

Private Food Safety Standards: Their Role in Food Safety Regulation and their Impact



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For further information on FAO activities, please contact:

Nutrition and Consumer Protection Division
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla, 00153 Rome, Italy
Fax: +39 06 57054593
E-mail: Food-quality@fao.org, Web site: <http://www.fao.org/food/food-safety-quality/>

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Executive summary

Private food standards are playing an increasingly important role in determining market access in international trade. The scope and objectives of these standards vary widely according to the nature of the entities developing and adopting them: they commonly address food safety, food quality or social and environmental issues along the production to marketing continuum. While official *food safety* standards must respect rules laid down within the SPS agreement, private food safety standards are not presently bound to this requirement. Given the growing importance of these standards, many developing countries are concerned that they undermine the authority of the texts adopted by the Codex Alimentarius Commission (CAC). This paper is a response to requests made by member countries during the 32nd Session of the CAC in 2009 that FAO/WHO carry out a more critical analysis of the role, cost and benefits of private standards especially with respect to the impact on developing countries.

The paper first provides a brief review of different types of private food standards and illustrates through a number of examples, the interplay between public and private spheres in the setting of food standards. The private interests promoted by private food standards are often in line with public interests: in some cases private standards can be seen as useful tools for implementing public policy and, where necessary, public authorities can be expected to take action to obviate potential problems arising from private standards and their implementation.

Private *food safety* standards are generally set by private firms and standard setting coalitions and aim to facilitate supply chain management within an increasingly globalised and competitive international food market. The main drivers for the proliferation of these private food safety schemes have been: the clear assignment of legal responsibility to food chain operators for ensuring food safety; increasingly global and complex supply chains; and, increasing consumer awareness of food and food systems and their impact on health and, in particular, on food safety. Food standards set and adopted by individual food firms, tend also to be used to distinguish these firms on the market and even though there is general agreement that food safety should not be used by the food industry as a competitive tool it seems that this is sometimes the case.

The main aspects of private food standards (PFS) that are of concern to many developing countries are: the scientific basis of food safety requirements within these standards and their consistency with Codex; the appropriateness of the prescriptive detail of PFS in the developing country contexts in which they must be applied; the cost of certification; the impact of PFS on market access and public health; the scope for stakeholder participation in PFS schemes; and, the potential for PFS to undermine official food safety authorities. The paper sequentially considers each of these six aspects of private food safety standards utilising information from the surveys conducted by WTO and by OIE during 2009, from published reports and reviews, by comparative analysis of selected PFS with Codex norms and guidelines and through personal communications with informed parties.

Generalisations about private food safety standards are difficult. Most of the major *collective* PFS are very close to Codex recommendations while several examples are reported of *individual firm* standards that differ significantly from relevant national and international requirements. Since, in general, PFS include a requirement that all relevant national standards have to be met, these standards are never “less stringent” than official standards although the

“add-ons” can be off-target with respect to what is generally agreed to be the major food safety risks associated with the food or the food process.

Given the close alignment of some collective PFS with Codex requirements, greater emphasis by developing countries on building their capacities to implement Codex standards (and to demonstrate that these are being effectively implemented) would greatly reduce difficulties with the implementation of PFS by producers/ processors from these countries. Furthermore, such an approach would have broad-based public health benefit for the domestic population whereas, at present any food safety gains derived from the application of PFS benefit only a small segment of food market in developing countries.

Certification to PFS schemes has opened market opportunities for many food businesses in developing countries, but the cost of certification can be excessively burdensome particularly to small-scale operators. Strategies to reduce these costs include increased efforts at harmonising private standards, improved access to qualified auditors in developing countries and the development of nationally benchmarked programmes that could contribute to ensuring that requirements for infrastructure, monitoring and documentation are suitable to the operations.

In most PFS and their schemes there is limited scope for broad stakeholder input. This situation partly explains the observation that PFS contain prescriptive requirements that are ill suited to the contexts in which they must be applied. Greater transparency in the development of these standards would facilitate comments and inputs from developing countries to ensure the feasibility of standards. Transparency is not only important in the setting of standards but also in the implementation of PFS. Feedback from the enforcement of standards provides insight into where the food safety problems remain, where there are difficulties in meeting provisions and whether changes are warranted. Information on the performance of private certification bodies is also important to provide assurances of the credibility of PFS schemes.

The Codex process is open to 182 member countries and there are mechanisms in place to facilitate private sector engagement in the process of setting Codex standards, even though the most of the major standard setting bodies have not utilised available mechanisms. Based on the experience gained from the implementation of PFS, there is an opportunity to feedback “globally valid” improvements into the Codex process for broad stakeholder consideration.

The implementation of private food standards is likely to become even more widespread in terms of the types of markets to which they apply, the number of countries where use of 3rd party certification systems is important and the product groups affected. This underlines the need for private standard setters and governmental authorities to better understand the impact of private standards and to take measures to optimise the benefits of private standard certification and reduce difficulties that they pose, particularly to developing countries.

Transparency, on the part of industry and industry coalitions, in the setting and implementation of private food standards becomes increasingly important. Other considerations that could guide discussions on approaches for moving forward to a better understanding of the issues and a shared vision of the role of private food standards in the overall architecture of food safety regulation include the following:

1. Concerned national institutions should ensure that they are well informed of the situation in their countries concerning the use and impact of private standards and can report on these to relevant international organizations.

2. Engagement between private standard setting bodies and concerned international organizations could contribute to resolving some of the concerns of developing countries. However, it must be understood that constructive dialogue depends on all parties having access to relevant information.
3. The ability of countries to *implement* Codex standards and guidelines would greatly enhance their ability to comply with private food standard requirements. Countries should consider making better use of Regional Codex Coordinating Committees for regular reporting on actions taken to implement Codex standards in their national context.
4. Stakeholder input into the development and review of private standards contributes to promoting their feasibility in each national context. Member countries and private standard setters should consider whether national technical working groups might be an effective means of providing developing country input into the processes of reviewing and revising private standard schemes.
5. Member organizations of the Standards and Trade Development Facility (STDF) and the STDF secretariat might consider increased emphasis on identifying and promoting best practices in designing and delivering technical assistance aimed at enabling food chain operators in developing countries to implement effective programmes of food safety management.
6. The ability of developing countries to demonstrate equivalence of alternative food safety management measures could contribute to overcoming the challenges posed by overly prescriptive private standards. Donor agencies and development partners should consider increasing their support for building the scientific and technical capacities in developing countries that would facilitate such approaches.
7. The use of microbiological criteria may become increasingly important in both official and private food safety standards. Member countries should be aware of the potential relevance of new work proposed by the Codex Committee on Food Hygiene concerning the revision of the Codex “Principles for the development and application of microbiological criteria” to their expressed concerns about the stringency of private food standards.

Private Food Safety Standards: Their role in food safety regulation and their impact

1. Introduction

Food safety is a shared responsibility. Governments establish food safety policies and they put in place and manage a system of controls that collectively aim to assure that national food safety goals are met. National food safety regulations and standards are a fundamental part of the food control system. The modern conception of food control places direct responsibility for ensuring the safety of food on all operators in the food chain. They must be able to demonstrate to regulatory authorities that their operations are in line with national guidelines and codes of practice and that their products meet national standards. Consumers also play a role in functioning of national systems of control beyond the actual safe handling of food that they purchase or otherwise obtain: their choices and concerns influence decisions of government and the food industry.

The rules governing food safety and quality in international trade are provided within the SPS and TBT Agreements of the WTO. The SPS agreement, in turn, refers to the standards of the Codex Alimentarius Commission as the benchmarks for food safety in international trade and calls for harmonisation of *national* standards with Codex as an important strategy for facilitating trade. Any increase in stringency of official standards as compared with the corresponding Codex standard must be justified on the basis of science.

The pivotal role of Codex standards has fuelled an intensification of efforts on the part of developing countries to participate effectively in the Codex process so as to have a voice in the decisions that affect their market access and, consequently, national social and economic development. This increased engagement in the work of the Codex Alimentarius Commission comes at a cost to developing countries – a cost that is justified by the benefits that they directly and indirectly derive from participation.

There is general consensus that there has been a considerable rise in the number of private food standards (PFS) over the last decade (Liu, 2009; OECD, 2007; UNCTAD, 2007). While these standards are nominally voluntary, there is growing concern that commercial concentration within the food industry, particularly within the retail sector, leads to a situation where conformance to private standards can determine market access. This has caused consternation among many developing countries who have demanded clarification of how PFS relate to Codex standards and sought guidance from the concerned international bodies – FAO/WHO, CAC, OIE and WTO – on the current and expected impact of PFS on developing countries and on the rules that govern the development and implementation of such standards. There is concern that any erosion in the authority of Codex standards in global food safety governance undermines the ability of developing countries to safeguard their public health and trade interests.

The issue of PFS has been discussed regularly at SPS committee meetings since 2005 when a private standard scheme was the subject of a specific trade concern raised by a developing country Member. While there are diverging opinions among Members regarding the applicability of the SPS Agreement to PFS (WTO, 2007a; WTO, 2007b), a working group was established in 2008 to take the lead in proposing possible actions for the SPS Committee to address concerns raised regarding the effects of private standards.

Since 2008, the issue of private food standards has also been discussed within the Codex system. Following discussions at the 60th and 61st sessions of the Executive Committee of the CAC (CAC, 2008a 2008b) in 2008 and at the 31st session of the CAC (CAC, 2008c) it was agreed that FAO/WHO would prepare a paper on this issue for consideration at the 32nd session of the CAC in July 2009. At that session, the paper “*The Impacts of Private Food Safety Standards on the Food Chain and on Public Standard-Setting Processes*” (Henson and Humphrey, 2009) was presented and discussed but no conclusions were reached. The Commission noted that there was a need for closer consideration of how private standards related to Codex standards. The Commission agreed to monitor the developments on private standards on the basis of discussions in the WTO and that the Commission, working in cooperation with the OIE and IPPC, should consult on a common strategic position on this matter. The Commission agreed that a study should be conducted to analyse the role, cost and benefits of private standards especially with respect to the impact on developing countries. A number of members noted that Codex norms and guidelines should be used as benchmarks for international harmonization of food safety requirements and that PFS should accordingly be based on Codex.

2. Objectives and Scope

This paper responds to the request of the 32nd Commission meeting by reviewing the role of private food standards (PFS) and their impact on market access, particularly with respect to developing country producers (CAC, 2009a). The paper focuses on food safety provisions within the PFS and places emphasis on the consistency of these provisions with relevant Codex texts. The review was undertaken by considering surveys and reports on the impact of private standards undertaken by various agencies including WTO, OIE, FAO, UNCTAD, OECD, the World Bank and other literature sources, by comparative analysis of PFS with Codex norms and guidelines and through personal communications with informed parties.

It is intended that the analysis provided in this paper provide a foundation for constructive discussion among stakeholders based on a common view of the scientific basis of PFS and an appreciation of available information concerning the impact of PFS on market access.

While it is recognized that many member countries have raised the question of whether the SPS provisions should apply to PFS, this paper does not discuss this question which remains within the competence of WTO and will continue to be addressed in that forum.

Specifically, the present paper aims to enable readers to:

- recognize that there are different types of private food standards with differing objectives
- understand the underlying factors that drive the development of private food safety standards
- recognize the relation between private food standards and public policy
- gain an improved understanding of the concerns that have been cited in relation to private food safety standards and of the evidence in support of these concerns
- engage in constructive discussion on what actions, if any, should be taken next either to further clarify the situation or to address specific concerns.

3. Main types of Private food standards – their purpose and their relation to official standards

3.1 What are private food standards?

Private standards are standards that are designed and owned by non-governmental entities (Liu, 2009). These entities include both for profit (businesses) and not-for-profit organizations, and the standards that they set can be broadly classified as: individual firm standards, collective national standards or collective international standards. These are well described in previous works (OECD, 2004; Henson and Humphrey, 2009;) which underline the fact that these standards are highly variable with respect to their purpose and their scope, the nature of the standard owners, and, the rules and procedures that govern their development and implementation. PFS developed by not-for-profit NGOs typically address environmental and social issues and aim to reward sustainable and ethical practices (Liu, 2009). PFS set by the food business, either individual companies or industry groups, typically aim at product differentiation and at facilitating their supply chain management. Several recent publications have reviewed the various types of PFS, their objectives and their major characteristics and the modalities for their enforcement¹ (UNCTAD, 2007; Henson and Humphrey, 2009; ISO, 2010; Liu, 2009). Key points that should be noted from previous reviews are:

- PFS are commonly the basis of *schemes* for assessing the conformity of suppliers with the buyers' requirements which are driven by official requirements and consumer demands
- Many PFS address a combination of issues (environmental, social, food safety and quality) and are an efficient means (from the point of view of the buyer) of transmitting information along the supply chain
- There is growing emphasis on process rather than product standards, as with official standards
- In the best of cases, PFS provide a means of reinforcing public policy and supporting its application
- There is varying degrees of openness and opportunity for stakeholder input in the development of PFS
- The application of schemes may include a label to provide information directly to consumers (B2C) or may involve only the transmission of information from supplier to buyer (B2B)
- Even in the absence of labels, company web sites are an important source of information to the public on individual company standards and practices.

This paper will be focussing on private food safety standards including food safety provisions within standards with broader scope. Before moving to the discussion of food safety standards, it is useful to provide further insight into 2 issues: the public/private interface in food standardisation and the phenomenon of individual firm standards.

3.2 Public/private inter-relationships in food standard setting

This paper started with the acknowledgement that food safety is a shared responsibility. Public standard setting processes that did not invite private sector input and perspective would be highly flawed: such interaction is routine at national level in most countries. This is the first major point to be understood about public/private inter-relations in food standard setting.

¹ A summary table providing an overview of the main types of PFS, taken from Liu, 2009, is provided in annex 1.

The rules and operating procedures of the Codex Alimentarius Commission reflect this imperative for private sector input in public standard setting and facilitates this input in at least 3 major ways:

- CAC has established transparent rules for international private sector bodies to be observers within Codex and all information related to standard development is made available through the Codex website
- National delegations to Codex sessions may – and often do – include industry representatives
- National codex structures are encouraged to involve the local private sector in the discussion of Codex issues at national level.

A second important illustration of the public/private inter-relations in food standard setting is the International Standardization Organization (ISO). ISO is a worldwide federation currently comprising 105 member bodies² on the basis of one member per country (www.iso.org) which develops private standards including private food standards. These standards are widely recognized and used in the food sector and the TBT Agreement makes reference to ISO work³. ISO membership from developing countries typically comprises governmental departments with responsibilities for voluntary standardization while members from developed countries are typically non-governmental bodies recognized by government to have such responsibility. The principles according to which ISO operates include: to provide market-driven international standards based on objective information and knowledge, to meet the needs of all relevant stakeholders including public authorities where appropriate without seeking to establish, drive or motivate public policy, regulations or social and political agendas (ISO 2010). Many countries adopt ISO standards as national voluntary standards but in some cases, certain ISO standards can be legally mandated by government. ISO is an observer within Codex Alimentarius Commission and CAC is an observer within ISO. This interaction assures coordination and coherence between standard setting activities undertaken by the two bodies. Perhaps that most visible manifestation of this coordination is provided by the Codex text on “Recommended methods of analysis and sampling” (Codex STAN 234-1999) which contains reference to approximately 340 ISO methods. There is a long history of collaboration between Codex and the ISO Technical Committee on Food Products (ISO/TC 34)⁴ and significant collaboration between the two organizations in a number of other ISO Technical Committees covering such topics as water quality, essential oils and conformity assessment (ISO, 2009). Both at international level, through the formal relationships between Codex and ISO, and at national level, through effective communication and coordination between national Codex structures and national institutions participating within ISO, there is plenty of scope for public sector input into the deliberations within ISO on food standards.

There are several other examples of the interplay between public and private spheres in relation to standard setting:

- Organic standards which in many cases started as private standards have largely been superseded by national voluntary standards (in line with Codex guidelines)

² There are 3 categories of member in ISO: member bodies, correspondent members and subscriber members. Only the former have full voting rights in all technical committees and policy committees within ISO. The total of all types of members is 159.

³ ISO is an observer in both the SPS and TBP Committees.

⁴ There are presently 55 participating members within ISO/TC 34 of which 34 are developing country members.

- Fair trade standards were initiated by non-governmental organizations and more recently some governments have adopted regulations to promote uniform application of fair trade practices as part of government policy on sustainable development
- A number of voluntary standards such as those relating to Geographical Indication or traditional processes are encouraged by governments as a means of preserving traditions, creating opportunities for rural development through strategic product differentiation. Frequently, work on these standards is initiated by private organizations which are then formally adopted by government as national voluntary standards.
- A number of public voluntary food safety/quality standards have been developed by national or local authorities in close collaboration with industry. For example, the “Label Rouge” was initially developed by the French Government. The Safe Quality Food (SQF) series of private standards was originally developed by the Government of Western Australia before being acquired by an industry organization.
- National public institutions in a number of developing countries have provided direct and in-direct support to local private sector organizations for the establishment of national voluntary GAP programmes benchmarked against GlobalGAP
- The Consumer Goods Council of South Africa (CGCSA) is working in collaboration with the relevant national authorities to develop a single harmonised food safety audit standard that is adapted to the local food chain and that assures an appropriate level of public health protection.
- A new Food Act for New Zealand is currently being scrutinized by parliament which is expected to recognize private national food safety programmes as a means of demonstrating compliance with public requirements. The US FDA is conducting a pilot to evaluate the potential for considering private 3rd party certification schemes as part of official import controls for farmed fishery products. This is expected to be the starting point for the FDA’s moving toward broader recognition of voluntary third-party certification programs.
- The WTO TBT agreement includes a code of practice for establishment of standards that explicitly covers private standard setting bodies
- The Directorate General for Agriculture and Rural Development of the EC has initiated discussion on the need for “Guidelines for the operation of certification schemes relating to agricultural products and foodstuffs” (E.C., 2010).

This interaction and dynamic exchange between public and private spheres in relation to standard setting draws attention to the fact that the two sets of interests are not necessarily opposed. In some cases, private standards can be useful tools for implementing public policy and in other cases it can be seen that mechanisms can be established to obviate potential problems arising from private standards and their implementation.

Table 3-1: Views of OIE member countries on the role of private standards in facilitating implementation of official standards

OECD classification and number of responses	Private standards and certification can be a useful aid to the implementation of official standards		
	agree	no opinion	disagree
Developed countries (36)	89%	11%	0%
Developing countries (28)	53%	20%	27%

Taken from OIE, 2010

The report of the OIE questionnaire on private standards on sanitary safety and animal welfare showed that among developed country respondents there was a strong belief that private standards and certification can be a useful aid to the implementation of official standards whereas this point of view was less marked among developing country respondents (Table 3-1).

3.3 Individual Firm Standards

The major individual firm standards are owned and applied by large retailers and brand name differentiation seems to be an important aspect of their function. Typically these standards combine food safety requirements along with a number of non-food safety requirements. In recent years there has been concentration in the retail sector with a small number of retailers controlling a high proportion of the market share. In most European countries the 5 largest retailers account for between 50% to over 70% of retail food sales (OECD, 2004). Furthermore, private labels reportedly account for an increasing proportion of sales, accounting for 14% at global level in 2000 and roughly 22% of total retail food sales at global scale in 2010 (GFSI, 2010). These two trends combine to create a situation whereby global food retailing increasingly resembles an international oligopoly composed of a limited number of multinationals with minor brand producers and non-branded producers being obliged to comply with the requirements and conditions set by retailers (FAO, 2006). A review of member country responses to the WTO questionnaire on the impact of private standards confirmed that many developing country producers consider that these standards act as significant hurdles to market access (WTO, 2009).

4. Private food safety standards

4.1 Types of food safety standards

Food safety standards may be of various types:

- numerical standards defining required characteristics of products, such as contaminant limits or maximum residue limits (including methods of sampling and analysis to be applied in the measurement of the specified characteristic)
- process standards that define how the food should be produced including verifiable performance objectives which may be numerical
- process standards that define the requirements of the management system such as documentation requirements.

While the terms “standard” and “scheme” are sometimes used interchangeably, it is useful to note the difference between the two. A private food standard (PFS) scheme comprises the standard as well as a governance structure for certification and enforcement. Henson and Humphrey (2009) outline 5 major functions that are involved in standard schemes: standard setting, adoption, implementation, conformity assessment and enforcement. Understanding the difference between a “standard” and a “scheme” is fundamental to interpreting observed differences between Codex standards and PFS schemes. Table 4-1 presents a summary of key features of private food standards that have substantial impact on food safety management practices along the food chain.

Table 4-1: Key Features of Main Private Food Standards and Related Schemes compared with relevant Codex standards

	GFSI Benchmarked schemes ⁵						International standards	
	BRC	IFS	SQF 2000	FSSC 22000	GlobalGAP (FV) ⁶	SQF 1000	ISO 22000	CODEX Hygiene Principles & other relevant codes
Geographic focus	British market	German, French and Italian market	US and Australian market	Europe	International (mainly Europe)	US and Australian market	International	International
Owners	British retail members and trade associations	German, French and Italian retail associations	US retailer associations	Foundation for Food Safety Certification	European retail associations	US retailer associations	International Standards Organization	FAO/WHO
Members include	Tesco, Sainsbury's, Marks and Spencers	Carrefour, Tesco, Ahold, Wal Mart, Metro, Migros and Delhaize	Ahold, Carrefour, Delhaize, Metro, Migros, Tesco and Wal-Mart	(Std based on ISO 22 000 & BSI PAS 220)	Ahold, Aldi., ASDA, COOP, Conad, Migros, Metro, Marks & Spencers, Sainsbury's, SPAR, Tesco, Tegelmann, US Food Service	Ahold, Carrefour, Delhaize, Metro, Migros, Tesco and Wal-Mart	105 member bodies (one per country) from Public and private sector. Plus corresponding and subscribing members	180 Member states Plus observers
End users (who apply the std)	Food manufacturers	Food manufacturers	Food manufacturers	Food manufacturers	Primary producers	Primary producers	entire food chain	entire food chain

⁵ The Global Food Safety Initiative (GFSI) was launched by Consumer Goods Forum in 2000. GFSI brings together the CEOs and senior management of around 650 retailers, manufacturers, service providers and other stakeholders across 70 countries. One of the GFSI objectives is “Convergence between food safety standards through maintaining a **benchmarking process** for food safety management schemes”. The benchmarking process involves comparison of food safety schemes with criteria for food safety management outlined in the GFSI Guidance document (GFSI, 2007). As of June 2010, there were 13 GFSI recognised schemes.

⁶ Global Gap Fruit and Vegetables is one of several Global GAP schemes however it is by far the most commercially significant.

General management provisions overlying GMP/GHP, GAP, HACCP programs⁷	Yes	Yes	Yes	Yes	Yes	Yes	Yes	partial
Key Elements of GMP, GHP and GAP⁸	Yes	Yes	Yes	Yes	Yes (GAP)	Yes (GAP)	partial	Yes
Key Elements of HACCP	Yes	Yes	Yes	Yes	HACCP principles	HACCP principles	Yes	Yes
Certification of food safety systems; audit and auditor requirement	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Very limited
No of CBs	107 (89 in Europe)	66 (some with international offices)	20	23	97	20	not available	not applicable
No of certified producers	(not available)	10,000	1841	not available	100,000	156	not available	not applicable

⁷ Includes: documented processes and procedures; food safety policy and manual; management responsibility; commitment and review (including HACCP system); resource management; internal audit; corrective actions/non-conformities; complaint & incident management; traceability; equipment management and validation; product analysis

⁸ Covers: location; facility; fabrication; equipment; maintenance; staff facilities; contaminant risks; segregation; stock management; hygiene and cleaning; water quality; waste management; pest control; pesticide/herbicide control; transport; personal hygiene; training.

4. 2 Driving forces for the establishment of private food safety standards

A number of high profile food safety system failures that occurred in developed countries during the 1990's fuelled a process of regulatory change around the world. The changes aimed at greater coordination of food safety management activities at all stages of the food chain, strengthening of the legal responsibility of food chain operators for the safety of food that they produce and market responsibility, improved transparency and accountability for public food safety decision-making. Parallel to these changes, there have also been significant changes to the structure of the global food market.

4.2.1 *Demonstration of due diligence:*

Given the context noted above, many countries have adopted national food legislation that explicitly places primary responsibility on food chain operators to assure the safety of the food that they produce. Governments establish national food safety regulations which the food industry must follow and, through programmes of enforcement, carry out "checks" to ensure that national regulations are being met. There is growing emphasis on preventative approaches to food safety through the establishment of process standards and codes of practice to promote effective industry food safety management that prevents or minimizes the introduction of food safety hazards into the food chain. Official standards and programmes of enforcement - increased attention to audit inspection and reduced reliance of end-product checks - reflect the new approach of prevention.

The emergence of PFS is to a large extent a consequence of this modern food safety regulatory policy. In the best of cases, PFS can be seen as a mechanism for implementing public policies in support of a safer food supply. Businesses implementing PFS can demonstrate "due diligence" and minimize liability in case of food safety incidents

4.2.2 *Global sourcing and the need for improved supply chain management*

Given the regulatory environment outlined above, it becomes clear that food safety standards form an essential part of any supply management strategy, particularly in the case of multinational companies that source their foods and food ingredients from a multitude of countries with widely differing production systems, infrastructure, regulatory frameworks and technical capacities. Private food standards schemes provide an effective tool for securing a safe food supply while at the same time displacing much of the cost for supply management onto suppliers.

4.2.3 *Heightened consumer interest in food safety*

Consumers are increasingly aware of food and food systems and their impact on health. They are particularly concerned about food safety. There is general agreement that food safety should not be used by the food industry as a competitive tool. The launching of the Global Food Safety Initiative (GFSI) by leading exponents of the food retail sector in 2000, was a signal from the vertices of these multinationals that they should join forces on issues of food safety rather than compete. The GFSI sets out to benchmark⁹ private food safety schemes so as to facilitate recognition of any of the benchmarked schemes by any of the GFSI members. However it is not clear whether the GFSI goal of "once certified, accepted everywhere" is being achieved. Notably none of the member countries that responded to the WTO questionnaire (WTO, 2009) noted any relief from the need for multiple certifications.

⁹ The benchmarking process involves comparison of provisions within applicant food safety standard schemes with criteria outlined for effective food safety management in the GFSI Guidance document. Those standards that meet all of the criteria are considered as "GFSI benchmarked standards" and should be recognized by all members of the Consumers Good Forum as meeting food safety management requirements. It is the main strategy for achieving the stated GFSI goal of "once certified, accepted everywhere".

Individual firm standards remain an important part of the standards landscape and these certainly serve a product differentiation function. As noted earlier, these standards incorporate provisions covering a range of operational objectives: food safety, environmental sustainability, ethical business practices, etc. It is therefore entirely possible that in many cases, these private standards serve to distinguish themselves primarily with respect to environmental or ethical objectives. However, in at least some cases, the messages transmitted through company websites are ambiguous particularly with respect to pesticide residues and the measures taken by the retailers to reduce them. Examples of these messages are “we feel responsible to continuously optimize quality standards for fruit & vegetable according to most recent scientific research with the goal to minimize consumer risk” and “[the company] now in addition offers transparency for the load of harmful substances contained in its fruits and vegetables”. Such messages should be interpreted in light of what is known about consumer perception of the relevance of pesticide residues. Several consumer perception surveys illustrate a widely held view that pesticide residues are an important public health concern (Mondelaers et al, 2009; Petz, 2008). It is reasonable, therefore to presume that some consumers may interpret retailers’ pesticide residue standards as providing enhanced food safety protection over national regulation which, of course, is incorrect. This is discussed further in Section 5. In general, food industry communication to the public about their food safety standard schemes pass the message that their products’ safety is above that required by the public standard (Codron et al, 2005). It is not clear what impact this messaging has on public confidence in public food safety authorities. The experience of past food safety crises has demonstrated that public confidence in national food safety authorities is in the best interest of all stakeholders within the food sector – including, or even especially, the food industry.

5. Concerns in relation to the proliferation of private food safety standards

A review of recent literature (Wolff and Scannell, 2008; FAO, 2009a; IIED, 2009; WTO, 2010) demonstrates convergence on the following issues as the source of concern among some parties:

- Stringency of food safety requirements as compared with Codex
- Prescriptive rather than outcome focussed
- Costs of certification/ Requirement for multiple certifications
- Impact on access to markets and public health
- Transparency/ Involvement of key stakeholders in decision-making
- Legitimacy of PFS and their potential to undermine public food safety regulatory system.

The remainder of this section considers each of these issues and reports and/ or analyses available information pertaining to each of these stated concerns.

5.1 Stringency in relation to Codex standards and relevant official requirements

In approaching the issue, it is useful to distinguish between two major groups of standards:

- numerical standards such as maximum contaminant and residue limits
- process standards that stipulate elements of good practice in the management of all operations along the food chain and in procedures for establishing compliance with these.

Assessing consistency with Codex provisions is simpler in the former case and we will deal with this first.

5.1.1 Numerical standards

Private standard provisions concerning pesticide residues

In general, collective private food standards such as GlobalGAP refer to prevailing official pesticide residue regulation and **do not** set additional requirements. However, there is considerable evidence

of individual retailers that include pesticide residue provisions that are stricter than corresponding Codex provisions¹⁰ and national regulation. In particular:

- A large number of Private retail labels impose stringent limits ranging from 25% - 80% of the national maximum residue limits (see Table 5-1).
- a growing number of private retail labels impose limitations on the total number of residues present on the food.

In the first case, it is important to note that reducing the MRL does not provide additional protection of public health. The MRL determination is based on Good Agricultural Practices which is usually orders of magnitude lower than the food safety end point. In any case, the MRL determination by JMPR always involves a comparison of the limit with the ADI¹¹ to assure “no harm” from a food safety perspective.

Table 5-1: Provisions related to pesticide residues in selected individual retailer standards¹²

	% of national MRL tolerated	Maximum no. of residues allowed
retailer 1	50	
retailer 2	33	
retailer 3	33	
retailer 4	80	3, 4 or 5 residues
retailer 5	80	5 residues
retailer 6	70	3,4, or 5 residues
retailer 7	70	3,4 or 5 residues
retailer 8	70	3,4, or 5 residues
retailer 9		3,4 or 5 residues
retailer 10		3,4 or 5 residues
retailer 11	70	
retailer 12	internal MRLs based on ADI	
retailer 13	25%	

The second practice of restricting the number of residues has been explained in terms of the possible synergistic toxicological effect of multiple residues. This is a recently emerged issue for which there have been no risk assessment models developed and for which there are no data demonstrating an effect at the levels of interest. Even if concerns for public exposure to multiple residues were the motivation, the response is arbitrary and not based on scientific considerations. FAO/WHO and its independent expert bodies are committed to using the best science available as a basis for decisions and further work on risk assessments that consider multiple exposure to contaminants is required. In the meantime, the best response, as vigorously supported by FAO, is

¹⁰ There have been discussions within WTO SPS committee concerning national MRLs that are more stringent than those of Codex but discussion of this phenomenon is beyond the scope of this paper which deals with the consistency on private standards with official regulations and does not address inconsistency between national standards and Codex.

¹¹ The ADI value (“Acceptable Daily Intake”) is used as the exposure limit value for long-term uptake of a pesticide residue from food. The ADI of a pesticide is the daily intake which, during an entire lifetime, appears to be without appreciable risk to the health of the consumer on the basis of all the known facts

¹² Information on individual retailer standards was obtained from copies of standards provided by informants and by informants interviewed during the preparation of this paper. The names of the actual retailers involved have not been provided as it was not considered necessary to illustrate the point concerning use of more stringent numerical food safety standards.

development and implementation of integrated pest management programmes (IPM) to reduce use of pesticides within a sustainable agricultural system.

There is another important dimension to the practice of limiting the total number of residues: in some cases, it may undermine IPM programmes which are strongly supported by FAO and have been adopted by a number of governments as public policy. IPM involves reduced use of broad spectrum pesticides and instead combines different management strategies and practices to control pests and, when necessary, targeted pesticides are used against specific pests. This may sometimes result in low levels of multiple residues. PFS that impose *arbitrary* limitation in the number of residues tolerated on specific products may encourage producers to use broad spectrum pesticides, which is contrary to the IPM approach. Pressure that has been put by civil society groups to reduce pesticide use has been an important force driving adoption of IPM and other environmentally friendly systems of production. However, individual retailers need to respond responsibly to public pressure and ensure that they use adequate expert advice in the development and implementation of their standards to ensure that they support and do not frustrate implementation of public policy.

PFS Anticipation of expected regulatory action

It has been reported that in some cases, individual company standards blacklist certain chemical compounds, particularly pesticides that are under consideration by regulatory bodies. It is not clear whether such action is taken to allow themselves maximum time to re-organize their supply chains thereby preventing any disruption in their supply base in case of eventual new regulation, or whether such action is in deference to consumer perception of the risks associated with use of the chemical substance in question. In either case, in so doing, the companies displace risks and adjustment costs onto their suppliers.

Over the period 2000-2005, FAO implemented a project involving 7 countries from Africa, Asia and Latin America which aimed at reducing the levels of ochratoxin-A (OTA) contamination in green coffee¹³. The instigating factor for the project was the announced consideration by European food safety regulators of the need to establish an OTA limit to protect public health and the limit under consideration was given as 5ppb for green coffee. Eventually the 2004 decision of the EU was to establish a limit of 5 ppb for roast and ground coffee without a limit for green coffee. In the mean time, however, the project team was informed that many importers imposed requirements for certificates of analysis showing that OTA content of the green coffee was below 5 ppb where no such measure had been imposed previously. This caused unnecessary added cost to traders and exporters and much uncertainty for the millions of small-scale coffee producers and the organizations that represent them. Codex was since asked to develop a Code of practice for the reduction of OTA in green coffee. This code was adopted in 2009 (CAC, 2009b). There has been no request for the establishment of a Codex limit for OTA in green coffee.

Microbiological criteria

While it is certainly true that in recent years there has been a shift toward greater emphasis on process standards rather than product standards, the latter still play an important role in food control. In fact, in outcome based regulation, authorities can establish microbiological criteria to be met by industry leaving them with the choice of selecting the most appropriate means of arriving at the specified outcome given the particularities of their production system/ process. There has been much discussion within Codex on the question of microbiological criteria: Guidelines have been

¹³ The project was funded by Common Fund for Commodities and the Government of the Netherlands with support from the European Coffee Industry and with the supervision of ICO. The collaborating countries were Cote D'Ivoire, Kenya and Uganda, India, Indonesia, Brazil and Colombia.

developed for the establishment and application of microbiological criteria for foods¹⁴ and principles and guidelines have been set for the conduct of microbiological risk assessment and risk management (CAC, 2009c). Codex has received very few requests from member countries to develop international microbiological criteria although many governments have adopted such criteria at national level¹⁵.

In general, collective private food standards covering manufacturing operations do not incorporate “private” micro criteria, but refer to those established by the relevant national authority. The GlobalGAP livestock standards do contain microbiological criteria for zoonosis monitoring that are significant in terms of good hygiene practice in primary production, and these are in line with OIE standards (OIE, 2009). Some individual firm standards do include microbiological criteria and might therefore be considered more stringent than Codex, although it would be more correct to consider whether criteria established are in line with Codex guidance and with relevant national standards. No attempt was made to extensively review individual firm standards to assess their use of microbiological criteria. However, an example of microbiological criteria found in one private retailer standard is presented in Table 5-2 below to illustrate a few points:

- The microbiological criteria set by retailers put considerably additional burden for testing on suppliers. These retail criteria are in addition to relevant national regulation
- Codex emphasises that microbiological criteria must be accompanied by sampling plans and specified methods of analysis without which it is impossible to interpret the findings. This does not seem to be always the case with private retail standards
- Microbiological criteria set by national government and by Codex are rigorously science based – the basis for some of the microbiological criteria established by private retailers can sometimes be unclear.

Among the specific problems with sanitary safety requirements of private standards noted in the OIE survey report are requirements for *Listeria* spp for cooked poultry products. The OIE is following up with respondents (OIE, 2010). Some respondents of the WTO survey highlight the excessive costs due to requirements for microbiological analysis and also refer to requirements for absence of *Listeria* in some raw meat products (WTO, 2009). It is necessary to better understand the problems that are being faced on the ground and work towards continually improving guidance from international and national authorities to industry on microbiological risk management. The Codex Committee on Food Hygiene has proposed a revision of the “Principles for the development and application of microbiological criteria” (CAC, 2009d). The scope of the proposed work includes guidance on the use of microbiological criteria by industry and by national authorities. Member countries should be aware of the potential relevance of this work to expressed concerns about private food standards.

Such work is currently being undertaken within the Codex Committee of Food Hygiene where Draft Guidelines for the control of *Campylobacter* and *Salmonella* spp. in chicken meat are being discussed. These guidelines are informed by recent risk assessments carried out by FAO/WHO Joint Expert Meetings on Microbiological Risk Assessment (JEMRA) on *Campylobacter* and *Salmonella*

¹⁴ These guidelines are currently being revised to incorporate new thinking on food safety objectives and performance objectives. They are at step 2 of the Codex process.

¹⁵ Codex microbiological criteria set since the establishment of JEMRA include criteria for *Salmonella* and *Cronobacter* spp. in powdered formulae for infants and young children (CAC/RCP 66 – 2008) and *Listeria monocytogenes* in ready-to-eat foods (CAC/GL 61 – 2007). There are also a number of micro criteria that we adopted by CAC prior to the establishment of JEMRA such as those for natural mineral waters (Codex Stan 108-1981) and for *Salmonella* in spices (CAC/RCP 42 – 1995).

Table 5-2: Microbiological criteria in selected private and official standards

Product	Individual retailer std		EU Regulation		FSANZ regulation		Codex
	organism	Limit	organism	limit	Organism	limit	
Raw poultry – whole carcass	Standard Plate Count ^d	< 10 ⁵ cfu/cm ^{2a}	salmonella (after chilling) ^c	absence in 25g in pooled sample of neck skin ^b	No micro criteria		No micro criteria
	campylobacter ^d	< 10 ² cfu/g ^a					
	Enterobacteriaceae ^d	< 10 ³ cfu/g ^a					
Minced meat	SPC ^d	< 10 ⁶ cfu/g ^a	Aerobic colony count ^c	m < 5 X10 ⁵ cfu/g; M < 5 X10 ⁶ cfu/g ^b	No micro criteria		No micro criteria
	E.coli ^d	< 10 cfu/g ^a	E. coli ^c	m < 50 cfu/g; M < 500 cfu g ^b			
	Enterobacteriaceae ^d	< 10 ⁵ cfu/g ^a	salmonella ^d	absence in 10g ^b			
Bean sprouts	E.coli ^d	< 3 cfu/g ^a	Salmonella ^d	absence in 25g ^b	Salmonella ^d	absence in 25g ^b	No micro criteria
	Listeria monocytogenes ^d	absence in 25g ^a					
	Salmonella ^d	absence in 25g ^a					

a - sampling plan not provided

b - sampling plan provided

c – at the end of the manufacturing process

d – on the market during the shelf life

in poultry¹⁶ and are intended for use by national authorities and by the industry in the design and implementation of food safety management systems. In developing these guidelines the CCFH has recognized the need for support to countries in the application of these guidelines and requested FAO/WHO to develop a decision support tool that would be used for this purpose. An initial version of the tool has been developed and will be finalised by the end of the year. FAO/WHO are actively seeking extra-budgetary resources to build capacities in developing countries to use the tool which will allow them to optimise their hygiene controls with respect to their production systems and to demonstrate equivalence of their measures to trading partners or to private sector buyers.

5.1.2 Stringency of PFS process standards as compared with Codex Guidance

As noted in Section 4.1 and explained in detail in Henson and Humphrey (2009), there are different functions incorporated in a standards scheme. It is important not to assume that the number of provisions within a standard is directly correlated with the “stringency” of the standard. Many of the provisions included in PFS schemes refer to functions that are beyond the scope of Codex standards. The latter are generally not concerned with establishing the means by which a certain outcome should be met or with stipulating conditions that should apply to auditing of the standard. Codex Codes of Practice, like other Codex texts, are recommendations to governments who can take a number of measures to adopt these texts or to integrate them into national regulation and official procedures. In the best of cases, governments and private operators use these codes as a basis for developing national codes that are consistent with the Codex guidance and adapted to the national situation.

If we were to compare those components of the collective private food safety standards that deal with Good Hygienic Practices (GHP) and Good Manufacturing practices (GMP) with corresponding Codex provisions we find that they are similar. Before proceeding with selected illustrations of this convergence with Codex, there are two issues to be highlighted that underlie many of the reported difficulties that small producers encounter in applying PFS:

- Traceability is one area where some PFS do exceed Codex recommendations. The Codex definition of traceability/product tracing is “the ability to follow the movement of a food through specified stages of production, processing and distribution”. Reference to this is made in several Codex texts such as Codes of Practice on good animal feeding and Code of Practice for fish and fish products. However, some PFS require companies to be able to trace all raw materials used in their operations from source and the end-product throughout distribution which is “beyond” the Codex and is also beyond the PFS schemes that are based on ISO 22000 which require that “the traceability system shall be able to identify incoming material from the *immediate suppliers* and the *initial distribution route* of the end product”.
- The documentation and testing requirements of PFS are widely recognized as sources of difficulty for small scale businesses in developing countries and these provisions do “go beyond” Codex. This point will be discussed in Section 5.2.

Perhaps consideration of the Synergy PRP¹⁷ provides the easiest illustration of the utility of the Codex General Principles of Food Hygiene (GPFH) as the basis of good hygienic practice at national level and for industry programmes. The Synergy PRP (Synergy, 2009) basically transforms the prose style of the Codex text into distinct provisions and includes additional detail where the standard setter has considered this necessary. As an illustration of the similarities, Table 5-3 compares the requirements related to the control on incoming materials of Synergy PRP with Codex

¹⁶ The reports of these and other JEMRA risk assessments are publicly available for use by national authorities and private businesses (www.fao.org/ag/agn/agns/micro_en.asp).

¹⁷ Synergy PRP (pre-requisite programme) combined with ISO 22000 comprise the Synergy 22000 scheme which was benchmarked by GFSI in February 2010.

GPFH. The additional provisions in the private standard (in italics) can be considered as further detail but consistent with the spirit of the Codex principles, particularly noting the fact that the Codex text recommends that hazard analysis should guide the development of adequate measures to control all operations.

Table 5-3: Comparison of Synergy PRP provisions on control of incoming raw materials with Codex

Codex - GPFH	Synergy PRP
Section 5.3 - Incoming material requirements	Section 9.1 – Management of purchased materials
No raw material or ingredient should be accepted by an establishment if it is known to contain parasites, undesirable micro-organisms, pesticides, veterinary drugs or toxic, decomposed or extraneous substances which would not be reduced to an acceptable level by normal sorting and/or processing. Where appropriate, specifications for raw materials should be identified and applied. Raw materials or ingredients should, where appropriate, be inspected and sorted before processing. Where necessary, laboratory tests should be made to establish fitness for use. Only sound, suitable raw materials or ingredients should be used. Stocks of raw materials and ingredients should be subject to effective stock rotation	No raw material or ingredient should be accepted by an establishment if it is known to contain parasites, undesirable micro-organisms, pesticides, veterinary drugs or toxic, decomposed or extraneous substances which would not be reduced to an acceptable level by normal sorting and/or processing
	Where appropriate, specifications for raw materials should be identified and applied.
	<i>All food safety relevant material shall be registered for the intended use</i>
	<i>The conformance of incoming material to specified purchase requirements shall be verified</i>
	Raw materials or ingredients should, where appropriate, be inspected and sorted before processing
	Where necessary, laboratory tests should be made to establish fitness for use. Only sound, suitable raw materials or ingredients should be used.
	(stock rotation is dealt with in Section 9.3)

The issue of allergen control is generally given more prominence in private food standards than in the Codex GPFH. The latter consider allergens as a chemical food hazard and all clauses relevant to this category of hazard apply to allergens. This is illustrated in Table 5-4. There is considerable variability in the reporting required of suppliers by different retailers or other buyers in relation to allergen and compositional information on supplied products. Some reporting formats enforced by certain buyers are so complex that they are often beyond the capability of small-scale businesses who need considerable (and costly) external assistance to meet the buyers documentation requirements (S. Hopgood, personal communication, 2010).

Table 5-4: Comparison of food safety management provisions related to allergen control

Allergen control	
Synergy PRP	Codex - GPFH
10.6.1 Major allergens shall be identified and controlled to prevent cross contamination	5.1 Control of food hazards – “food business operators should control food hazards through the use of systems such as HACCP”

refers to Directive 2000/13/CE on labelling	Refers to Codex General standard for labelling: Cereals containing gluten; i.e., wheat, rye, barley, oats, spelt or their hybridized strains and products of these; Crustacea and products of these; Eggs and egg products; Fish and fish products; Peanuts, soybeans and products of these; Milk and milk products (lactose included); Tree nuts and nut products and; Sulphite in concentrations of 10 mg/kg or more
10.6.2 Where necessary, products shall be protected from allergen cross-contamination by cleaning, line-change procedures or work sequencing	4.1 the internal design and lay-out of food establishments should ... protect against cross contamination between and during operations 6.1.1 – Cleaning should remove food residues ... that may be a source of contamination
10.6.3 Re-work containing allergens shall only be incorporated in products containing the same allergens	5.1 Control of food hazards – refers to need to identify hazards and ensure adequate means of control
10.6.4 Employees shall receive a specific allergen awareness and practices training	10.2 training programmes – provides general guidance on training. Specific training requirements are found in other specific Codex codes of practice.

A final point to be made in this section is that sometimes an incorrect comparator is used when Codex codes are dismissed as being “too basic” or certain PFS are criticised as being “too strict” depending on the point of view of the commentator. For example, comparison of GlobalGap Fruit and Vegetable standard with relevant Codex provisions requires consideration of Codex GPFH, Codex Code of practice for fruit and vegetables and, in certain cases, consideration of the Code of practice presently under development for leafy vegetables would also be required.¹⁸ When the correct comparison is made the Codex texts can be seen to be more detailed in some cases. *This underlines the point that conscientious attention by governments to the adoption of Codex codes and technical assistance from multilateral and bilateral agencies to support national implementation of Codex standards would make an important contribution to reducing the difficulties incurred by small scale producers in meeting at least some of the major private food standards.*

5.2 Prescriptive rather than outcome focussed requirements

One of the most common examples provided by respondents to the WTO survey of PFS exceeding relevant international standards was the detailed and prescriptive operational procedures required by the former (WTO, 2009).

Codex international codes of practice have global range – they focus on what factors need to be considered and what results need to be achieved and not on how the results should be achieved in recognition of the wide range of realities facing member countries. However, someone at some stage must interpret the guidance provided and translate it into clear instructions as to what actions and procedures must be implemented within food operations to ensure that safe food is reliably produced. National governments, producer/ food business associations and individual food businesses all play some role in translating international guidance into actionable and auditable provisions.

¹⁸ Other Codex Food hygiene basic texts should also be considered (CAC, 2009).

Prescription presents a number of advantages:

- Producers/ processors can clearly understand what is required of them
- Auditors can readily judge with relative uniformity whether the required provisions are being met
- Standard implementers have reasonable assurance that their requirements are met by their suppliers

Despite these advantages, one cannot overlook the potential problems caused by prescriptive provisions:

- They can inhibit innovation within the industry
- They can impose inefficiencies and unnecessary costs to those who are obliged to meet them.

It seems obvious that individual companies have the obligation to translate general guidance into clear instructions for the management of food safety within their operations. The problem arises with the fact that with the globalisation of many food businesses their internal prescriptive requirements can be imposed on suppliers operating under widely variable situations. The big industry players who have been known to insist with authorities on the importance of regulations that allow them flexibility in designing and implementing their food safety systems are now less willing to accord flexibility to their suppliers.

Demonstrating equivalence of national voluntary standards

Demonstrating equivalence of national voluntary standards with private collective food standards is a logical approach for obviating the potential negative impacts while maintaining the positive aspects of prescription. This is the approach taken in several countries with respect to the implementation of GlobalGAP Fruit and Vegetables (Henson and Humphrey, 2009). In some cases the development of a national GAP programme was led by the private sector and in other cases, the public sector took a more proactive role. In all cases, a successful outcome required collaboration and coordination between public and private actors. The experience of KenyaGAP development speaks to the potential impact of national benchmarking process in making the implementation of the private international standard more feasible in the local context. Examples of issues that were confronted by the national technical task force and eventually accepted by GlobalGAP in the benchmarking process are:

- Recognition that use of water containers with a tap underneath for hand washing in the field meet the 'running water' requirement in the standard (Humphrey, 2008 report)
- Recognition that boxes with locks for use in storage of pesticides meet the requirement of the standard for chemical stores.

In order to withstand the imposition of costly food safety management measures, which do not necessarily contribute to improved food safety outcomes, countries must have the ability to qualitatively or quantitatively demonstrate the equivalence of an alternative measure in terms of food safety outcomes. The work of FAO/WHO on the development of the decision support tool for the effective control of campylobacter and salmonella along the poultry chain is an example of such capacity development. The acceptance by GlobalGAP of the risk based approach to determining water testing requirements for irrigation water proposed by NZ GAP is an example of the triumph of logic over prescription when such logic can be clearly argued (P. Ensor, personal communication, 2010).

Laboratory testing requirements in certain private food standards may in some cases be justified and in other cases they may constitute prescription that adds costs without adding public health value.

Local industry groups supported by national public institutions should be able to assess the utility of such provisions and mediate, as appropriate, with concerned bodies to minimise unnecessary costs while assuring food safety. In many countries, the absence of accredited laboratory services within the country may mean that samples need to be sent abroad for testing which can greatly increase costs.

Requirements for Documentation and record keeping

Documentation and record keeping requirements are a crucial part of food safety management systems and they often create difficulties for small-scale operators. It is essential that documentation requirements be carefully rationalised in such a way as to provide the necessary food safety guarantees without introducing obstacles and inefficiencies in the day-to-day running of the operation. Some of the member countries who replied to the WTO questionnaire on private standards raised concern about specific HACCP recording and documentation formats required by certain PFS schemes. This leads to businesses having to keep multiple records that essentially demonstrate the same things. Mutual recognition among PFS schemes would reduce this burden. The challenges posed in achieving effective and practicable food safety recording keeping must not only be seen in relation to PFS requirements but even to facilitating compliance with official food hygiene requirements by small scale food businesses. The work done by the UK Food Standards Agency to facilitate good hygiene practice in the catering sector - which is dominated by small scale operators with limited technical food safety expertise - included the development of a “diary” for simple but effective food safety record keeping (www.food.gov.uk). This provides an example of how national authorities and local industry groups can devise pragmatic and effective solutions for small scale businesses. This could be a starting point for having such “local solutions” recognized and accepted first of all by national authorities and then also by private standard scheme owners.

Requirements for staff training

There is increasing specificity provided on staff training requirements as we move from Codex to collective private standards to individual firm standards. Section 10 of the Codex General Principles of Food Hygiene requires that “Those engaged in food operations who come directly or indirectly into contact with food should be trained, and/or instructed in food hygiene to a level appropriate to the operations they are to perform” and provides further guidance on factors to be considered by businesses in deciding on the level of training required. Specific Codex codes provide further guidance on training needs in specific operations. Collective private standards are generally in line with the Codex guidance but in some cases, may specify areas of training needs and also explicitly require that training records be kept. Some individual firm standards may further require that key food safety staff be trained through “approved industry training courses”.

Training is undoubtedly an important aspect of any national food safety programme. FAO, WHO and many other regional, bilateral and NGO development partners put considerable emphasis on such training. A number of private sector initiatives exist that operate on this front as well, among them, the ongoing GFSI supported initiative, the Food Safety Knowledge Network (FSKN), to develop harmonized core competencies of food safety professionals which can then be integrated into existing food safety training schemes and linked to the certification process against GFSI benchmarked schemes (CIES, 2009). This clearly marks a move towards greater prescription on training requirements but could provide a useful tool for promoting effective food safety training at national level by relevant service providers. Training costs already constitute a significant part of the cost burden to small-scale businesses of achieving PFS certification. Any initiative to promote better food safety training for food industry professionals should not increase this burden and particularly should not create the need for additional certifications by food businesses.

5.3. Costs of certification and requirements for multiple certification

Before reviewing available data on the costs of certification it is important to distinguish between the costs of meeting food safety requirements and the cost of demonstrating compliance with these requirements through a system of 3rd party certification. There is no question about the responsibility of food chain operators to take measures to ensure that the food they produce and market is safe. Concern arises when producers think that they are being burdened with costs for measures that they consider unnecessary for the assurance of food safety and when they consider that the transaction costs for certification are excessive in relation to the value of their business (Cuffaro and Liu, 2007).

Most studies that report on the cost of certification do not distinguish between the cost of implementing food safety measures consistent with Codex and additional costs related to provisions that “go beyond” Codex and costs of the actual certification process. Costs of achieving compliance with private food standard (PFS) schemes involve initial investment costs and recurring costs. The former typically include upgrading of factory infrastructure and processing equipment, establishing laboratory facilities and costs of designing and establishing new food safety management programmes. Clearly the magnitude of these costs depends on the state of the food business at the point of deciding to seek PFS certification. For food businesses that are operating in countries where local and national food safety authorities are active and sufficiently well equipped to provide effective monitoring, enforcement and support, as required, the additional investment to achieve PFS certification is reduced. Furthermore, the initial investments in infrastructure and upgraded technologies can lead to significant improvements in efficiency and quality improvement: the costs must be considered alongside the benefits (World Bank, 2005; UNCTAD, 2007; Lupin et al, 2010).

Costs of certification against food safety management schemes for fish processing companies reportedly ranged from a few hundred US dollars to \$10,000 (FAO, 2009b) according to the size of the business and the type of operation. The specific schemes mentioned were BRC, SQF, IFS and GAA/ACC¹⁹. Even though initial investments are relatively modest for small holder farmers seeking GAP certification, they can still be significant or even determinant in terms of feasibility of certification. Recurring costs are also significant in the economics of accessing markets that require certification. These include training and consultancy costs to maintain and update food safety management systems as required, laboratory testing costs, auditing and certification costs. Auditors’ fees account for the major part of direct certification costs and these costs are of greater importance for small scale operations per hectare or per unit output.

Table 5-5: Investment and recurrent costs for GlobalGAP certification in selected countries

Item	Country							
	Malaysia		S. Africa		Chile		Kenya	
	USD	%	USD	%	USD	%	USD	%
Investment costs								
Basic pesticide/ fertilizer store	1350	67	1350	69	1500	39	60	13
Toilet and hand wash facilities	400	20	600	31	2010	53	180	37
Covered packaging storage	260	13	ND* *	-	310	8	240	50
Total investment costs	2010	10	1950	100	3820	100	480	100

¹⁹ Global Aquaculture Alliance and Aquaculture Certification Council

		0						
Recurrent costs								
Lab analysis	350	15	300	18	300	16	600	40
Certification	1800	78	1400	82	1140	60	750*	50
Training	160	7	ND	-	450	24	150*	10
Total recurrent costs	2310	100	1700	100	1890	100	1500	100

*group data ** ND =No Data

Table taken from Santacoloma and Siobhàn, 2009

Requirements for multiple certification are a major problem particularly for small scale producers. The underlying reasons for this phenomenon are:

- Buyers may have more confidence in certain private standards and therefore insist on certification according to a particular scheme
- Individual retailers may wish to insist of their product differentiation through the use of their individual firm standards

The benchmarking process of the GFSI is intended to address the former problem. However, there is very little information available to suggest that the intended impact is being achieved. The unpublished report of an FAO study (FAO, 2006) includes interviews with a number of European retailers one of whom stated that he accepts certification from any of a number of GFSI benchmarked schemes. However, several respondents of the WTO survey noted that requirements for multiple certifications remained a concern and none reported relief resulting from the benchmarking process. Some industry operators have reported, in confidence, that the “habit” factor should not be under-estimated: major businesses are simply accustomed to doing business with certain standard schemes and prefer to continue using those schemes. As there is little transparency in the implementation of PFS by the food industry it is very difficult to monitor the impact of this industry initiative on food businesses.

An illustration of the latter point is provided in a report by Humphrey (2008) which quotes a Kenyan exporter as follows: “For Tesco, we still have to have Tesco’s Nature’s Choice. They will claim that it is a higher standard than EUREPGAP, but the fact is that you do the same audit on the same day, with the same person. And 95 per cent of it is common. So ultimately, what they are using it for is a marketing tool”.

Ongoing work initiated by United Fresh Produce Association in the United States focuses on the development of a *single harmonised standard* for the US fresh produce industry against which producers would be audited by *a wide choice* of approved auditors. The harmonised standard will *cover only food safety*. These three factors contribute to the minimisation of certification costs while assuring consumers and the authorities that food safety is effectively addressed in an industry that has recently been implicated in a number of food-borne disease outbreaks.

It is important not to lose sight of the fact that certification serves a purpose – it increases the confidence of buyers that their requirements are being met -but it is clear that actions taken to reduce the cost of certification would serve to facilitate accessibility to small scale businesses. Apart from reducing the need for multiple certifications, this can be done in different ways:

1. Lowering the cost of certification and training – This can be facilitated by a politic of developing increased numbers of trained auditors who are available locally. In Kenya,

charges of certification bodies (CBs) dropped once a greater number of auditors were available (S. Mbithi, Personal communication, 2010). It is an interesting observation that donor involvement has often led to an increase in fees being charged (IIED, 2009).

2. Reducing the frequency of certification – This could be considered for businesses with a strong history of compliance. There have been cases, where small holders who are normally subjected to multiple certifications – GlobalGap plus individual firm standards – were able to export produce to the same retailers without any certification when produce was in short supply due to drought. This suggests that either food safety became temporarily unimportant (which seems unlikely given the acknowledged importance of brand capital which can be lost in case of a food safety incident) or the retailers were sufficiently confident of the level of food safety even without the certification. This latter conclusion is supported by the 2006 FAO study which reported that “Retail will accept non-certified product of trustworthy and reputable suppliers (and still do so), if the only alternative is not having the product on the shelf”.

The issue of excessive prescription also impinges both directly and indirectly on the certification costs. The inclusion of requirements for monitoring and documentation that is not essential for assuring food safety uses more of the food business operator’s time and calls for longer audits by the CBs. The GlobalGap small holders’ taskforce has noted the need for reducing the complexity of implementing GlobalGAP certification requirements and for GlobalGap to work with farmers’ associations and simplify its implementation (Mbithi, 2009). ISO has embarked on the development of guidance to countries on implementation of ISO 22000 that takes into consideration the needs of developing countries (ISO, 2009). Since the start of the year, GFSI has benchmarked 2 additional schemes that are based on ISO 22000, therefore ability to implement this standard will be of importance in facilitating access to markets requiring PFS certification. Several other PFS schemes do not afford much opportunity for stakeholder input and therefore feasibility of the requirements for small-scale businesses, particularly in developing countries is not likely to be a significant consideration in these schemes.

5.4 Impact on public health and market access

5.4.1 Public Health

Private sector self-regulation is certainly an important part of overall food safety governance. As discussed in Section 4, this increased responsibility of the private sector is part of government strategy for more effective and efficient food control. It is the food business that is best placed to evaluate the food safety risks associated with his operation and to establish in the most efficient way, the most effective control at the most appropriate point. A recent review of safety in meat and poultry processing in the US (Ollinger and Moore, 2009) illustrates the importance of company food safety management decisions on food safety outcomes. They concluded that company determined actions accounted for 2/3 of pathogen reduction and that official regulation accounted for 1/3. This supports the contention that outcome focussed regulation by governments allows industry to find the optimal way of achieving food safety targets within their own operations. However, the impact of globally applied PFS on food safety outcomes in different countries is a different question.

Several reviews on the subject have noted that PFS are serving the important purpose of driving food safety backwards throughout the food chain. In some developing countries there is a tendency for a double system of control: with food safety management being taken seriously for exports whereas the domestic market suffers from neglect. In these situations, PFS do not significantly improve access to safe food for a great majority of people in the least developed countries. Notably,

in many developing countries national supermarket chains are being established and their controls on suppliers are improving the safety of food for growing segments of the population although improved protection for the most vulnerable elements of the society rests heavily on the ability of the public authorities to develop and implement effective risk-based food control programmes through both regulatory and non-regulatory mechanisms. There is an opportunity for the public authorities to learn from the adaptations that are occurring along the value chains that are successfully meeting private standard requirements in order to strengthen national strategies for broader compliance with national food safety standards along the food chain. Recent Consumer protection legislation in South Africa reinforces the “due diligence” motivation for food businesses by empowering individual consumers to denounce safety or quality problems and ensuring means for taking action on complaints. the Consumer Goods Council of South Africa (CGCSA) is working with the food industry and with national authorities to “raise the bar” for food safety everywhere in the country (L. Anelich, Personal communication, 2010).

5.4.2 Market Access

A large number of recent studies have reported gains in efficiency of food operations resulting from the application of the safety and quality management systems required under PFS (FAO, 2009b; IIED, 2009; Lupin et al, 2010). It is important to recognize that the political will to support enforcement of national food safety standards should have even greater impact on efficiencies in safety and quality management with provisions and requirements tailored to the national context.

The responses to both the OIE and the WTO questionnaires point to the double face of PFS: they sometimes create problems to market access and sometime create opportunities. Table 5-6 shows that, once again, it is the developed countries that are more optimistic about a positive outcome.

Table 5-6: Views of OIE member countries on whether private standards create trade problems or benefits

OECD classification and number of responses	Private standards for sanitary safety			
	create problems		create benefits	
	agree	disagree	agree	Disagree
Developed countries (36)	84%	8%	87%	3%
Developing countries (28)	80%	7%	30%	47%

Taken from OIE, 2010

The discussion in Section 5.3 on the cost of certification is a major consideration in the impact and as is demonstrated in Table 5-7, the initial investment costs and the recurrent costs of certification can be prohibitive for the smallest scale of operator. This means that PFS have the effect of favouring medium to large scale businesses. Some of the businesses in this category have recognized that certification is a worthwhile investment that allows them access to markets that they would not otherwise have access to, particularly in cases where the businesses are located in countries whose national systems of food control are weak.

Table 5-7: Cost of Compliance as % of Annual Profit Margin of different categories of Small-Scale Grower

Area/ Hectares	Support from donor		No support from Donor	
	Capital cost %	Recurring cost %	Capital cost %	Recurring cost %
2.0 – 6.0	2-5	0.4-1	8-23	3-8
1.0 – 1.8	5-8	1- 2	21-41	9-14
0.3 – 0.8	12-33	3-8	58-160	19-53

Taken from Graffham and Vorley, 2005.

Legge et al (2009) report that smallholder involvement in fruit and vegetable export production in Kenya has significantly declined largely due to pressures from GlobalGAP compliance, with the number of small holder growers dropping by over 50% from the early 1990s to 2006. Over the same period the total exports for these commodities did not decline. Concern for the marginalization of small-scale tea farmers, due to certification requirements, has also been noted (FAO, 2006).

To accurately respond to the question of what impact does PFS have on market access, it is necessary to have accurate information on the market penetration of these schemes. One FAO study set out to assess the importance of private standards for developing countries exports by gathering hard data on the market shares of private standards certification for imported fresh fruits and vegetables in the European Union (FAO, 2006). The study also aimed to investigate potential causal relations between the importance of private standards certification and factors such as: Port of entry, type of product imported, country of origin of the product, degree of concentration at import level, types of marketing channel and other factors. However, given the fact that most of the certification schemes are B2B, the investigators did not have access to the information required to draw meaningful conclusions.

It is safe to say, however, the use of private standard schemes relevant to food safety management is highly variable among different commodity groups. Such standards have been of less importance in relation to the traditional agricultural commodity exports of most developing countries, which include grains, sugar, coffee, cocoa and tea. For these commodities, the primary bases for international competitiveness remain largely price and quality (World Bank, 2005) although for some of these traditional exports, increasing traceability requirements are expected to impact small scale producers. Some of these traceability requirements may be public sector driven. The report of the 104th session of the International Coffee Council (ICC, 2010) referred to a bill that is being considered by the US Congress to require traceability of all coffee sold in the US to one step beyond the farm. Coffee is one of the world's largest traded commodities produced in more than 60 countries, providing a livelihood for some 25,000,000 coffee farming families around the world (www.ico.org). Traceability within the tea sector was also noted by the FAO Committee on Commodity Problems as an issue of concern to small holder farmers.²⁰

In recent years, the relative importance of traditional exports from developing countries has fallen and newer high value exports have become increasingly important. Private certification requirements for selected high value market segments are described below.

Fruit and vegetables – Numerous papers that have analysed the impact of PFS on trade of fruit and vegetables report that it is a “buyers market” and that major retailers can impose their standards without fear of jeopardising their supply (FAO, 2006; OECD, 2007, UNCTAD, 2007) consistent with responses to the WTO questionnaire. However, it is important to recognize that there is still a significant market for uncertified fruit and vegetables. For sub-Saharan small scale producers the uncertified market – wholesalers and retail sector – represents an important market (Legge et al 2009) although the trend is for the demand for uncertified produce to decline (Accord, 2009). GlobalGAP is, at present, the dominant private scheme for certification in this area²¹. Private 3rd party certification schemes have been much less important so far in the US market, but this is expected to change soon with the ongoing work to establish a harmonised food safety standard for

²⁰ The East African Tea Trade Association (www.eatta.com) is carrying out a survey to get opinions from stakeholders on which private food safety standard is most relevant the tea trade in EA. So far there have been few votes but all have been in favour of ISO 22000 over BRC, IFS and a national Kenyan standard KS 65:2009

²¹ In 2005 the reported number of EurepGAP and SQF 1000 certified primary producers was 18,000 and 900 respectively (FAO, 2005). In 2010, the figures stood at 100,000 for Global GAP and 156 for SQF 1000 (see table 4-1).

GAP audits. The draft standard is expected to be submitted for review by October 2010 (www.unitedfresh.org/newsviews/gap_twg).

Meat and meat products – Fresh meat was among the products identified by respondents to the WTO questionnaire as being affected by private standard requirements. Codron et al (2005) report that major retailers tend to have a premium line of meat products which requires certification but also a significant product line for the “generic” product that does not require certification. Controls by the competent authorities of importing countries are very strict and possibly reduce the perceived need for further private controls.

Fish and fishery products – Over half of international fish trade by value originates in developing countries, where it represents an important source of foreign exchange earnings and employment opportunities (FAO, 2008). Private certification requirements for this sector are reportedly growing but remain behind private certification requirements for other sectors (FAO, 2009). The growing demand for certification refers particularly to processed fish products and private label fish products. The schemes that are most important in the aquaculture segment are ACC, GlobalGAP and the recent ASC²². For processed product, Dutch HACCP, Danish HACCP, BRC, SQF and IFS are cited by processors (FAO, 2009a).

5.5 Transparency and involvement of key stakeholders

The fundamental objection to PFS by many producers, particularly from developing countries, is that they have no voice in the setting of standards that have the potential to influence markedly their market access. Henson and Humphrey (2009) outline key aspects of governance and of procedures within Codex Alimentarius, ISO, GlobalGAP and other collective and individual company standard schemes. This will not be repeated in this paper, rather, a few points pertinent to the issue of opportunities for stakeholder participation are outlined.

Within the spectrum of private food standards discussed in Section 3, the Individual firm standards provide the least opportunity for input from other stakeholders. As these standards are developed by individual firms (typically retailers) for their own adoption – they reflect the interests of the firm.

Collective private food standards are developed typically developed by groups of retailers and processors or by private standards coalitions and therefore serve the interest of a wider segment of the food industry according to their membership. The broader the membership, the less likely they are to be used as a tool for product differentiation and the wider the range of perspectives that are considered in decision-making. The GFSI, with its goal of facilitating recognition of food safety equivalence among a number of private schemes and with its increasingly balanced membership between retail and production sectors, is ensuring even broader input into the definition of private food safety schemes. However, the perspective of small and medium scale producers, particularly those from developing countries is still not covered in this broadened membership. The GFSI holds technical committee meetings that are held 3 times per year and participation is on invitation only.²³ These invitees presently include food safety professionals from one developing country. If this is being considered as an approach by which better consideration could be given to developing country contexts, then it would need to be made clear how inputs provided in the technical committee are taken into consideration in decision-making. It is important also to note that travel

²² ACC is the US-based Aquaculture Certification Council and ASC is the Aquaculture Stewardship Council initiated by the World Wildlife Fund.

²³ The Oct 2009 GFSI newsletter announced the establishment of three working groups will tackle work items defined by the Board in the following areas: Best Food Safety Practice/Benchmarking, Global Markets and Communication/Stakeholder Engagement. The list of technical committee members is provided on the GFSI website (<http://www.mygfsi.com>).

costs associated with participation of developing country invitees is a barrier to their regular participation.

Largely driven by donors and development partners, mechanisms have been introduced into the GlobalGap procedures that have proven effective in rendering the standard more compatible with the realities of small holder fruit and vegetable production. Several issues of importance to small holders have been brought to the attention of the Fruit and vegetable technical committee and, as reported in Section 5.2, some significant concessions have been won. There is optimism that the next version of GlobalGap will provide even further changes that are favourable to small holders. It is expected that there will be a reduction in the number of “major musts”, “minor musts” and “recommendations” in the control points and compliance criteria checklists (Anon, 2009). Reduction in the length of audits and the time spent by small farmers in record keeping reduces the cost burden of certification. As stated by the Small holder ambassadors’ task force, further effort is required by GlobalGAP to simplify the implementation of the scheme for fruit and vegetable growers (Mbithi, 2009). When the revised version of GlobalGAP is finalised, it will be possible to judge to what extent small holder representation and national technical committee input influenced the outcome. While there has been a lot of attention to fruit and vegetable certification, other GlobalGAP schemes have received less attention due to their lesser importance to market access. The GlobalGAP Green coffee standard²⁴ is at least questionable in the decisions about the “major musts” indicated for hygiene controls in the production of Green coffee which vary significantly from provisions highlighted in the Codex code of practice for reducing ochratoxin contamination in green coffee (CAC, 2009b). It is the openness of decision-making of public standards that strengthens the value of the standard even when there may be disagreement about selected issues.

ISO occupies a special place in the landscape of private standards. Its membership comprises both private and governmental organizations on the basis of one organization per country. The developing country members are most commonly represented by governmental agencies with responsibility for voluntary national standards. Approximately 70% of the membership of ISO is developing country members and 34/55 participating members of ISO Technical Committee 34 (the committee dealing with food products) are developing country members. There is an ISO policy committee that is responsible for addressing problems affecting developing country participation.²⁵ There is plenty of scope, therefore, for developing country input into the development of ISO standards related to food safety management. There did not seem to be any information available at the ISO website, however, on the actual extent of participation of developing country members at Committee meetings or any measure of the effectiveness of this participation.

Transparency

Transparency is not only of importance in the processes leading to setting private standards, transparency is also important in the implementation of the standards.

- It is very difficult to get a clear picture of the market penetration of many private standard schemes. Such information is a precondition for understanding the impact on developing

²⁴ Global Gap standards are modular. The control points and compliance criteria that apply to “all farms” and “all crops” are common to certification of both Fruit and vegetables and Green Coffee. It seems that the GlobalGap green coffee standard is not widely applied. There are 5 CBs that are approved for certification according to this standard as compared with 115 CBs that certify fruit and vegetable production. A recent working paper on private standards in the coffee sector (CFC-ICB, 2009) makes no reference to the GG standard. There has been less public discussion about this standard as it does not seem to be widely used in the main coffee market and is therefore of little impact.

²⁵ The 2005-2010 ISO action plan aimed at increasing developing country participation in standardization work. During 2009, ISO implemented a programme of capacity building, funded by developed country member donors, that was worth 2.2 million CHF.

countries and identifying and assessing possible actions that could optimise benefits and minimise the negative impacts.

- A lot of information is generated from the implementation of PFS: particularly, laboratory analysis reports and auditor reports. Such information is fundamental in understanding where food safety problems actually lie and is fundamental in making decisions on how the management systems could be modified.
- The big retailers that implement their individual standards and participate in a number of collective standard schemes (Table 4-1) have access to much more food safety information emerging from those schemes than the public authorities who need to be making decisions that affect public health and agriculture development strategies. *This asymmetry of information access does not facilitate productive dialogue.*

The infrastructure for 3rd party certification is fundamental to the functioning of PFS schemes although some of these schemes do involve 1st party control. As the major enforcement arm of the system of private sector regulation, the certification bodies (CBs) have a hugely important role. There are, however, some concerns that have been voiced:

- Uniformity of judgement – At least one of the respondents to the WTO questionnaire raises the point that producers in a given country can be penalised with respect to another due to differences in interpretation of provisions by different CBs.
- The big winners in this food trade environment where private standards schemes proliferate are those in the business of 3rd party certification. One question that emerges is “To what extent do those who benefit from the business of certification influence decisions about food safety certification requirements?”.

It is not unusual to come across businesses who are displaying various certificates of compliance with food safety and quality management schemes when there are obvious weaknesses in their operations. The system of 3rd party certification is certainly not infallible. But given the importance of its role, standard owners and adopters need to be more forthcoming on what they are doing to monitor and safeguard the integrity of the system. The GFSI established an accreditation task force in 2008 which drafted additional requirements to ISO/IEC 17011:2004 “General requirements for accreditation bodies accrediting conformity assessment bodies”. After consultation with accreditation bodies and food safety experts, the results were presented at the International Accreditation Forum Technical Committee in March 2009. The next step is to work towards implementation with the GFSI recognised schemes and their accreditation bodies (CIES, 2009). Monitoring of the performance of CBs and transparent reporting of this is an important element of demonstrating the credibility of any scheme.

5.6 Undermining of official food control systems and mis-information to consumers

One of the fundamental concerns of developing countries is that private food standards (PFS) schemes disregard the considerable work done by the intergovernmental bodies charged with developing food safety guidance thus marginalising intergovernmental bodies and national authorities.

While the preparation of this paper did not involve an exhaustive study of PFS, the findings from the major *collective* food safety schemes examined show that there is a high level of consistency with Codex. Furthermore, in recent times, important industry voices have been stating their commitment to respect the guidelines and standards of Codex. This provides reassurance that the international leadership on food safety management remains solidly with Joint FAO/WHO CAC. The international community must remain attentive that this remains the case.

A large proportion of developed country respondents to the OIE questionnaire (OIE, 2010) were of the view that private sanitary standards actually serve to reinforce official regulation. Some attempts are actually being made by food safety authorities in many countries to rationalise food safety controls – whether they be private or public – to deliver safe food to consumers.

While, in general, PFS do not undermine national authorities in terms of *what* needs to be achieved, perhaps in terms of *how* these things need to be done, they may be undermining the authority of national governments to negotiate with standard owners/ adopters, on the acceptance of measures that could be considered as equivalent. This point leads to the question about whether PFS schemes should be held to the same disciplines to which WTO holds official food safety regulation, and as noted in Section 2, this issue is beyond the scope of this paper.

Finally, as noted in Section 5.1, while there was not an exhaustive review of individual firm standards in preparing this paper, the evidence from those reviewed suggest that this is the category of standard most prone to establish provisions that are more stringent than Codex and national regulations. The reason for this is the role that individual firm standards play in market differentiation. While some of these standards distinguish the standard owner/adopter in terms of quality, environmental or social sustainability, some do seem to use food safety as a marketing tool. This can undermine the public confidence in national food safety authorities by suggesting that national standards do not provide an appropriate level of protection.

6. Conclusions and considerations for moving forward

6.1 Conclusions

Generalisations about private food safety standards are difficult. Some of them are very close to Codex while others are significantly different. Since, in general, PFS include a requirement that all relevant national standards have to be met, these standards are never “less stringent” than official standards although the “add-ons” can be off-target with respect to what is generally agreed to be the major food safety risks associated with the food or the food process, they may sometimes require specific measures that are not suited to the context in which the business operates and, perhaps most significantly, when different buyers are highly prescriptive about record keeping or documentation procedures, suppliers may be constrained to keep parallel records to satisfy each buyer. The public health benefit of the standard schemes is generally related to the assurance of regular and rigorous audits rather than with added level of protection associated with the standard itself. Certification to private sector schemes has been shown to provide a driver for improved hygienic practices by food chain operators and it has been shown to create opportunities for developing country producers to access markets that would otherwise not have been open to them. Furthermore, some developed countries are considering ways of integrating private standard certification into overall national systems of food control to strengthen public health protection. A major concern about the standards, however, is that they are disproportionately burdensome to small-scale operators and sometimes *unnecessarily* so. The review and analysis presented in Sections 3-5 leads to the following conclusions:

Private food standards vary widely in their scope, ownership and objectives. It is therefore not possible to generalise about their impact:

- Some are established to support a broad interests of society while others are primarily intended to serve the interests of industry
- Private interests promoted by PFS are often consistent with public policy

- Where private food standards have the potential to undermine public policy, then governmental institutions can establish mechanisms to avoid this.

A major driving force in the proliferation of PFS is the obligation that many governments have placed on the food industry to ensure the safety of the foods that they produce and market:

- Collective private food standards are, in general, highly consistent with Codex
- The PFS are more specific in terms of *how* management systems should be implemented while being consistent with Codex in terms of *what* should be covered
- Traceability requirements tend to be more strict in PFS than is required by Codex
- Some Individual Firm standards include pesticide residue limits and other numerical food safety criteria that are more stringent than relevant official regulation and which arguably serve to differentiate the product on the market.

The greater degree of prescription of the PFS has both positive and negative implications:

- Producers / businesses know what to do and auditors know more easily what to look for
- If the detailed instructions are inappropriate to the national/ local situation, then operations can be made less efficient in a highly competitive market.

Certification to PFS schemes has opened market opportunities for many food businesses in developing countries, but the cost of certification can be excessively burdensome particularly to small-scale operators:

- Harmonised standards and ready access to qualified auditors contribute to reducing this burden
- Nationally benchmarked programmes could contribute to ensuring that requirements for infrastructure, monitoring and documentation are suitable to the operations
- There is such a high degree of convergence among existing PFS, the opportunity for a more harmonised approach would appear to be great.

The ability of developing countries to implement Codex standards (and to demonstrate that these are being effectively implemented) would greatly reduce difficulties with the implementation of PFS by producers/ processors from these countries.

The Codex process is open to 182 member countries and there are mechanisms in place to facilitate private sector engagement in the process of setting Codex standards:

- There is opportunity for member countries to request review/ updating of Codex standards if the experience of implementing private food standards shows that there are “globally valid” improvements that could be made.

In most PFS and their schemes there is limited scope for broad stakeholder input:

- ISO is unique in terms of the composition of its membership which comprises both public and private entities. A mechanism therefore exists for developing country input but it is unclear the extent to which the potential is effectively utilised.
- GlobalGAP has, in recent years, opened its deliberations to wide stakeholder input which has resulted in significant gains in making the standard more feasible for small holder fruit and vegetable farmers without jeopardising food safety
- There is still limited opportunity for stakeholder input into GFSI and the most of the schemes which it has benchmarked

- Any approaches for facilitating stakeholder participation in standard setting/ review processes should consider the burden of travel costs for food safety experts from developing countries.

There is need for transparency not only in the establishment of standards but also in their implementation:

- Information on the market penetration and patterns of use of private food standards is necessary to understand the impact of these standards of market access on developing country producers and processors
- Feedback from the enforcement of standards provides insight into where the food safety problems remain, where there are difficulties in meeting provisions and whether changes in the scheme are warranted.

6.2 Considerations for moving forward

There is general consensus that the implementation of private food standards will become even more widespread in terms of the types of markets to which they apply, the number of countries where use of 3rd party certification systems is important and the product groups affected. This underlines the need for industry and governmental authorities to better understand the impact of private standards and to take measures to optimise the benefits of private standard certification and reduce difficulties that they pose, particularly to developing countries. Below, a few considerations are provided that could guide discussions on approaches for moving forward to a better understanding of the issues and a shared vision of the role of private food standards in the overall architecture of food safety regulation.

8. The issue of private food standards is relevant to food safety, market access, poverty alleviation, sustainable rural development and other national and international goals. It therefore remains of high interest to a number of national and intergovernmental bodies. Member countries have already called for information sharing and collaboration among international organizations in assessing the impact of private standards and in developing a commonly agreed strategy for optimising benefits and minimising negative impacts of these standards²⁶. Concerned national institutions might consider how they can prepare themselves to better inform concerned international organizations of the situation in their countries.
9. It has been suggested in various fora that there should be more engagement between private standard setting bodies and concerned international organizations. There already exists a formal mechanism whereby international industry bodies can request observer status in the Codex Alimentarius Commission which allows them to participate in all deliberations related to standard setting. Of the major private standard setting bodies and coalitions mentioned in this paper, only ISO has requested observer status in Codex. Better access to information related to the implementation of the major private standards (including data on market penetration) would improve the ability of concerned international organizations to identify trends and to respond more strategically to existing and emerging challenges. In what ways and under what conditions should concerned international organizations (WTO,

²⁶ One of the proposed actions for the WTO SPS Committee (G/SPS/W/247/Rev.1) is for the SPS Committee and the Codex, OIE and IPPC to have regular exchange on private standards.

FAO, WHO and OIE) engage with private standard setting bodies and coalitions? In considering this question, it should be recognized that:

- a. constructive dialogue depends on all parties having access to relevant information
- b. engagement comes at a cost: all stakeholder must therefore be clear on what benefits are expected and there should be regular evaluation of engagement strategies to ensure that the benefits exceed the costs.

10. The ability of countries to *implement* Codex standards and guidelines would greatly enhance their ability to comply with private food standard requirements. This may also be reasonably expected to reduce some of the drivers for further proliferation of private standards and, most importantly, is key to improving food safety within the main domestic market. Could Regional Codex Coordinating Committees be an appropriate venue for regular reporting of actions taken in countries to implement Codex standards in their national context and would such reporting facilitate learning among countries from each others experiences? Could these meetings also serve as a useful forum for reporting from country delegates on issues related to private food standards?
11. Stakeholder input into the development and review of private standards contributes to promoting their feasibility in each national context. If national technical working groups have proven to be an effective means of providing developing country input into the GlobalGAP standard setting process, then a similar approach might considered by other private standard setting bodies for getting developing country input. In the case of ISO standard development, countries may consider reviewing existing practices regarding communication between national Codex structures and national ISO members and improving such communication as necessary.
12. There have been and continue to be a considerable number of technical assistance activities - provided by governmental and nongovernmental bodies and by international agencies - aimed at strengthening the capacities of food chain operators in developing countries to implement effective programmes of food safety management. There needs to be greater attention to the impact of such assistance including an assessment of the extent to which it enables producers and processors to meet market requirements. Member organizations of the Standards and Trade Development facility (STDF) and the STDF secretariat might consider increased emphasis on identifying and promoting best practices in designing and delivering such technical assistance.
13. The ability of developing countries to demonstrate equivalence of alternative food safety management measures could contribute to overcoming the challenges posed by overly prescriptive private standards. Donor agencies and development partners should consider increasing their support for building the scientific and technical capacities in developing countries that would facilitate such approaches.
14. The use of microbiological criteria may become increasingly important in both official and private food safety standards. Member countries should be aware of the potential relevance of new work proposed by the Codex Committee on Food Hygiene concerning the revision of the Codex “Principles for the development and application of microbiological criteria” to their expressed concerns about the stringency of private food standards.

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Simplified typology of private standards and certification schemes in the food sector – ANNEX 1

Standard owner a)	Business sector					Not-for-profit sector c)						
	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 & brand differentiation		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 main objective	Food safety	Product intrinsic quality	Food safety, good practices	Origin-linked trade marks b)	Product intrinsic quality	Environmental protection and sustainable agriculture		Addressing social issues		Responding to cultural demands		Other ethical concerns
Scope	Good practices Traceability	Nutrition Health consumer preferences (e.g. GMO free)	Good agricultural practices and/or environmental and social issues		Traditional production process b)	Organic agriculture a) (most developed countries have public standards)	Conservation, protection of species	Fair trade	Labour rights child labour	Religious 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	Idaho potatoes, 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		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
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Table taken from Liu, Pascal 2009

Notes:

- a) 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.
- b) 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,...). Objectives of governments when regulating GIs are not only regulation (intellectual property rights) in the market but also consumer response, traditions and diversity preservation
- c) 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
- d) Private religious standards tend to disappear in those countries where the government has adopted an official standard