

Private standards in international trade: issues and opportunities¹

Abstract

The number of private standards and their influence on trade have risen steadily since the early 1990s under the combined forces of globalization, policy liberalization, changing consumer preferences and progress in information technology. There is a wide array of private standards, each with its own objectives, scope, advantages and constraints, which makes it difficult to treat these standards as a homogeneous category. The type of organization that develops the standard and the development process may have significant implications for the standard's suitability to producers. It is difficult to assess the market penetration of private standards, as national customs agencies do not monitor this information. However, there is evidence that the market for foods certified to private standards has expanded rapidly over the past decade, in particular in the fair-trade and organic sectors.

Private standards may benefit producers through more efficient management, cost reduction, improved market access and enhanced product quality and corporate image. Labour standards may reduce worker turnover, absenteeism and accident and sickness rates, thereby reducing costs and raising productivity. Compliance with environmental standards may improve the management of natural resources on which farmer livelihoods depend. They may lead to better health conditions for farmers and farm workers and enhance relations with the local community. In addition to the above benefits, some standards may have a direct value-adding effect by enabling producers to obtain higher sale prices.

However, private standards raise a number of issues due to the nature of their ownership and their development process, which is seldom sufficiently participatory, transparent and based on scientific evidence. As a result, some standard requirements and indicators may not be suitable to all producers, especially for those who are outside the area where the standard was originally developed. Complying with some private standards and demonstrating compliance requires substantial capital, time and skills. Yet, the value generated by the standard tends to be captured by downstream market operators, in particular large-scale retailers, and only a small share accrues to producers. The problem is compounded when the standard is *de facto* mandatory because a majority of large buyers demand it. As a result, small-scale producers run the risk of being excluded from high-value markets. This problem is particularly acute for developing countries due to the lack of infrastructure and public finance to help domestic producers adopt standards.

Finally, private standards may compete with government regulations and be more demanding in both stringency and scope than regulations without clear justification. Some critics have argued that they undermine the multilateral trading system and intergovernmental standard setting bodies. Yet, some issues could be addressed by involving the main stakeholders in a transparent standard development process, basing the standard's requirements on scientific evidence and internationally agreed standards and focusing on desired outcomes rather than means, in order to produce a standard that is adaptable to different contexts and can benefit producers also. Collaboration among stakeholders and public-private partnerships are needed to maximize the positive effects of private standards on producers and minimize their negative impacts.

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This paper largely draws on another paper written by the author for the FAO Expert Meeting on Feeding the World in 2050, Rome, June 2009 and to be published in a volume by FAO later this year

Introduction

Private standards are standards² designed and owned by non-governmental entities, be they for profit (businesses) or not-for-profit organizations. Whereas governmental standards (usually called ‘technical regulations’) may either be mandatory or voluntary, private standards are voluntary by definition. Private standards have always existed in the agricultural sector, but their number has risen markedly since the early 1990s. With the advance of globalization this type of standards has increasingly applied to international trade. Although no figures are available, it is estimated that presently a substantial share of agricultural exports have to comply with various types of private standards. Yet, the multilateral trade rules that apply to technical regulations have so far not been applied to private standards.

This paper examines the current situation of private standards, the issues they raise and the opportunities they may offer producers. It begins by analyzing the causes for their emergence. As the term ‘private standards’ covers a wide and diverse array of standards, the paper proposes a simplified typology. Estimates of sales are provided for those standards for which data are available. The paper goes on to examine the benefits and challenges of private standards for various types of stakeholders, in particular developing country governments and producers. Finally, the prospects for continued growth of the influence of private standards on agricultural trade in the long term are discussed.

The prospects for private standards to be brought under the disciplines of the multilateral trade agreements in the future are outside the scope of this paper as they have already been addressed by other authors.

1. Factors behind the rise of private standards in international trade

The main driving forces behind the rise of private standards are the globalization of trade, progress in information technology, concentration in the food processing and retail industries, changing consumer preferences and regulatory changes in major developed markets.

Firms increasingly source their raw materials, components and products from a large number of suppliers worldwide. In the past, backward integration through ownership was a favoured strategy to secure scarce supply and ensure product quality. For example, retailers would take over food processing companies while food processors would invest in agricultural production units. However, control through ownership is complex, costly and entails risks, especially for firms that are not experienced in the industry. The situation of surplus production that developed in the agricultural sector from the 1980s made it less important to secure access to supply. And progress in information and communication technology made it possible to control the supply chain through the use of standards. In a market situation of abundant supply, standards give a sufficient degree of control over product quality and do not require large investments and the involvement in the management of suppliers. Thus, backward integration through ownership has tended to be replaced by a lighter form of integration through standards. Such a trend has been observed in the banana industry, where multinational companies have sold some of their plantations and increasingly used standards since the 1990s (FAO 2003a, FAO 2009).

More importantly, retailers have used a similar approach. The retail sector has experienced unprecedented globalization and concentration since the 1980s. One of the consequences of retailers’ increasing bargaining power is that they can impose higher requirements onto their suppliers. These requirements not only include price and product specifications, but also apply to production, processing and transport. Some technical standards, such as those for bar-coding, have been initiated by retailers to improve logistical processes. Many retailers have their own specifications that are communicated solely to their suppliers and of which the outer world has little knowledge. Yet, for

² For the definition of standards and other technical terms used in this report, please refer to previous work such as FAO (2003b)

certain categories of standards, notably those related to food safety, retailers and other buyers may implement standards as a group and require third party auditing and certificates.

Other requirements have been included to respond to new demands from consumers. Rising purchasing power, education level, urbanization and evolving lifestyles combined with the decline of food prices relative to other goods have led to changes in consumption patterns. While in the past price and visual aspect were the main purchase criteria, the *intrinsic quality* of food has become a much more important parameter. In addition to the physical quality of foods, consumers are increasingly demanding on the ethical dimension of food quality. This relates to the process of production and trade and its broad impacts on society and the environment. It includes a wide range of social, environmental or cultural issues such as the treatment of workers, a fair return to producers, environmental impacts and animal welfare. These concerns have developed partly as a reaction to the industrialization of agriculture, the concentration of food production and trade and the resulting globalization of food trade. They have been fuelled by non-governmental organizations (NGOs) campaigning for social and environmental goals such as the preservation of rainforests, labour rights, and the abolition of child labour or fair-trade. Some of these NGOs have developed voluntary standards that firms may choose to adopt to meet these concerns.

A third ‘driver’ of standard development has been a tightening regulatory environment, such as increased levels of liability for food companies in relation to food safety aspects. A series of food crises in the late 1990s and early 2000s had considerable media coverage and raised the awareness of governments, the food industry and consumers on the need for improving the monitoring of food production and distribution. Governments have tended to respond by adopting stricter legislation placing the liability for food contamination on the industry and retailers (e.g. the ‘due diligence’ requirements in the United Kingdom first and then in the whole EU). In turn, retailers and food manufacturers have sought to make their suppliers liable for the safety of their products, notably through the development of standards for good agricultural practices and good manufacturing practices, traceability and the requirement that suppliers be certified. In some cases, firms have developed standards individually (e.g. Carrefour’s “*filière qualité*”), while in others they have acted collectively (e.g. some European supermarket chains formed the Euro-retailer Produce Group to develop the EurepGAP standard in the 1990s).

Finally, competition on quality provides another incentive to adopt “high” standards. Adopting a standard and publicizing it is a strategy to improve the corporate image, differentiate products and add value.

2. Typology of private standards and their conformity assessment systems

Although trade policy forums tend to consider private standards as a homogeneous group, it is important to bear in mind that this term covers a wide array of standards. Private standards differ significantly among themselves depending on their objective and scope, the customers they target, the type of companies and areas they may apply to, and the type of organizations that own and require them. There are also different modes of verifying that the standard is met. What follows is a simplified typology of private standards.

2.1 Objectives and scope of standards

As defined by ISO, standards are used to ensure that materials, products, processes and services are consistently fit for their purposes. Standards have different levels of objectives, ranging from the *ultimate objective* to the more operational and immediate objectives (see Table 1 below).

Ultimate objectives

The ultimate objective relates to the strategic goal that the organization aims to achieve by prescribing the standard. Section 1 has touched upon different types of ultimate objectives. They can be

summarized under three types: regulating supply, differentiating products and advancing ethical goals. Standards aiming at regulating supply are exemplified by the supplier-oriented standards developed by large food manufacturing and retailing firms. The ultimate objective is to control procurement and beyond this, the whole supply chain. Product differentiation standards are usually defined by producer organizations, but some of them also originate from large-scale retailers. Their objective is to create specific market demand, thereby improving market access and possibly fetching a price premium. The third type responds to various concerns that have emerged in civil society since the 1980s and can be broadly termed as 'ethical standards'. It mainly consists of process standards with a wide range of objectives. Ethical standards aim to encourage the inclusion of various ethical values into production, trade and consumption by signalling to consumers those products which meet these values. This generates market rewards for the companies that adopt these values. A standard may have more than one ultimate objective.

Immediate objectives

The next level of objectives can be called the *immediate objectives*. The above first type of standards (regulating supply) includes ensuring food safety as an immediate objective. Private food safety standards have emerged in the wake of a series of high-profile food poisoning cases in the 1990s. Ensuring food quality is another frequent immediate objective of standards. It can also be found under both the first and second type of ultimate objectives (i.e. supply regulation and product differentiation). Standards aiming to ensure food quality have long existed in the agricultural sector. These two types of immediate objectives include both product and process standards, and emphasize the traceability of products throughout the supply chain.

The third ultimate objective includes various immediate objectives (e.g. protecting the environment, promoting sustainable agriculture, advancing social goals, responding to cultural demands, etc.). Standards may have more than one immediate objective. For example, origin-linked standards generally include food quality, preservation of tradition and local natural resources in their immediate objectives.

Operational objectives

The final level of objective can be designated as *operational objective* and corresponds to what is directly addressed by the standard, in other words the expected outcome of the standard's implementation. For example, a food safety standard may aim at the adoption of good agricultural practices and at fully traceable products. An environmental standard may have various operational objectives (e.g. development of organic agriculture, preserving the natural habitat of birds, protecting rainforests, or limiting the contamination of the environment by GMOs). Similarly, a social standard may have as operational objectives ensuring the respect of labour rights and worker health and safety, reducing child labour, promoting social equity and fair-trade, or preserving the rights of indigenous communities. A cultural standard may have the preservation of traditional local know-how in food production as operational objective. A religious standard may have the mode of preparation of food as operational objectives (e.g. kosher and halal foods). Ethical standards may have ensuring animal welfare as operational objective.

It is important to bear in mind that some standards mix several immediate and operational objectives. For example, fair-trade standards include some environmental criteria.

2.2 Type of prescribing organizations

Private standards have been developed and promoted by both businesses and not-for-profit non-governmental organizations (NGOs). In the business sector, they respond to the first or second ultimate objective or even both (regulating supply or/and differentiating products). Usually producers set standards for product differentiation while retailers set standards for regulating supply. Yet, retailers also benefit from product differentiation standards and have launched own brands to this effect.

Standards may be set by different actors of the supply chain, individually or in industry groupings. The producers, generally in an association, cooperative or local consortium, may have an interest to set a standard in order to show a wide range of buyers that they fulfil certain requirements generally in demand in the market. Such an assurance programme may save time and money, compared to assuring each buyer individually. Such producer standards include the standards set by national horticultural producer associations under the COLEACP harmonized framework or those set by Florida orange producers. Another example would be the first organic standards set by organic producer associations, which not only served to assure consumers but also functioned as a learning tool for the producers.

At the other end of the chain, buyers such as food processors or retailers may set a standard to ensure that procured products have a consistent level of 'quality' (in its broadest sense) without the need for inspecting all the suppliers. Large firms may choose to do this individually. Examples of retailer's own standards include Tesco's *Nature Choice* and Carrefour's *Filière Qualité*. On the other hand, if a group of buyers recognize that they have basically the same requirements for certain products, they may set a standard together. This would encourage producers to implement such standards more rapidly, as it becomes clear that a large number of buyers require them. An example of such a buyers' standard is the GlobalGAP (formerly EurepGAP) protocol that was developed by a group of European supermarket chains. The SAI-Platform and the Global Food Safety Initiative are initiatives by groups of large food manufacturing companies to harmonize food standards (FAO 2007b).

Not-for-profit NGOs have been very active in standard development. Such civil society organizations include environmentalist groups, faith-based associations, trade unions, animal rights movements and other organizations involved in social progress. Their ultimate objective is to promote and reward sustainable or ethical business practices. For example, the International Confederation of Free Trade Unions (ICFTU) has established a generic code for ensuring labour rights, and some trade unions are involved in coalitions that are setting standards. NGOs may be advocacy groups, but can also be broad stakeholder groups. Standard-setting NGOs may themselves be an umbrella organization of various smaller NGOs, each with their own constituencies. Standard-setting NGOs may be national or an international association of national NGOs such as the Fairtrade Labelling Organization International (FLO) and the Sustainable Agriculture Network (SAN). Whether a standard set by NGOs becomes generally accepted will depend on many factors. Among them, the public recognition of the NGO setting the standard; the standard-setting process, especially stakeholder consultation; the "implementability" of the requirements; and the publicity around the standard. As with governmental standard-setting bodies, NGOs may choose to do the verification themselves, or to accredit certification bodies.

Finally, the private sector and NGOs may form two-party coalitions to set standards, possibly with the participation of government. For example, governments, industry and consumer organizations are all represented among ISO members. ISO is a hybrid body composed of public and private national standard-setting bodies. Another example is the Ethical Trading Initiative (ETI), a tripartite organization with government, businesses and trade union representation in the United Kingdom.

Some private standards have become somehow marginalized by the subsequent development of governmental standards. This is the case of organic agriculture standards in most developed countries, as governments have regulated the production, marketing and labelling of organic foods since the 1990s (EU) or early 2000s (USA, Japan). However, private organic standards continue to exist alongside public standards due to consumer preferences. In these cases, the food product is certified to two standards (the public and private ones). As for private religious standards (e.g. Halal or Kosher...), they tend to disappear in those countries where the government has adopted an official standard. Unsurprisingly, there is a correlation between the type of standards and the standard-setting organization. Most of the standards developed by the business sector aim at food quality, food safety and traceability. Conversely, most ethical standards are set by not-for-profit organizations. The type of organization that has developed and owns the standard and the development process may have significant implications for the standard's suitability to producers.

2.3 Targeted clients

Private standard schemes may target two broad categories of customers: corporate clients ('business to business' or B2B schemes) and final consumers ('business to consumer' or B2C schemes). Most of the food safety, traceability and good agricultural practice standards are B2B. Conversely, product quality and ethical standards usually belong in the B2C category. They signal the specific qualities of the product to consumers through the use of a label to be affixed on the product. Some of them target both corporate clients and final consumers (e.g. Rainforest Alliance).

2.4 Target companies for standard compliance

A private standard may be designed for self-application by the company (or group of companies) that has developed it or for other companies. It may apply to agricultural producers, food processors, traders or all the actors of the marketing chain. Also, it may apply to a specific type of farms or enterprises within these categories. Fair-trade focuses on small farmers organized in groups, although plantations may be eligible under certain conditions. While this is not clearly stated, in practice most of the supplier-oriented standards developed by retailers focus on large commercial farms and food processing firms. Similarly, historically environmental standards such as Rainforest Alliance and ISO-14001 or labour standards such as SA-8000 were developed for plantations and agro-industries. In a few cases, the owner of the standard has attempted to adapt it to the specific situation of small holders, but the rate of adoption among small holders remains generally low.

2.5 Geographical scope

Private standards and certification programmes may have a national or international scope. Due to the globalization process, they increasingly have an international scope.

While many international private standards apply to all regions worldwide, some are restricted to certain geographical or economic areas. For instance, FLO's fair-trade standard applies to developing countries only. The Rainforest Alliance focuses on tropical and sub-tropical countries. Finally, origin-linked standards apply to a specific well-delimited sub-national production area³.

2.6 Product vs. Process standards

A *product standard* is a set of criteria with which a product or a family of products must comply. Typical product standards in the agricultural sectors include quality standards relating to the physical appearance (grade, shape, colour, absence of blemishes), the nutritional contents or the absence (or low level) of certain undesirable elements such as contaminants, pesticide residues, and genetically-modified organisms (GMOs). A *process standard* is a set of criteria for the production process (e.g. prohibited use of agrochemicals and obligation to maintain soil fertility in organic agriculture).

Process standards can be further divided into *management system standards* and *performance standards*. Management system standards set criteria for management procedures, for example for documentation or for monitoring and evaluation procedures. They do not set criteria for the performance of the management system in terms of what actually happens in the field or the packing station. ISO-14001 is an example of management system standards. Performance standards, in contrast, set verifiable requirements for factors such as the non-use of certain pesticides or the availability of sanitary services. The Rainforest Alliance's sustainable agriculture standard is an example of performance standards.

2.7 Conformity assessment systems

There are three ways of verifying that a standard is met. In the first case, a company may decide to adopt the standard and appoint employees to verify that all its departments comply with it. This is

³ An exception to this rule is the "café de Colombia" indication, which applies to the whole country

called *first-party verification*. For example, in the early days of the organic farming industry, producer groups checked themselves that all group members complied with the standard chosen by the group. In the second case, a firm may demand that its suppliers meet the standard and control itself that they do so. This is *second-party verification*. Second party verification is widespread among food processors and retailers. Finally, a firm may require that its suppliers meet the standard and request an independent organization that is not involved in the business relationship to control the compliance of the suppliers. This is *third-party verification*, also called *certification*. The International Organization for Standardization defines *certification* as “a procedure by which a third party gives written assurance that a product, process or service is in conformity with certain standards” (ISO Guide 2, 1996). Certification can be seen as a form of communication along the supply chain. The *certificate* demonstrates to the buyer that the supplier complies with certain standards, which can be more convincing than if the supplier itself provided the assurance. The rise of certification is to a large extent the result of trade globalization and progress in information technology.

It is important to underscore that certification is by definition done by a *third party* (named *certification body* or *certifier*) which does not have a direct interest in the economic relationship between the supplier and buyer. Ideally, the organization that has set and owns the standard should not carry out the certification operations itself. Rather, it should authorize competent independent certification bodies to do this work after checking their capabilities.

To ensure that the certification bodies have the capacity to carry out certification programmes, they are evaluated and *accredited* by an authoritative institution. Certification bodies may have to be accredited by a governmental or para-statal institute, which evaluates compliance with guidelines for the operation of such bodies set by, for example, ISO, the European Union or some other entity. In addition, standard setting bodies may accredit certification bodies for the scope of their particular standard.

Table 1: Simplified typology of private standards and certification schemes in the food sector

Standard owner a)	Business sector					Not-for-profit sector e)						
	Food manufacturers and retailers (as single firm or industry group)			Farmer organizations, exporter organizations or trade associations		Advocacy NGOs						
Owner's objective	Supply chain management b)			Product differentiation, value adding, market access		Promote and reward sustainable/ethical business practices						
Designed for	Suppliers			Producers and the national industry itself		Producers and traders						
Standard's immediate objective	Food safety	GMO-free	Product intrinsic quality	Food safety, environmental & social issues	Product intrinsic quality	Environmental protection and sustainable agriculture		Addressing social issues		Responding to cultural demands		Other ethical concerns
Operational objective	Adoption of good practices Products are traceable		Nutrition Health	Adoption of good agricultural practices	Origin-linked trade marks,traditional production process d)	Organic agriculture c) (most developed countries have public standards)	Conservation of natural resources, protection of species	Fair trade	Labour rights child labour	Religious f)	Origin-linked trade marks d), traditional production process	Animal welfare
Examples	GlobalGAP, BRC, SQF, IFS, Tesco's Nature's Choice, MPS			KENYAGAP, Thai Q ChileGAP Colombia Florverde, Ecuador's FLOrEcuador, KFC certif	Florida oranges	IFOAM Basic Std, Soil Association, East African Organic std	Rainforest Alliance, Bird-friendly, Dolphin-friendly, GMO-free Conservation Agriculture	FLO Bio-équitable Ecocert IMO	SA-8000	Halal, Kosher	Cotija cheese	Free-range chickens & eggs
Scheme type	B2B	B2B B2C		B2B	B2C	B2C			B2B	B2C		
On-product label?	No	Y/N		No	Yes	Yes			No	Yes		
Main benefits for producers	Maintain access to large integrated markets Improved farm management			Product differentiation, access to premium markets, added value		Product differentiation, access to premium markets, added value	Product differentiation. Added value?	Higher prices & incomes, more stable markets	Product differentiation	Better access to specific markets	Product differentiation	
Main costs borne by	Producers, exporters			Consumers & producers		Consumers & producers	Producers	Consumers	Producers	Producers	Consumers & producers	Producers & consumers

Notes:

- a) Some standard types may belong in several categories. For example, GMO-free may be owned by retailers, producers or not-for-profit groups. Also, the first organic standards were developed and owned by farmer organizations.
- b) Beside supply chain management, retailers also have standards aimed at product differentiation and value addition (e.g. quality, GMO-free standards, etc.)
- c) Private organic agriculture standards have become somehow marginalized by the subsequent development of governmental regulations in most developed countries, where certification to the public standard is mandatory if the product is to be labelled as organic. They continue to exist alongside public standards but are thought to account for a relatively small share of organic product sales.
- d) Geographical Indications (GI) can be based on different legal tools, referring either to a public scheme (*sui generis* law that regulates the standard) or private property, within a trademark approach. Some trademarks can also be owned by public authorities (e.g. Idaho potatoes) as for traditional quality schemes (label rouge in France, Hungarian trademark HÍR,...). The objectives of governments when regulating GIs are not only regulation (intellectual property rights) in the market but also consumer response, traditions and diversity preservation
- e) ISO standards are not included in this table, for the sake of concision and also because ISO is a hybrid body composed of public and private national standard-setting bodies
- f) Private religious standards tend to disappear in those countries where the government has adopted an official standard.

3. Market demand for private standards

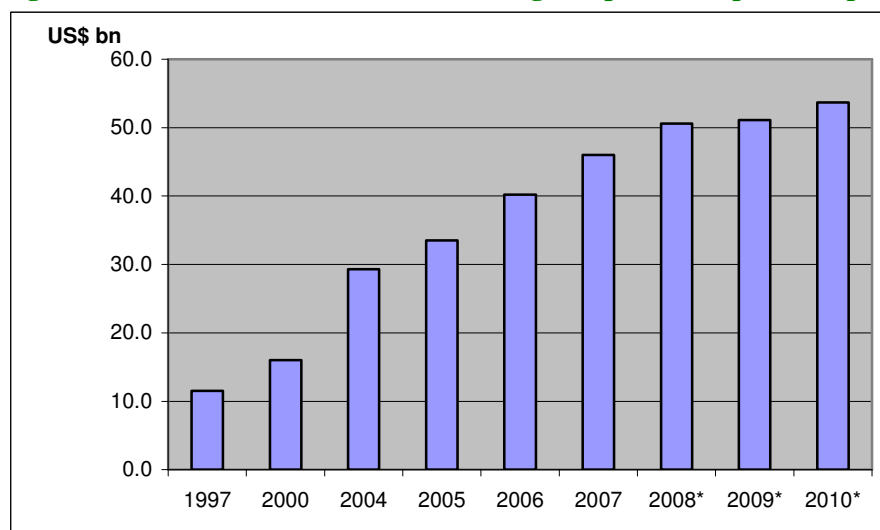
There is ample evidence that sales of foods certified to private standards have expanded rapidly since the late 1990s. However, there is a lack of official data on the volumes and values of sales, as national agricultural census data and official trade statistics usually do not distinguish between certified and non-certified products. Sales of certified foods that do not bear an on-product label are virtually impossible to track and companies consider the data as confidential commercial information. Even for the GlobalGAP standard, which has become widespread in Northern Europe, it has been impossible to collect reliable sales data. The situation is slightly better for some of the certification programmes which target final consumers with a label, although it is still far from ideal. In the case of organic standards, a few market research firms and NGOs have started publishing data. In the case of the Fairtrade standard, FLO and its member organizations monitor the marketed volumes and (sometimes) values. Data on total Rainforest Alliance (RA) product sales are not available, but this organization provides some estimates for the volumes of specific commodities (e.g. coffee, bananas). In order to guide decision-making and policy formulation, more reliable data on the market for certified products are necessary.

Developed countries are the main markets for certified products with more than 95 percent of sales, but there is a rapid increase in some other countries such as Brazil, Argentina and China. Similarly, the EU member countries account for the bulk of the European market (more than 90 percent), but increases have occurred in Central Europe (Czech Republic, Slovenia, Slovakia and Hungary). Switzerland has a very high per capita consumption. There is a large variation in consumption per capita across the different EU countries, with Germany, the United Kingdom and France leading by volume as the most important markets. The following describes the markets for organic and fair-trade certified products, which are those for which more complete sales data are available.

3.1 Organic standards

Based on estimates collected from various studies and industry sources,⁴ global retail sales of organic foods were estimated at some US\$40 billion in 2006. Few final figures are available for 2007 yet, but the UK market research firm Organic Monitor (2009) estimates that sales reached US\$46 billion. They have increased four-fold percent over a decade, growing from approximately US\$11 billion in 1997 (Figure 1). Growth has slowed since the second half of 2008 due to the economic crisis.

Figure 1 - World retail sales of certified organic products (past and projected)



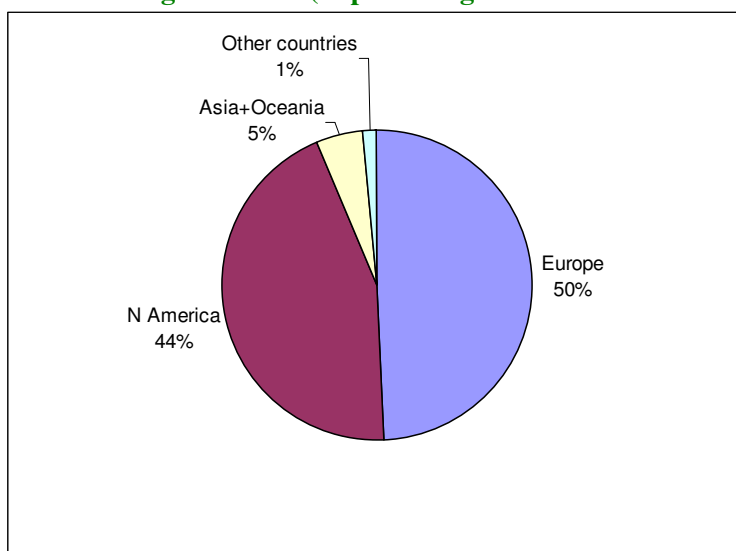
*: forecast

⁴ ITC, Eurofood, SÖL, Organic Monitor and other sources.

It is estimated that 98 percent of the sales of certified organic products take place in developed countries, where their market share usually ranges between 2 and 5 percent depending on the country (although some European countries have a share of over 10 percent). North America and Europe account for the bulk of retail sales as illustrated in Figure 2. Other markets are Japan, Australia and New Zealand. Although developing countries presently account for only a fraction of sales, consumption is rising steadily in some of them, in particular in the emerging economies of East Asia (Singapore, Malaysia, China, Republic of Korea) and Latin America (Argentina, Brazil, Chile). In these countries organic sales are overwhelmingly concentrated in the large cities and purchasers originate from the upper classes.

It is important to bear in mind that the above figures refer to all organic-labelled foods, be they certified to private or public standards. Most developed countries have adopted a public standard for organic products. In these countries certification to the public standard is mandatory if the product is to be labelled as organic. As a result, the bulk of organic-labelled foods are certified to public standards. However, some of these foods are also certified to a private organic standard in addition to the public standard of the country where they are sold. This may give them a market advantage where a certain private organic label is well regarded by consumers. The percentage of organic products certified to private standards is unknown.

Figure 2 - Main markets for organic foods (in percentage of world retail sales in 2006)



3.2 Fair trade standards

Global sales of Fairtrade certified foods reached nearly €2.4 billion (US\$3.5 billion) in 2007 according to the Fairtrade Labelling Organizations International (FLO, 2008)⁵. Sales increased by 47 percent (in euro terms) over their level of 2006 and further growth was recorded in 2008. Tropical products such as tea, cocoa, coffee and bananas enjoyed the fastest growth rates. On average, sales expanded by 40 percent annually over the period 1997-2007. By the end of 2007, 632 producer organizations in 58 developing countries in Africa, Asia, the Caribbean and Latin America were certified by FLO. FLO estimates that these organizations represent 1.5 million farmers and farm workers, and when counting their families and dependents, overall 7.5 million people benefit directly from fair-trade. Since FLO was created in 1997, the number of certified producer organizations has trebled.

FLO-labelled products are available in more than 60 countries. The main markets for fair-trade products are the United States, the United Kingdom, France, Switzerland and Germany, accounting for nearly US\$2 billion in 2007 (82 percent of global sales of FLO-labelled foods). Some NGOs that do

⁵ Since this figure only reflects sales of FLO-certified foods and does not include sales by alternative trade organizations, the total market value of fair-trade food is slightly higher.

not belong to the FLO system also sell fair-trade labelled foods, but the quantities are very small compared to those of FLO-labelled foods.

The market share of fair-trade foods is still very low. It is estimated to be much below 0.1 percent of global food sales. However, some products have a much higher share in some countries. For examples, fair-trade bananas were estimated to have a market share of 25 percent in the United Kingdom and 40 percent in Switzerland in 2008 (FAO 2009), while coffee was estimated to have a share of some 5 percent in the Netherlands and 3 percent in the United States (FAO 2008).

4. Advantages of private standards

4.1 For consumers and society

The advantages of standards for the companies (processors, distributors and retailers) that require that their suppliers comply with them have been discussed above. In addition, standards can also be beneficial to consumers. For example, food safety standards can reduce the number of food poisoning incidents. Relevant standards on nutritional contents may improve consumer health and well-being. Animal welfare standards might have a similar effect by providing higher-quality products. Beyond consumers, society as a whole can benefit from relevant standards. Environmental standards can help a country preserve its natural resources. They contribute to maintaining agricultural production factors (soil, water, forests, genetic resources) and conserving elements that are important to human well-being including landscape and amenities. Food safety standards can contribute to reducing government expenditure on food controls and the national medical care system. Similarly, labour standards help reduce incidents and sickness rates, which entails savings on public health care budgets.

However, whether private standards benefit consumers and society ultimately depends on the actual improvement that they generate with respect to the previous situation. Their requirements should be meaningful, science-based, relevant to the objective, relatively easy to implement and should not lead to discrimination against certain categories of operators. Also, the standards should be well enforced. For example, if a country already has a high level of public standards on food safety with strong enforcement, introducing stricter private standards may not result in higher food safety. This issue is discussed more in details in the next section.

4.2 For farmers and developing countries

Private standards can benefit food producers in several ways. Traceability and better record keeping may improve the management of the farm or enterprise. They may help them rationalize production and cut input costs (for example through a more efficient use of agrochemicals). Complying with standards may improve market access through enhanced product quality and improvement in the image of the farm or company. Labour standards may reduce worker turnover, absenteeism and accident and sickness rates, thereby reducing costs and raising productivity. They may lead to better health conditions for farmers and farm workers. Compliance with environmental standards may improve the management of natural resources on which farmer livelihoods depend. They may enhance the farmer's relations with the local community, including its suppliers and lenders. Although they are difficult to quantify in financial terms, these benefits may be significant. A number of case studies by the World Bank, UNCTAD and other organizations have highlighted the potential benefits of private standards⁶.

In addition to the above benefits, some standards may have a direct value-adding effect by enabling producers to obtain higher sale prices. In developed countries, a substantial share of consumers is willing to pay a price premium for products that can offer guarantees that their environmental, health and social concerns with regard to food production are addressed. However, consumers can seldom verify directly how their foods have been produced due to the large distances between them and the producers. In order to convey this information to the consumer, build trust and prevent possible frauds, some NGOs operating certification programmes have developed registered labels to be affixed onto

⁶ For a literature review of the impacts of private standards in agriculture see FAO (2003) and FAO (2007a)

the products. Some of these certification and labelling schemes lead to a price premium. Farmers and exporters increasingly view them as a tool to add value to their products.

This is an important strategy for developing country exporters of tropical products for which there is a situation or risk of oversupply. Under the pressure of declining commodity prices at the end of the 1990s, many agricultural producers have sought to differentiate their products from those of their competitors by targeting premium market segments. Traditionally, product differentiation has been pursued through improving the physical attributes of the goods, be they observable (e.g. grade, shape, colour, physical integrity, variety, packaging) or not (e.g. taste, acidity, sugar content). In addition, in recent years, farmers and processors have increasingly differentiated their products on the basis of the production process. Environmental and ethical standards offer an avenue for such differentiation.

By adopting a standard and obtaining certification, agricultural producers have been able to participate in the new international value chains for agricultural products. These new chains tend to be shorter than conventional food chains. They usually include a group of farmers, an exporter, an importer-distributor and a specialized retailer. In some cases, the chain is even shorter when the group of producers exports directly to a retailer. This type of short chains is typical of the fair-trade sector, where the declared goal is to reduce the number of middlemen to increase the profit margin at farm-gate level. This integration, which has been facilitated by rapid progress in information and communication technology, leads to increased profit margins at both ends of the chain. A number of new value chains for certified products have been identified. The organic food market has proved extremely fertile in this respect due to its rapid and steady growth.

From the economic perspective of developing countries, some private standards may help add value to exports and therefore raise export earnings, generate employment, support small producers, improve food security and diversify the local economy. They may deliver public goods such as preserving natural resources. Cases have been reported where they help enforce national regulations in countries where the legal enforcement capacities are low (ISEAL 2008).

5. Challenges posed by private standards

5.1 The suitability of requirements and indicators

As noted in the previous section, the usefulness of a private standard depends on the improvements in the quality of the product or process resulting from its adoption. Of course, this depends on the operator considered. The standard is meant to benefit the prescribing organization. Whether it also benefits the company/farmer that must comply with it and society as a whole depends on its requirements ('criteria'). Generally, compliance entails investment of time and money from the producer if the standard is to lead to actual improvements, but these investments may be compensated by various benefits as seen in the previous section. Yet, if the criteria are irrelevant or not suited to the producer's situation, they may be a heavy burden. Here, it is important to make a distinction between prescriptive and result-based standards. Results-based standards state the results that have to be obtained, but let the implementing companies choose how to achieve these results. By contrast, prescriptive standards set precise requirements for how products should be produced. Such prescriptive requirements tend to pose more difficulties for producers in other production systems than those for which the standard was originally developed or with which the authors of the standard are familiar, as many of the criteria may be irrelevant. For example, the GlobalGAP (formerly EurepGAP) standard was primarily designed for European farmers and some of its requirements were found both irrelevant and excessively costly for African smallholders⁷. In this respect, result-based standards are preferable because producers can implement them in a way that is consistent with the local circumstances (FAO 2007b).

⁷ Some European small-scale farmers have claimed it is also costly for them.

By default, product standards are more results-based than process standards. Some prescriptive clauses in process standards are difficult to avoid (e.g. the prohibition of the use of synthetic pesticides in organic agriculture). However, process standards could be more results-based than often is the case. For example, many food safety oriented standards aim to create hygienic production environments. Yet, instead of prescribing the desired result, they prescribe the means to achieve such results, to such details as the number and type of toilets that have to be available at a food processing facility.

Generally, compliance with product standards can be verified by examining the product. Verification of adherence to process standards is however more difficult. That is why certification companies require extensive documentation in addition to the inspection of the production facility. Many standard developers already prescribe documentation requirements in the standards themselves. This makes it difficult for certification bodies to be creative in situations where documentation is problematic (e.g. due to high illiteracy rates). Overall, the need for documentation tends to make process standards more prescriptive.

5.2 Overlap with technical regulations

Private standards may be problematic when they address areas that are already covered by adequate technical regulations. Two problems may arise: they may be more restrictive than technical regulations, or they may be more prescriptive, or both, without objective reasons. The benefits of a private standard to society depend on the extent to which the objective of the prescribing organization meets the collective public interest. The problem with standards set by businesses is that they may be used as a tool to differentiate the company from its competitors. When the firm sets a standard to achieve narrow corporate goals only, such as improving its image, no benefits may be expected.

One area where the overlap of public and private standards has become the subject of controversy is food safety. This is because food safety is generally considered to be well addressed by regulation, at least in developed countries, and therefore additional requirements put by companies on food producers may not necessarily increase it. For instance, when a Greenpeace report on pesticide residues in fruit and vegetables triggered panic among consumers in Germany, domestic discount store chains reacted by claiming that they would demand that their suppliers provide fresh produce with Maximum Residue Limits (MRL) lower than official values as defined by law. Yet, there was no evidence whatsoever that the official MRL were inadequate for public health. Apparently, the discounters' claim was mainly for advertising purposes. They were likely to increase the costs of production without any proven effects on consumers' health.

It should be noted that the position of developed country governments vis-à-vis business standards for food safety is not unambiguous. Governments may blame businesses for excessive requirements but, on the other hand, governmental regulations have encouraged companies to develop their own systems for safety control. Ultimately, the suitability of a standard to market players and society depends to a large extent on the process through which it was formulated.

5.3 The standard setting process

Critics of private standards have argued that their development process is neither participatory nor transparent. During recent meetings of the SPS Committee, developing countries repeatedly pointed out that private standards are not set in a transparent and inclusive manner. Many of them feel that they are excluded from the process. They view private standards as competing and eroding the multilateral efforts to reach consensus on standards and facilitate their international harmonization. At a meeting of the SPS Committee in June 2005, the representative of Argentina stated that: *"If the private sector was going to have unnecessarily restrictive standards affecting trade, and countries had no forum in which to advocate some rationalization of these standards, twenty years of discussions in international fora would have been wasted."* (WTO 2005- G/SPS/R/37/Rev.11)

Several countries have recommended following the example of the Codex Alimentarius Commission, which they view as participatory, transparent and science-based. They have underscored the need for agreed guidelines for developing private standards. Some have argued that private standards should be addressed by the multilateral standard-setting bodies (Codex Alimentarius, CPM and OIE), as this would reduce costs, increase transparency and promote harmonization.

Another frequent criticism of private standards is that they are defined in an arbitrary manner instead of being based on sound science. Setting international standards has proven to be very difficult due to the variety of circumstances that exist around the world. This is especially true for agricultural practices, which have to respond to differences in climate, soils and ecosystems, and are an integral part of cultural diversity. To address this diversity, international private standards should be normative standards, i.e. generic standards or guidelines to be used as a framework by local standard-setting or certification bodies to formulate more specific standards.

Arguably, the requirements of standards would be more relevant if companies involved their suppliers and independent experts when developing a standard. This would make it less likely that complying with the standard is too costly or complicated for producers. The reluctance of companies to involve stakeholders in standard setting may be partly explained by the trade-off between effectiveness and participation. The involvement of all stakeholders is bound to slow the development of the standards due to the often conflicting goals of stakeholders. Conversely, if a developer wants to produce the standard in a short time span and presses ahead with a certain standard, it is likely to lose the support of some groups. In a case study on Costa Rica, Bendell (2001), shows that many stakeholders dropped out of the standard setting group as the standard was being elaborated and adapted to operational constraints.

Recently, some of the business coalitions that set standards have started opening the development process to external stakeholders. For example, GlobalGAP launched a call for comments on the latest version of its standard where everyone, including the general public, could send comments by email.

5.4 Accountability of standard setters and accreditation bodies

In the case of governmental standards, it can be argued that there is a ‘double accountability’ guarantee. Governments are accountable to their citizens and to multilateral institutions (the SPS and TBT committees under the WTO system). There are multilateral rules governing standard setting, obligation of notification, provision of information and mechanisms for dispute settlement (see Chapter 1). Conversely, in the case of private standards, companies are only accountable to their shareholders (provided they comply with national laws). NGOs are only accountable to their members. The legitimacy of both groups in setting standards that may have impacts on the wider public interest (in particular human health) has been questioned⁸.

5.5 The monitoring system

- *Effectiveness*

Among the three approaches to conformity assessment described in section 2.7, first-party verification is probably the easiest to establish and the cheapest. However, under adverse circumstances, the company may face a dilemma between the cost of complying with the standard and its immediate financial performance target. Compliance may become irregular depending on the financial health of the company. In second-party verification the risk is lower, as compliance is monitored by another company (generally the customer). Yet, there is still scope for conflict of interests, for example when supply is scarce or in the case of preferred suppliers that the buyer cannot afford to lose.

Conversely, with certification the potential for conflict of interests is limited, as the verifier is an independent third party with no interest in the economic relationship between the buyer and the

⁸ This issue is discussed in FAO (2003b).

supplier. Certification can be a useful instrument to access remote markets when the issue of trust arises. In countries where the effectiveness of regulation is perceived as low, or the developing country stereotype influences the perception of consumers in the importing markets, the use of external monitoring organizations may be a solution for establishing trust in the quality of exported products (FAO 2007a). In the agriculture export sector, the use of foreign control firms is common. Multinational certification companies, such as Bureau Veritas Quality International or Société Générale de Surveillance, perform thousands of quality controls of agricultural goods for export worldwide every year. Similarly, the use of foreign certification bodies is widespread for organic foods. One reason is that few developing countries have domestic organic certification bodies. Yet, the main cause is that consumers in importing countries are more likely to trust an organic product that bears the label of their own country's certification bodies. This is because they tend to trust the quality of the work of the latter in general. Also, they believe that these will be less vulnerable to possible pressures and conflicts of interest than the certification bodies of the producing country.

Nevertheless, it should be noted that certification does not automatically guarantee impartiality or absence of conflicts of interest. For example, the standard may have been set by any party, e.g. by the producer or by the buyer, in which case their interests are likely to be reflected in the standard. When a standard setting body certifies against its own standard, a conflict of interests may also arise. The standard-setting body may want to see high implementation rates of its standard, or have a bias against certain types of producers or processors for ideological reasons, which may influence certification decisions. If the certifier is a for-profit company, it may have an interest in not interpreting the standard in too strict a manner, lest some clients switch to competitors who have a more flexible interpretation. Also, withdrawing certification in case of non-compliance means losing a customer. Even when the certifier is a not-for-profit non-governmental organization (NGO), conflicts of interests are still possible. First, if the certifying NGO has set the standard itself, it may be tempted to interpret it flexibly so as to promote its adoption by a large number of producers. Therefore, ideally, the organization that owns the standard should not carry out the certification operations itself. Rather, it should authorize competent independent certification bodies to do this work after checking their capabilities. Second, a certifying NGO, in a similar fashion as for-profit certifiers, may have an incentive to be flexible to avoid losing "clients" if it faces fierce competition from other certifiers.

- *Implications for producers*

Obtaining and maintaining certification is costly, as suppliers have to pay registration and inspection fees. In addition to these direct costs, monitoring and record keeping systems have to be developed to meet the demands of auditors. Such systems usually entail substantial investments in time and money for small producers. The latter need financial resources to upgrade their facilities to the level required by the standards. They also need skills to understand the standard's requirements, set the system and fill in the many forms that have to be submitted to the certification body.

In order to contain these costs, small-scale producers need to organize in groups, cooperatives and other forms of associations to set up collective quality assurance systems. Indeed, effective internal control systems will reduce the cost of certification for producers, ensure product quality and enhance the group's cohesion and management. Farmers and enterprises need to seek market information, technical advice and access to financial resources in order to select and adopt standards that are of interest to their business. Small-scale producers seldom have the capacity to do this on their own and therefore need support from national governments and development agencies.

5.6 Distribution of costs and benefits along the supply chain

Complying with new standards usually entails additional costs for suppliers. Investments are often necessary to upgrade the production facility. Obtaining and maintaining certification is costly. Although certification benefits the entire food chain, the costs of private food safety and GAP certification are almost always entirely borne by suppliers (farmers, processors and exporters). Small suppliers may not be able to afford such costs and run the risk of being excluded from high value market segments.

As seen above, certification programmes that use an on-product label targeted to consumers may lead to a price premium. In some cases, the premium more than offsets the costs of compliance and certification. This is generally the case for organic and fair-trade certification. However, there is evidence that only a small share of the premium paid by consumers accrues to producers, as most of it is captured by downstream operators, in particular retailers. Case studies of certified banana exports from the Dominican Republic and Peru found that less than 20% of the premium accrued to the producing country (FAO 2009). The return to exporters was not higher for organic bananas than for conventional bananas. The case studies suggested that fair-trade was the system that gave the highest returns to producers but even so, the share of price premium accruing to them was relatively low. Retailers extracted the largest share of the retail price (40 to 50%), followed by importers. In a field study on the Dominican Republic, CIRAD (2008) found that grower organizations captured less than 12% of the retail value of certified bananas while retailers captured between 33 and 40%.

5.7 Differential effects of private standards on various stakeholders in developing countries

- *Developing country governments*

Most of the initiatives to adopt new private standards have occurred in developed countries. Yet, these standards apply to both domestic and imported products. From the perspective of developing countries whose economy relies on exports to major developed markets this is an alarming development. So far, the international debate on private standards has revolved around three issues: market access; impacts on economic development in developing countries; and relevance of WTO agreements to private standards. The following text focuses on the first two issues, while the latter is examined in the next chapter.

A large number of developing country governments feel that the rise of private standards threatens their market access and will reduce their export opportunities. In particular, food safety and good agricultural practice (GAP) standards have come under close scrutiny because they tend to be imposed by large corporate buyers on their suppliers as a prerequisite for doing business. Although in theory they are voluntary in nature, they are increasingly viewed as de facto mandatory. The GlobalGAP standard has generated particular concern due to the rising number of large supermarket chains that require it. Trade envoys from developing countries have complained that developed country governments have transferred the monitoring of food safety to their private sector, in particular the retailers. Those in turn shift this responsibility to their suppliers through certification requirements. In the case of imported foods, this means that the burden and costs of food safety monitoring have shifted from importing countries to exporting countries.

Developing countries often lack the infrastructure, equipment and trained personnel to meet the additional requirements of private standards. They have invested substantial resources and made efforts to meet the technical regulations of developed countries and are reluctant to have to comply with additional requirements from the private sector, especially if these are defined in an arbitrary manner and not based on scientific evidence. For those developing economies that rely on exports, losing market access will translate into a loss of vital export earnings, which jeopardizes economic and social development. Further, exclusion from international markets may shut them out from sources of expertise, inputs and technology.

- *Large commercial farms*

Case studies (e.g. Maertens and Swinnen 2007) show that private standards are an extra cost for large scale farms and businesses, but in general it remains affordable. Obtaining certification will not generate a price premium, but it can give rise to other types of direct and indirect benefits such as the rationalization of production, savings on inputs, more efficient management and enhanced corporate image as detailed in the previous section.

- *Small-scale farmers and agribusinesses*

Much of the concern that has arisen over private standards and certification programmes relates to the burden they place on small-scale producers and exporters, especially in developing countries. Most of the complaints voiced have focused on standards for good agricultural practices and food safety. The first public concern on GlobalGAP at the SPS Committee was raised by Saint Vincent and the Grenadines, a country where the majority of farms have a very small size. Several developing countries have complained that the costs of ensuring food safety are borne by the sole producers instead of being distributed along the supply chain. Food producers have to invest time and money in order to obtain certification but do not receive higher prices. As a result, small-scale farmers may be forced out of the export market. A case study on Kenya (Graffham et al. 2007) showed that between 2003 and 2006, 60% of these small vegetable farmers were dropped by the export company they were linked with in 2005 or withdrawn from EurepGAP compliance schemes as they could not face the costs of EurepGAP. In some cases, technical assistance projects may reduce costs, but this is not a sustainable solution.

In conclusion, while this section has evidenced a number of issues raised by private standards, it is important to keep in mind that these challenges are not unsolvable. In particular, some could be addressed by involving the main stakeholders in a transparent standard development process, basing its requirements on scientific evidence and internationally agreed standards, focusing on desired outcomes rather than means, in order to produce a standard that is adaptable to different contexts and can benefit producers also.

6. Prospects

Will private standards continue to gain ground and to what extent will they influence international food trade in the long term? In order to answer this question, it is important to assess how the world economy may evolve in the next 40 years. Global population is projected to exceed 9 billion by 2050. This will put more pressure on limited natural resources, in particular land, water, forests and fossil fuels. Absent significant productivity gains, this means that the endemic surplus situation that characterized the agricultural sector globally from the 1980s to the early 2000s is likely to disappear. The growing economic weight of emerging markets such as China and India will lead to a multi-polar world with more diverse trade patterns. Despite recent difficulties exacerbated by the current economic crisis, trade liberalization is expected to continue both at multilateral and regional levels. Combined with progress in information technology, these developments will lead to a more globalized economy. Overall, a greater share of agricultural production will enter international trade.

However, this globalization trend might be somewhat mitigated by rising transportation costs due to the expected increase in fuel prices and government concerns about food security that may lead to export restrictions in some food insecure countries. Global warming will lead to an increase in climate instability and extreme weather phenomena, thereby raising the volatility of agricultural supply.

Given this scenario, the prospects for a greater role of private standards in international trade can be examined in the light of their main functions described in section 2.

6.1 *Regulating supply and governing the value chain*

An essential function of standards is to ensure the uniformity of products or processes. This paper has argued that standards are a useful tool for large companies to regulate supply and govern the marketing chain. Further globalization will increase the tendency of large retail and manufacturing companies to source raw materials and products worldwide, thereby making private standards even more necessary. Continued progress in information and communication technology will make it easier to trace products from one end of the chain to the other. The higher volatility of agricultural supply will render standards even more useful to those who control the value chain. It may reinforce the trend towards using standards for backward integration as opposed to direct ownership, as investing in agricultural production may become even riskier than in the past. On the other hand, it could be argued

that the expected reduction in agricultural surplus may increase the need for securing supply through direct investment. This was illustrated by foreign direct investment into agricultural production picking up in 2008 following a long period of decline.

The end of large surpluses should shift some bargaining power back to producers away from retailers, who saw their power expand considerably from the 1980s to the 2000s. One implication is that retailers would no longer be able to demand that their suppliers comply with new standards without compensating them adequately for the extra costs incurred. This would lead to a fairer distribution of the costs and benefits of standards along the marketing chain. Higher product prices should give producers more resources to upgrade their facilities and meet food safety standards. Another implication is that efforts to harmonize supplier-oriented standards will increase. Standard-setting industry groups led by retailers such as GlobalGAP may give producers more actual power in decision making, thereby facilitating standard adoption. Eventually, standards for good agricultural practices, food safety and traceability may converge or enter mutual recognition arrangements. This would benefit all supply chain operators and consumers.

There will continue to be a growing interaction between public and private standards. Once the current economic crisis is over, governments in middle income developing countries will adopt standards to regulate food safety. Such initiatives will be facilitated by enhanced technical capacity in governmental agencies, rising purchasing power and higher awareness of consumers of food safety issues. As a result, it is forecast that the overlap of private and public standards will increase in the long term. The *co-regulation* approach is likely to become widespread in the food safety area.

6.2 Product differentiation and value adding

Many producer groups and industry coalitions have used private standards to convey information to customers, differentiate their products in the market and add value. This trend was exacerbated by the endemic surplus situation in the food markets of developed countries. Should the surplus shrink, this driver of standard adoption would weaken. In particular, standards that do not have clear selling arguments or add little value would disappear from the market. However, other factors are likely to provide producers with continued incentives for adopting standards that are truly distinctive and add value. In particular, changes in consumer preferences will continue to be a key driver of private standards. Consumers will demand that the products they purchase address increasingly diverse concerns. Beside product standards, standards governing the production and trade processes will be increasingly demanded. This trend will be nurtured by progress in information technology which will reduce the costs of process monitoring and reporting. Overall, globalization is expected to provide producers with a strong incentive to use standards to differentiate their products from those of their competitors.

Consequently, little harmonization can be expected in the case of value-adding standards developed by producers. This stands in direct contrast with the expected trend for supplier-oriented standards developed by large companies procuring agricultural products.

6.3 Advancing societal goals

Many private standards, in particular process standards developed by not-for-profit organizations, address environmental, ethical or cultural concerns. Further globalization and the emergence of a multi-polar world are likely to raise the number of these standards. Demand for products certified to standards responding to cultural specificities will rise in a globalized economy. Human migrations and the blending of cultures in large metropolitan areas will nurture the demand for standards addressing cultural concerns (e.g. religious food standards, animal welfare, standards related to origin and traditional production processes such as geographical indications).

The lower per capita availability of natural resources will favour the rise of environmental standards. More private standards for the recycling of materials will emerge, complementing governmental

regulations. The pressing challenge of climate change will lead to the emergence of certification schemes for low greenhouse gas emissions and fossil fuel use. Standards for carbon neutrality will become widespread. Life-cycle assessment will be increasingly used to analyze the environmental performance (including 'carbon footprint') of foods. The share of timber certified to private standards for sustainable forest management is expected to rise within the next decades. Trade in organic certified foods will continue to expand, as their competitiveness will be raised by high oil prices and a fall in the relative cost of labour vis-à-vis other production factors. Organic agriculture tends to use less fossil fuel and more labour per unit of output than conventional agriculture.

Ethical consumerism will continue to spread and its expansion will accelerate once the current economic crisis is over. As a result, it is expected that standards addressing labour rights and working conditions will influence a substantial share of trade in developed countries. More specifically, fair-trade standards will become increasingly important due to continued globalization and higher awareness of equity issues among consumers. Yet, the expected rise in agricultural prices will require the main fair-trade organizations to raise their guaranteed minimum prices and premiums in order to reflect the changing market conditions. Otherwise, farmers may judge the fair-trade system economically less attractive than presently and gradually stop seeking fair-trade certification.

It is expected that in the long term any major certification body will be able to certify against a range of standards and assess the compliance with several standards in the same inspection visit. This would lower the cost of multiple certification for producers and increase the volume of certified products in agricultural trade.

An increasing number of advocacy groups will discover the power of certification and labelling as a market-based tool to achieve their goals. This may increase the number of certification labels available in the market. However, there is a limit to the number of labels that consumers can recognize. It is doubtful that a product bearing 10 certification labels on its package is more attractive than a product bearing 4 labels. Therefore, the proliferation of certification schemes that has been observed since the 1990s is likely to come to an end in the future. Certification schemes will increasingly develop mutual recognition and equivalence arrangements among themselves. Some consolidation and mergers are to be expected, although this is unlikely to take place on a large scale due to the reluctance of many NGOs to merge into other organizations. As a result, whereas the volume of agricultural products certified to private standards is expected to grow substantially, the number of labels will not follow a similar growth.

7. Conclusions

The influence of private standards on trade has risen since the early 1990s and this trend is expected to continue under the combined forces of globalization, policy liberalization, changing consumer preferences and progress in information technology. It is difficult to assess the market penetration of private standards, as national customs agencies do not monitor this information. However, there is evidence that the market for foods certified to private standards has expanded rapidly over the past decade, in particular for fair-trade and organic products.

Private standards may benefit producers through more efficient management, cost reduction, improved market access, enhanced product quality and corporate image. Labour standards may reduce worker turnover, absenteeism and accident and sickness rates, thereby reducing costs and raising productivity. Compliance with environmental standards may improve the management of natural resources on which farmer livelihoods depend. They may lead to better health conditions for farmers and farm workers and enhance relations with the local community. In addition to the above benefits, some standards may have a direct value-adding effect by enabling producers to obtain higher sale prices. On the national level, private standards benefit consumers and society as a whole through the protection of human health, natural resources and amenities.

Yet, private standards raise a number of issues due to the nature of their ownership and their development process, which is seldom sufficiently participatory, transparent and based on scientific evidence. As a result, some standard requirements and indicators may not be suitable to all producers, especially for those who are outside the area where the standard was originally developed. Complying with some private standards and demonstrating compliance requires substantial capital, time and skills. Yet, the value generated by the standard tends to be captured by downstream market operators, in particular large-scale retailers, and only a small share of it accrues to producers. The problem is compounded when the standard is *de facto* mandatory because a majority of large buyers demand it. As a result, small-scale producers run the risk of being excluded from high-value markets. This problem is particularly acute for developing countries due to the lack of infrastructure and public finance to help domestic producers implement these standards. Finally, private standards may compete with government regulations and be more demanding in both stringency and scope than regulations without clear justification. Some critics have argued that they undermine the multilateral trading system and intergovernmental standard setting bodies.

Although private standards do raise considerable challenges, it is important to keep in mind that these standards differ widely and some are less problematic than others. Even for those that raise the most concerns, solutions could be found. In particular, some challenges could be addressed by involving the main stakeholders early on in a transparent standard development process, basing the standard requirements on scientific evidence and internationally agreed standards, focusing on desired outcomes rather than means, so as to produce a standard that is adaptable to different contexts and can benefit producers also. Collaboration among stakeholders and public-private partnerships are needed to maximize the positive effects of private standards on producers and minimize their negative impacts.

It is expected that private standards will affect a substantial share of international agricultural trade within the next decades. However, government policy will be a key factor in determining the extent of their influence on trade. As noted in the previous sections, there has been a growing overlap of public and private standards. In some sectors, such as the organic sector, governmental standards have marginalized private standards in most developed countries. In other areas, such as food safety, the trend has been the opposite: developed country governments increasingly rely on the private sector for enforcing policies. The co-regulation approach is increasingly being used, especially in Europe. In some cases, standards that were initially private are adopted by the public sector and then become compulsory. There are regional variations, though. In Asia, for example, private standards tend to apply mainly to food exports, while food safety on the domestic market is governed by national regulations. Government policy will be instrumental to the adoption of private standards by producers and other market operators. It can support their adoption through the provision of infrastructure and equipment (e.g. laboratories), training, provision of services such as technical advice and pre-audit visits and through the facilitation of certification.

In addition to the increasing interaction between public and private standards, there have been growing calls in intergovernmental forums for bringing private standards under the disciplines of multilateral trade agreements and the mechanisms of the World Trade Organization. These demands are expected to become more pressing in the coming years. Further analysis and international discussions are in progress to ascertain the relationship of these agreements with private standards.

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