USDA Definition Conform to Consumer Preferences? <i>David Scott Conner</i>	35
LOCATION-BASED LABELS	
Organic and Origin-Labeled Food Products in Europe: Labels for Consumers or from Producers? <i>Georges Giraud</i>	41
The Commodification of Heritage and Rural Development in Peripheral Regions: Artisanal Cheesemaking in Rural Wales <i>Tim Jenkins and Nicolas Parrott</i>	51
Local Symbol Systems: Local Food – Local Label <i>Sky McCain and Phil Chandler</i>	63
The Load Less Traveled: Examining the Potential of Using Food Miles and CO <sub>2</sub> Emissions in Ecolabels <i>Rich Pirog and Pat Schuh</i>	69
THE DEVELOPMENT OF SPECIFIC LABELS: RECENT EXPERIENCES	
Food Alliance: Transforming a Regional Success Story into a National Network <i>Deborah J. Kane and James F. Ennis</i>	77
Environmentally Friendly Food Production in St. Petersburg, Russia: Consumers’ Awareness and Ecolabeling Scheme Development <i>Olga Sergienko and Alena Nemudrova</i>	79
The Acceptance and Usefulness of the Term “Identity-Preserved” (I.P.) in the Sustainable Agriculture Community <i>Melissa Schafer</i>	91

## SOCIAL JUSTICE ISSUES

- Linking Producer and Consumer: Rewarding “More Than Purely Price” Values  
in the Marketplace  
*Cathy Rozel Farnworth* 97
- Toward Social Justice and Economic Equity in the Food System: A Call  
for Social Stewardship Standards in Sustainable and Organic Agriculture  
*Michael Sligh and Richard Mandelbaum* 107

## STRATEGIC AND CONCEPTUAL ISSUES

- Can Ecolabeling Mitigate Market Failures? An Analysis Applied to Agro-Food Products  
*Douadia Bougherara and Gilles Grolleau* 111
- Giving Credence to Environmental Labeling of Agro-Food Products: Using Search  
and Experience Attributes as an Imperfect Indicator of Credibility  
*Gilles Grolleau and Julie A. Caswell* 121
- Adding Credibility Beyond Ecolabels  
*Ulrich R. Orth* 131
- Ecolabeling: What Does Consumer Science Tell Us about which Strategies Work?  
*Mario F. Teisl, Brian Roe and Alan S. Levy* 141

## CONSUMER RESPONSE TO ECOLABELS

- In-Store Demand for Ecolabeled Fruit  
*Catherine Durham, Marc McFetridge and Aaron Johnson* 151
- The Influence of Biased Information on Consumers’ Willingness to Pay  
for Products Labeled as Free of Genetically Modified Ingredients  
*Tamara VanWechel and Cheryl J. Wachenheim* 159
- Differential Importance of Ecolabel Criteria to Consumers  
*Lina Gordy* 167

## ECOLABELS AND AGRICULTURAL PRODUCTION TECHNIQUES

- Soil Amendment Quality Certification: The Woods End/Rodale Seal Program  
*William Brinton and Scott Meyer* 177
- Why Pesticide Risks Matter and Pose Tough Challenges for Ecolabel Programs  
*Charles M. Benbrook* 183
- Assessment of Environmental Standards for Arable Farms  
*Philippe Girardin and Eric Sardet* 197