

Are Standards and Regulations
of Organic Farming Moving Away
from Small Farmers' Knowledge?

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ABSTRACT. Organic farming is a promising agricultural method with positive effects on the human ecological and social environment. Governments have taken over a major role in defining organic farming by creating legal standards. Many countries all over the world have estab-

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lished a certification and accreditation system in order to protect the justified expectations of consumers with regard to processing and controlling the product quality of organic goods and to protecting producers from fraudulent trade practices. As they are relevant to international trade, these standards do not only influence the organic farming movement on the national level but also have a converse impact across national borders. Organic farming was established in a bottom-up process as farmers aimed to design sustainable ways of using natural resources. Farmers' traditional knowledge and their awareness of ecological, as well as, of social affairs was the main base for the development of organic farming. Since public interest in organic farming has grown rapidly, the ownership on the process of defining organic farming is no longer in the hands of farmers and the original principles and aims of the movement seem to be threatened by a bureaucratic view of "recipe"-organic farming. However, unsolved problems also exist between the necessities of global harmonization and the local adaptability of the standards on organic farming. This paper structures the current discussion and gives future prospects for further development. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2005 by The Haworth Press, Inc. All rights reserved.]

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INTRODUCTION

Organic farming is a widely respected approach to overcoming the negative impacts of the Green Revolution on soil, air, water, produce, landscape, and humans worldwide. Organic farming was and is constantly being developed by farmers, scientists and concerned people all over the world. A central element of the organic farming method is the efficient use of on-farm and local resources like farmyard manure, indirect crop protection and local seed. Organic farming pursues a course of promoting the powers of self-regulation and resistance which plants and animals possess naturally (Lindenthal et al. 1995). Therefore, organic agriculture is not just a solution for more affluent countries but applied in every climatic region. In poorer countries especially, it can contribute to purposeful socio-economic and ecologically sustainable development (Kilcher 2002, Mc Neely and Scherr 2002, Yussefi and Willer 2003).

In recent years the public discussion on the use of antibiotics in animal foodstuffs, on Mad Cow Disease (BSE), and on Foot and Mouth Disease has focused the interest of the civil society and of European governments on the capacity of organic farming. It is being discussed as one possible solution for a wide array of problems in agriculture (e.g., Watson and Redman 1999, Mc Neely and Scherr 2002). Organic farming, therefore, has become an issue of public concern, but it has also become a big business. This business is being met by legislation and governmental standards on organic farming which include rules for processing, trading, monitoring, and certifying agricultural produce (e.g., European Council Regulation on Organic Farming No. 20292/91, IFOAM Basic Standards, US Organic Food Production Act).

The focus of this paper is the ongoing controversial debate on the development of organic farming and on the global trade of organic produce between North and South. This trade is influenced by standards and their effect on the whole organic farming movement. The authors aim to collect and structure the arguments of the current discussion, to begin assessing and commenting on some of them and to give some suggestions for future development.

MATERIALS AND METHODS

This paper is based on a review of literature, on the authors' experience in projects of organic food production and processing in cooperation with organic farmers in different parts of the world and on the authors' experience as auditors in the accreditation of certification bodies in Europe and Latin America. Arguments and examples in literature on the topic were structured and then discussed with key experts. The background data and the different opinions are presented as they appeared during the course of the research. Finally, the authors' opinion, presented in the discussion wherever no source is cited, was compared with the authors' experience based on participant observation during farm visits, inspections, audits and discussions in the committees that set standards.

RESULTS AND DISCUSSION

The Worldwide Organic Farming Movement

During the last decade, many countries of the European Union, the United States, but also countries in Latin America, Africa, Asia and

Oceania have faced a significant increase in certified organic farms. Almost 23 million hectares are managed organically worldwide. According to the International Trade Center, annual sales grew from 17.5 billion \$USD in 2000 to up to 21 billion \$USD in 2001. Growth rates for 2003-2005 are estimated from 5-15%. About ninety developing countries (of which about 15 are less developed) export certified organic products in commercial quantities, namely tropical and off-season commodities (Yussefi and Willer 2003). The driving forces behind this movement are members of the society who do not only discuss the environment, sustainability and solidarity, but also act: They put their commitment to socially just and ecologically sound development into practice (Box 1).

Who Defines Organic Agriculture?

Organic agriculture is based upon traditional sustainable agriculture, farmers' innovations and the results of scientific research. Organic farming practices are embedded in local cultures and their ethical values and beliefs. Therefore, organic farming movements around the globe are

BOX 1. The Driving Forces Behind the Organic Farming Movement

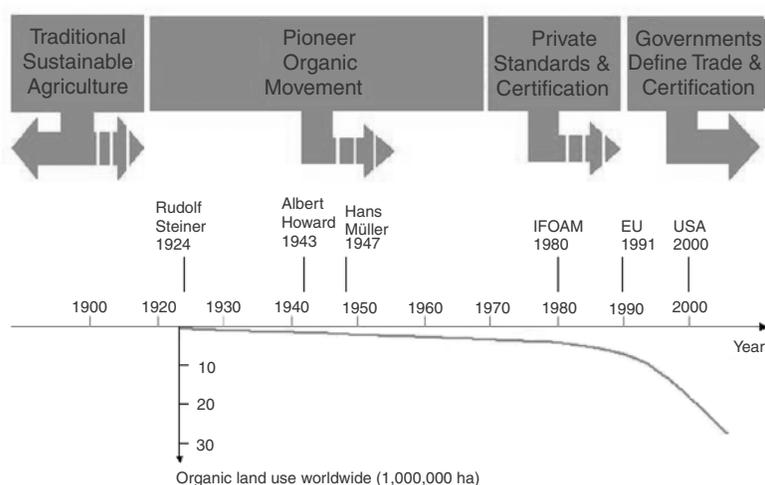
Driving forces behind organic farming

- The **concerned parties** in the society
 - Consumers, who want to buy organic products;
 - Farmers, who are willing and able to adopt organic land use systems;
 - Farmers' associations, which support their members with advisory boards and marketing;
 - National and international retailers, as well as, associations for organic trade and fair trade that demand a certain crop in organic quality;
 - Policy makers who support organic farming (e.g., with subsidies);
 - Experts in standard setting, monitoring, control, and certification.
 - The **discussion**
 - The solidarity of developed countries with developing countries;
 - The independence of developing countries from developed countries;
 - Animal welfare;
 - Environmental hazards of conventional farming;
 - Food and health;
 - Consumption and environmental responsibility;
 - Sustainable agriculture.
-

diverse and colorful. In different places throughout the world, the majority of initiatives started with the complete absence of private standards and legal norms. In many developing countries, traditional sustainable agriculture has been applied for centuries and still today provides a pool of locally adapted solutions for agriculture (Figure 1). For example, since the 1980s the *Agruco*-project in Bolivia has systematically evaluated local indigenous knowledge as the base of sustainable and organic agriculture. The *Agroecological University for Organic Farming Cochabamba* was founded and *Agruco* developed into one of the driving forces of organic farming in the Latin American organic agriculture movement.

Also in Europe, organic agriculture originated on the basis of local farmers' knowledge and experience. Farmers' groups led, e.g., by Rudolf Steiner and Hans Müller were important pioneers of organic farming in the 1920s and 1930s. Until the 1970s, organic farmers organized themselves step by step in associations in many places throughout the world. They started setting their own private standards, which were binding for the members of the organic farmers' associations and controlled directly by the standard-setting associations. Organic agriculture until the beginning of the 1990s was based completely on private standards that documented trade practices. Organic farmers defined what organic agriculture was in a democratic process. Private standards, e.g.,

FIGURE 1. The Development of Organic Farming (Kilcher 1998)



the IFOAM-standards, were originally laid out on the basis of common sense about organic agriculture. In a second step, standards like those of the farmers associations Bio Suisse, Demeter, Naturland and Ernte, were used as “expert witness statements” to help to decide whether the organic label of a certain product is in accordance with these expectations (Gerber et al. 1996, Dhamotoran and Gerber 1998, Vogl and Hess 1999, Schaumann et al. 2002).

Today millions of small farmers worldwide practice organic farming without being certified. Some call this “organic by default” (Scialabba 2000). Often this term refers to the fact that they do not use synthetic inputs, which are forbidden in organic farming. Some do not use the term organic but other terms that express the sustainable manner of these traditional practices, e.g., Altieri (1999, 2000) who refers to these farmers as the agroecology movement.

Independent of the term used, one has to consider the contribution of many of those small farmers to what organic agriculture is today. Small farmers of traditional agriculture practice a farming system that includes, in many cases, those practices which are promoted in organic farming or included in its standards (e.g., crop rotation, organic fertilization, use of legume species, mixed cropping) when working under environmentally and socially appropriate and stable conditions (Wilken 1987, Altieri 1990, Inglis 1993, Pichón 1999).

Parallel to the growing market in the 1990s, organic farming became an issue of public discussion. Justified expectations are protected in most legal systems by laws against fraudulent trade practices. This is the main objective of government regulations on organic agriculture. The first one, still a model for many governmental regulations, is the *Council Regulation 2092/91* in Europe (Box 2) (set into force in 1991). The *US Organic Food Production Act 1990* was set into force in 2000, and subsequent legislation in Japan, the *Japan Agricultural Standards for Organic Agricultural Products and Their Processed Foods*, was set into force in 2001. To date, 60 countries have governmental regulations on organic farming or are in the process of adopting them (Yussefi and Willer 2003). The main objectives of governmental regulation are to protect consumers and producers against fraud, and to regulate international trade and certification.

Standards and the Complex Quality of Organic Farming

Since governments started regulating organic agriculture, private regional standards have lost a part of their importance. The same happens

BOX 2. Content of Organic Farming European Council Regulation 2092/91

Council Regulation 2092/91:

- Protects producers from unfair competition;
 - Protects consumers from pseudo-organic;
 - Protects labels such as “organic,” and “biologic”;
 - Sets rules for production, processing and trade;
 - Sets rules for monitoring and certification;
 - Sets rules for import.
-

on the international level: the international norms of IFOAM (The *International Federation Organic Farming Organic Agriculture Movements*) have lost a part of their role since the *International Codex Alimentarius Commission* set transnational standards for organic food production into force. When defining organic farming legal standards are the focus of public discussion. Fuchs (2000), as well as, Kyed and Sørensen (2000) think that standards become more and more the handbook of organic agriculture and have become the primary source of defining organic farming. Standards focus on permitted inputs and practices, that lead to “recipe farming,” or to the following of a set of input tables with lists of substances (Bradley and Van Houten 2000).

The skill of active organic farming management based on the principles, philosophy and visions of organic farming, which have been the major causes for the development of this land use system, have lost importance in the public discussion within the organic agriculture movement. The increasing amount and diversification of organic farming’s legal settings also has a certain impact on the dynamic of conversion among farmers and an impact on the development of the whole organic food chain. Both are the subject matter of a controversial debate.

This debate focuses mainly on the interpretation of the term equivalence, the high cost of multiple accreditations, the impact of globalization on organic farming and on process ownership.

Equivalence

Organic food products from non-EU-countries can be imported into the EU-Organic-Food market, when it can be proven that the production rules and the inspection measures for organic food production in the 3rd country were equivalent to those in the European Union. Not only the EU, all governmental regulations for organic farming require “equivalence.”

In the EU, this can be ensured by access via the *List of Third Countries* and by access via *Import Permit* (article 11/6). In order to be added to the *List of Third Countries*, the country making the application must already have enacted organic farming legislation and a fully functional system of inspection and monitoring must be in place.

The application is assessed and decided upon by the EU. To date, certification bodies from Argentina, Australia, Costa Rica, Hungary, Israel, New Zealand and Switzerland are on this list. Exporters from those countries that are not on the *List of Third Countries* need an *Import Permit*. Therefore, producers and exporters apply for inspection by a EU-inspection body or EU-assessed national body (Kilcher et al. 2001).

In some EU Countries requirement of national organic labels exceed those of EU Regulation. In order to effectively enter the national consumer market for organic food (e.g., national AB-Logo in France promoted by the Paris Ministry Organic Farming Agriculture), the additional requirements must then also be met by the imported goods in the respective country. This makes imports quite tricky for non-European producers (Ziegler 2000). But even trickier is what the authorities understand by the term equivalence.

Authorities in EU member states have the responsibility to review production patterns and certification practices in the country of origin as products are imported (only for those countries, which are not registered at the “list of third countries”). As a rule, these authorities lack the specific competence needed for such assessment. Therefore, they tend to apply a detailed track of formalities and, as rule, they do not provide for a review of either the functional effectiveness or the functional equivalency of the organic production in the country of origin. Consequently, the consensus, that equivalency does not refer to detail formalities of production certification, but to the basic working patterning performance, is a consensus on paper, not in practice.

When organic food is produced in foreign countries, consumers must benefit from a reliable assurance that the circumstances of production there are beneficial to the environment and animal welfare in the same way as organic production is in Europe. This does not call for detailed worldwide standards that regulate many particulars, but for a clear global framework guaranteeing the maintenance of equivalency. Organic practices in the regions of the world should be different in order to meet local production patterns, but equal with respect to their effectiveness in the environmental and health protection of all living creatures.

“Equivalence” should, therefore, not mean virtual identity and sameness. Countries are free to develop their own organic food production

and certification systems. The interpretation of the concept of equivalence must entail its own objective; that is, to give effective systems for organic production in countries of origin a fair chance and not to make decisions about their access to the Northern organic food markets on the basis of pure formality (Schmidt and Haccius 1998).

Therefore, an implementation of the consensus that equivalence refers to functional effectiveness is strongly needed. If this interpretation is adopted, local knowledge, traditional techniques and specific, regional ecological solutions can more easily be recognized and valued in the organic food certification process, than is now the case.

Multiple Accreditation

Inspection bodies have to be supervised by a responsible national authority and have to work in accordance with European Norm 45011 or ISO 65. This also applies, in practice, to local inspection bodies in emerging markets of Developing Countries, since equivalency is interpreted as requiring such systems. Consequently, these inspection bodies have to prove accreditation by an official accreditation body, by a competent national authority or—as accepted by some EU countries—by a nominated, qualified expert (Kilcher et al. 2001).

Because of the different requirements by the importing countries, the process can involve multiple accreditations by different bodies or experts, which prove compliance of the certification body with EN 45011 or ISO 65. Therefore, the process of getting accreditation is expensive, time intensive, and lacks transparency and harmonization (Van Elzakker 1999).

In 1992 IFOAM established the IFOAM-Accreditation Program (managed by the International Organic Accreditation Service, IOAS) to support international equivalency for organic quality claims. In order to harmonize accreditation according to the principles of the IFOAM-Accreditation program, the IFOAM is currently negotiating with governments that have set standards for organic farming and with authorities that give import permits. However, accreditation is still a playground for false competition between private and government accreditors (Bächi 2003).

Global versus Local

The discussion on the impact of globalization on standards and regulations in organic farming is highly controversial. Willer and Youssefi

(2001: p. 33) believe, that of considerable importance for further growth of the organic market “*is the implementation of harmonized worldwide standards for organic agriculture.*” In opposition to this, Singh (Singh 2001: p. 2) believes, that “*Globalisation, as it is currently practiced, will undermine organic farming by forcing farmers, processors, and certifiers to submit completely to the inexorable forces of the so called free markets; homogenization and the dictates of the market will erode both biodiversity and the diversity of cultivation, which is so vital for organic produce; . . . The essential variations dictated by local ecosystems and cultures, will be eliminated by the push for uniformity.*” Evidence and examples for both can be found easily.

As an example, the German BIOSIEGEL label—a federal label for organic products launched in 2001 by the Federal Government as a means to earn the trust of German consumers for organic produce of worldwide origin—contributes to the globalization of the German organic food market. Consumers are educated to look for the BIOSIEGEL label as the most reliable indicator for true organic food. Federal Minister of Agriculture Renate Künast lobbies for the equal use of the BIOSIEGEL label for all organic products traded in a globally integrated organic food market. The Minister believes German organic growers to be morally obliged to support her BIOSIEGEL concept as an act of practical solidarity with organic producers in the developing countries and countries in transition.

This ethical argument for the globalization of the organic food market in Germany coincides with the interests of the supermarkets: BIOSIEGEL could not have been launched in the shops without the support of the four large German distributor groups. They would not have supported BIOSIEGEL if the logo had not been used primarily for products of German or EU organic farmers. It has been the *conditio sine qua non* of the supermarket companies to use the BIOSIEGEL label on their organic products in order to be free to buy these on the global market without territorial or quality preferences attached.

BIOSIEGEL was launched as a major symbol marking a change in agriculture towards more organic methods. Thus, the Green Minister of Agriculture in Germany accepted the supermarket’s precondition for the use of BIOSIEGEL in the labeling of organic produce of worldwide origin. Today German consumers buy organic products such as wheat flour with the BIOSIEGEL-logo in their supermarkets without any indication of the geographic origin. They do not know whether they thus support organic wheat growers of their region or whether they contrib-

ute to the end of organic production in Middle Europe by buying cheaper products from other continents.

The trust earned by the diverse and colorful German organic growers associations in the consumer market by building up their heterogeneous organic certification label systems has been transferred to the BIOSIEGEL label for organic food of global origin.

Many of those who lobby for the globalization of trade in organic food products, as does Mrs. Künast, expect the global division of organic production to enhance the welfare of all. Their assumption rests on *David Ricardo's* concept of *comparative advantages*: no region shall produce what may be produced at other places more cheaply. Organic food shall be produced globally by the producers who can grow it the most cheaply. It shall be produced by those having the best soil, the most advantageous climate, and the cheapest labor. Other organic farmers with less favorable comparative advantages are supposed to discontinue their production, when cheaper products from other regions in continents with higher comparative advantages penetrate the markets.

On the other hand, consumers expect the organic production of all crops and animal production to be diversified to very many locations globally, and labeled with a regional identity. Such diversification guarantees a safer food supply worldwide compared to a system where each crop is produced in very few production spots. The general public values redundancy of food production at many locations world-wide as a safety feature that secures food supply since it ascertains that supply continues even when production in the regions with the highest comparative advantage is interrupted by devastation, earthquakes, floods, epidemics or war.

Thus, many consumers expect organic food production to succeed in avoiding food miles and also expect organic production to be performed by the farmers of a region for local consumers. Their expectations are not met by the *Ricardo* concept of a global organic food market where the production of each commodity is to be concentrated on the few sites that offer the best advantages worldwide for the particular product.

Presently organic food production rules and certification rarely take into account the proximity of production and consumption or the concept of global redundancy in food production as a safety feature. These issues are discussed within the various organic agriculture movements and they may agree on a common acceptance of new rules with respect to these aspects. However, the WTO-System may take a stand against what occurs within the organic agriculture movement.

The *Ricardo* concept is the logical basis of the World Trade Organization (WTO). The WTO pursues a worldwide integration of all markets in one worldwide market place for products where all suppliers compete on an equal basis so that the cheapest supplier prevails. This global competition is believed to serve the interests of all producers, since those who are pushed out of the market with their product by competition are expected to switch to producing another item where their comparative advantage is the most favorable. WTO has its roots in the General Agreement on Tariffs and Trade, a multilateral treaty system of 1948 that established a sequence of negotiation rounds. These rounds then resulted in a group of agreements called the Final Declaration of Marrakech, which ended the Uruguay Round.

WTO affects the organic food market in two ways: first by requiring the discontinuation of agricultural subsidies based on production quantities. Subsidies may, however, be used to enhance environmental quality or animal welfare. The reallocation of subsidies could benefit organic agriculture as the most environmentally beneficial form of agriculture. Secondly, the organic market is affected by one of the agreements attached to the Final Declaration of Marrakech. The Agreement on Technical Barriers of Trade (TBT) recognizes a national right to adopt the standards considered appropriate in achieving legitimate objectives. The “legitimate objectives” provided for in the TBT Agreement are, notably, (i) protection of the environment and (ii) prevention of deceptive practices or practices that constitute acts of unfair competition involving the compositional, sensory and nutritional characteristics of food products. In order to prevent too much diversity, the agreement encourages countries to use international standards where these are appropriate, but it does not require them to change their levels of protection as a result.

Codex Alimentarius is a joint enterprise of both the World Health Organization and the Food and Agriculture Organization that seeks to document a common global understanding of what is appropriate in food labeling and other aspects of food production. The Codex Alimentarius Commission has stated that its food standards must be based on objective analysis and scientific evidence, after an examination of all relevant data, to ensure that standards guarantee the quality and safety of food supplies. Codex Alimentarius is also required to take account of, where applicable, other legitimate factors of importance in protecting the health of the consumer and promoting fair trade practices in the food trade.

It is unclear whether organic food production rules of a certification system, be it private or governmentally run, would be suppressed under WTO-rules if they were to encompass rules on the proximity of production and consumption or on the desirability of a multi-centered food production not necessarily implementing the *Ricardo* rule, but guaranteeing more food safety by redundancy in food production adapted to local site conditions. Consequently, it is unclear whether the organic movement still has the sovereignty to introduce aspects of food safety and food security into their production and certification rules. (See Box 3.)

Who Is the Process Owner?

The key-question is not, in our opinion, that standards are set, but: who is responsible for the process of developing, implementing and controlling standards and who decides which standards are helpful and necessary?

In developed and developing countries organic agriculture policies have developed from the bottom-up. Organic farmers and concerned consumers were the first on the scene. Policy and science have only been a reactive movement that in some cases have helped to create favorable structures. One of these structures has been standards set by governments. It is important to clarify whose interests lead to certain decisions in areas such as the process of discussing, setting, developing and the monitoring of organic farming standards.

The content and philosophy of the US-standards for organic farming shows that the organic farming movement has lost control over defining and accepting possible development and innovation in organic farming: The US standards prohibit certification bodies from using any standards other than government standards (Vaupel 2001). All changes of standards have to be validated and decided upon by a government that needed a decade to come up with standards for organic farming and that is far away from the every day life of organic farmers.

The rules tend to go into too much detail. It is not rare that those who draft the texts have specific production systems or regional conditions in mind, which are not present in other systems or regions to which these newly drafted rules apply. Rule making should take into account that rules are supposed to draw a line to distinguish organic agriculture from other forms of agriculture, but not to define what the best practice of organic agriculture is.

Standards and regulations are subject to development and change. One should assume that innovations at the grass roots level of organic

BOX 3. Benefits and Threats Organic Farming Standards and Regulations

Benefits of standards:

- They help organic agriculture to gain a higher profile by giving clear definitions, terms and concepts.
 - Standards create consumer confidence and protect consumers from fraudulent products.
 - Standards can create innovations and push scientific research through their demand for “organic solutions” in various fields.
 - The harmonization and equivalence inherent in standards help organic production to become mainstream with mutual recognition, facilitating market access to thousands of farmers in the market.
-

Threats posed by organic farming standards:

- Instead of consensus, standards create new borders and trade barriers.
 - Equivalence and homogenization standards kill the possibility of local identification and local adaptation.
 - Northern standards and procedures can “overrule” sound local agricultural practices and thereby impair indigenous knowledge and development. Over regulation demoralizes farmers’ initiative; and it makes innovative development and adaptations to local conditions almost impossible.
 - Regulations bring in high costs of certification and market access. Certification keeps farmers occupied with the administration of a mandatory system and becomes a time and energy-consuming burden. The inspection and certification regime does not conform to the cultural context of many of the farmers, i.e., the way they see themselves. This can lead to a total rejection of the whole idea of organic farming.
 - The recent developments in setting and executing standards by governments (and no longer by involved NGOs) make the government responsible for defining and setting standards in organic farming and leave the organic farmers movement worldwide with little or no power.
 - When regulations increase, the tendency to cheat might increase.
-

farming should have the chance to be incorporated into existing standards. The fact is that up to April 2003, the European Commission already published many amendments to the regulation 2092/91. The Working Group for Organic Farming in the EC discusses and prepares these topics of change. The Standing Committee on Organic Farming decides. Both bodies are composed of official governmental representatives from federal bodies (with few exceptions, e.g., The Netherlands and Sweden). The relation of the committee members to the organic farming movements in their home countries is heterogeneous and not quite clear to those concerned and to the public.

In Austria, for example, the Austrian representatives in the above mentioned Working Group and the Standing Committee are also mem-

bers of the Committee of The Austrian Codex Alimentarius for Organic Farming. This national committee is made up of participants from a wide range of involved parties relating to organic farming, including representatives of organic farmers associations, processors of organic food, certifiers, consumers' representatives and scientists who, on a regular basis, discuss the necessary steps in the development of the national and the European organic farming regulations. Here, a direct link between the development at the grass roots level and the standard setting committee is given. Nevertheless, changes in regulations are driven to only a small extent by a bottom up process. Private standards of organic farmers associations, which previously defined organic in a democratic process, now run behind the EU-standards and have to adopt the decisions of the EU in order to maintain equivalency.

As a matter of fact, negotiations within the European Union committees are a struggle to harmonize highly diverse needs and approaches to organic farming. Alpine regions, with long winters and short vegetation periods are "in competition" with warm Mediterranean regions for the definition of "what is" organic farming. The same is true for mountainous regions with steep slopes competing with large plains. Therefore the content of the regulation can be seen as merely an average, at a level where everybody can agree, but where nobody is really content.

Some special regional approaches or necessities are left as a matter of "interpretation," so that they can fit into the regulation. But due to the ongoing development and specification of the EC Regulation on organic farming the room for interpretation decreases constantly. Also the latitude within the implementation declines due to the increasing experience of the players within the certification process and the improved institutional structures. Still four different latitudes can be distinguished: first for some areas of agricultural production, no standards exist (e.g., the processing of organic grapes to wine in the EU); second, for some areas only guiding principles or minimum standards are fixed; third, unclear definitions and terms leave room for different interpretations; fourth, some regulations are just not being put into practice. Inspection bodies, state, national and EU-authorities are constantly narrowing the room for interpretation (Biberauer and Vogl 2003). Under these rigid circumstances, the need for a procedure in the development of regulations that allows for practical and value-based innovations is high (Darnhofer and Vogl 2003).

CONCLUSIONS

The development of organic farming and its standards needs to respect the traditional ecosystem and technological knowledge of farmers. Regulations and all activities to monitor them must respect cultural diversity and must not try to bring the various farming cultures worldwide into line.

Farming practices are embedded in a complex of knowledge, social organization, systems of belief and a worldview, which is typical of a certain time and place. Harmonization is one interesting tool, but only as long as overlapping work, unnecessary bureaucracy and costs can be avoided. Harmonization still has to ensure, allow and even support local adaptations of standards and regulations by local organic farmers associations to the needs of people and the environment within the frame of organic farming principles. Harmonization by 100% will never be possible and is not desirable. Therefore, a strong discussion on the expected future and a clear commitment to the guiding principles is necessary. This will allow for differences and diversity under a guiding umbrella.

Organic agriculture helps farmers return to their local knowledge. It gives them (re)new(ed) possibilities for maintaining and developing their local sustainable farming systems. Organic agriculture is not a concept from the North, it was developed also in the South and it is an attractive alternative for poorer farmers, too. What must be avoided is that the North should define and evaluate these farming systems with purely northern concepts and procedures. Regulatory mechanisms are certainly needed, but with a new ethical approach allowing regional definitions, local identification and innovations. Regional farming systems must find support in the allowing of regional standards and regional quality control systems with justified diversification instead of being overrun by global harmonization. On the basis of a consensus-building process we need individual concepts for individual realities.

Parallel to resolving problems with standards and certification, the organic farming movement should commit itself to providing clear answers to key challenges of the future: maintaining the power of innovation, empowering the poor, enhancing food security, ensuring farming resilience and protecting traditional indigenous knowledge through use and development in every-day life.

Many anthropologists, ethnologists and scientists of other disciplines study rural people and the practices and knowledge of their farmers. These scientists are aware of local knowledge, techniques and adapta-

tions that characterize the sustainability of land use systems. Their results and their voices can help to design locally adapted systems of organic farming and they can also be a means of facilitating sustainable development in organic farming. A closer methodological and communicative link should be established between those who study traditional knowledge and land use systems and those who want to transform and/or help (re)enter the practice of organic farming.

Multiple certifications and multiple accreditations have to be avoided. The goal must be “one inspection–worldwide acceptance” (Van Elzakker 1999, Vaupel 2000).

The high cost of unnecessary bureaucracy is paid by farmers and consumers, and thus limits the potential of organic farming. Organic farming becomes less interesting because of high costs (no longer for synthetic inputs, but for external consultants and certifiers) and because of high prices for organic produce at the market. Local certifiers have to be supported in their work, not as branches of northern certification bodies, but as an independent, regional capacity that support the organic movement. Local responsibility has to be increased especially in the control and certification procedures. This helps to increase identification and decrease the risk of fraud. Local certification and internal control systems need more acceptance and promotion by the authorities of the importing countries.

Local trade.

National regulations should facilitate international equivalency and not be misused to create trade barriers. The relevant players in the South should develop regional markets and thus find more locally adapted standards and regulatory systems. For regional marketing, no equivalence with European, etc., regulations *are* necessary.

Legal standards and regulations should be considered as nothing but a tool (Kyed and Sorensen 2000).

Standards and regulations should be designed, developed and understood according to their function; that is, to protect farmers against unfair competition and consumers against fraud. It is not their purpose to explain what organic farming is, in its full technical, social and spiritual development.

However, the question is whether and how the complex quality of organic farming can be understood within the context of legal terminol-

ogy. It may well be that the picture of the organic world is too rich in color and shape to be rendered in black and white. Laws draw borderlines for human activity but do not substitute life itself. Standards on organic farming try to specify the location of organic farming on the agricultural continent by excluding what is *not* organic; they aim to exclude everything from agricultural practices that contradict organic farming principles. As Milestad (2003) points out, rules can never capture the richness of principles and the gap between the principles and practice of organic farming stems from the nature of standards, which are unable to fully capture the ideal they are meant to represent.

General standards are unable to include the whole message and all the information on the guiding principles of organic farming. Legal standards, in the first instance, define the borderline between organic agriculture and other forms of food production that create a protected space for the trading of environmentally responsible agricultural products. The purpose of legal standards is by no means to promote the bettering of existing organic production, nor to promote the conversion from conventional to organic production, although there may very well be potential that they can facilitate such processes.

Regional standards regulate organic production on a regional level, taking into account the specific environment of the production and the specific concerns of consumer(-groups). The more “regional” standards are, the more they can comprise leading principles that are precise. Global guiding principles tend to be abstract and open to interpretation and misinterpretation. Guiding principles in regional standards are more likely to be helpful in reflecting the specific capacities and challenges of organic producers in the region. They are more likely to take into account traditional techniques and knowledge.

Regional Standards developed in the framework of the global consensus documented by IFOAM Basic Rules would serve best to protect justified consumer expectations and producer interests. Therefore, this “hierarchy” from global-general to regional-(local)-specific standards should be further developed. Global-specific standards are not desirable.

The current successful development of organic farming means organic farming has to be conscious of its origins.

The origins of organic farming lay in the hands of many innovative farmers worldwide. Farmers’ innovations and experiments at technical, social and economic levels towards sustainability and resilience have to be supported and facilitated, and should not be hampered. The border-

line which is drawn by legal standards on organic farming must not be too narrow but must leave enough space for the use and development of local and even personal adaptations and solutions within farmers' specific ecological and cultural context.

All over the world, the whole of agriculture is moving away from farmers' knowledge, due to international standardization, globalization and social changes. Politics are fighting with the negative consequence of this development: migration, poverty, and the loss of local knowledge are just a few of these consequences. Organic agriculture must not go the way of automatic standardization and globalization but has to remain and further become a positive and rich alternative route to current tendencies.

Standard setting and regulatory mechanisms have to empower an innovative, independent, diverse and democratic movement of organic agriculture. Organic agriculture will then be recognized more and more as an attractive and sustainable way of life and of earning a living for people all over the world.

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