The Impacts of Private Food Safety Standards

on the Food Chain and on Public Standard-Setting Processes

Paper prepared for FAO/WHO

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Executive Summary

1. Private standards have become a much more prevalent part of the governance of global agri-food value chains in the last 10 to 15 years. Private firms and standards-setting coalitions, including companies and NGOs, have created and adopted standards for food safety, as well as food quality and environmental and social aspects of agri-food production. These are increasingly monitored and enforced through third party certification. This has raised profound questions about the role of public and private institutions in establishing and enforcing food safety norms.

2. This paper provides an analysis of how and why private standards have evolved. It focuses specifically on standards relating to food safety. It identifies the linkages between the development of public regulations and private standards and outlines some of the impacts of these private standards on agri-food value chains in developing countries. It also considers the implications for the work of the Codex Alimentarius Committee (CAC) and public regulation more generally.

3. Private standards have become increasingly important in global agri-food value chains, progressively pervading both domestic business and international trade. These standards may relate to food safety and the integrity of food safety systems, but can also refer to aspects of food such as provenance, environmental impact, animal welfare, etc. One of the defining characteristics of private standards, particularly as they relate to food safety, is an increasing focus on the processes by which food is produced. In this respect, they mirror the increasing importance of process standards in public regulations, as exemplified in the increasing use of HACCP in regulations relating to matters such as food hygiene.

4. While the terms 'private standards' and 'voluntary standards' are frequently used interchangeably, it is also possible for governments to promulgate standards with which compliance is voluntary, and it will be for governments to make compliance with 'voluntary' standards mandatory. Many organisations create and adopt standards, and there is a dynamic interchange between the public and private sectors. Global standards-setting bodies such as Codex are a central part of the complex multi-layered structure of public and private standards that currently governs global production and trade in the agri-food sector.

5. As part of this multi-level process, it is important to distinguish between five different functions that are involved in standard schemes. These are: standard-setting adoption; implementation; conformity assessment; and enforcement. These can be carried out by a variety of public and/or private entities according to the nature of the standard. Codex is primarily concerned with standard-setting and with establishing meta-rules for governments to follow when introducing national regulations. Much of the work of private standards schemes is concerned with detailed rules concerning implementation and conformity assessment.

6. Within the broad array of private standards relating to food safety, the WTO has distinguished between three types of standard. This classification is based on who sets (defines and codifies) the standard. Individual company standards are set by individual firms, predominantly large food retailers, and adopted across their supply chains. Collective national standards are set by collective organisations that operate within the boundaries of individual countries, including industry associations and non-governmental organisations (NGOs). Some of these standards are specifically designed to establish claims about food from particular countries or regions. Others, however, have international impacts through their application to globalised value chains. A third set of standards, collective international standards, are designed to be adopted (required or used) by organisations in different countries. This frequently means that the organisation that sets the standard has international membership.

7. Food safety standards, public and private, are fundamentally about establishing controls and conformance in the production, transport and processing of food. To understand why private food safety standards have developed so rapidly in recent years, two questions need to be asked. First, what are the drivers of increased controls along global agri-food value chains? Second, why is this need to control expressed in the form of a proliferation of private standards, as opposed to increasing use of public standards or direct business-to-business collaboration to ensure food safety?

8. There are four key drivers for increasing control in agri-food value chains. These must be situated within wider processes of regulatory change and the restructuring of global agricultural and food markets. First, reforms of food safety regulatory systems respond to real and/or perceived risks in food production, transport and processing which are the result of a series of food safety crises and increasing consumer anxiety. Second, heightened interest among consumers and businesses in food production processes and changes in their conceptions of food safety and quality are reinforced by company competitive strategies around provenance, environmental and social impact, etc. Third, the globalisation of food supply and increased role of coordination economies in defining competitiveness create new risks and new challenges for value chain coordination and control. Fourth, responsibility for ensuring food safety has been devolved from the state towards the private sector.

9. These four drivers combine to create an environment in which businesses are under more pressure to deliver food safety and to maintain the integrity of their brands. They need to do this in the face of increasingly globalised and complex food supply chains that cut across multiple regulatory jurisdictions. One key role of standards is to facilitate the coordination of agri-food value chains across space and between producers/firms and, in so doing, to transmit credible information on the nature of products and the conditions under which they are produced, processed and transported.

10. Private standards are frequently characterised as going beyond the requirements of public standards. This ‘going beyond’ involves at least three different elements. First, private standards may set a higher standard for particular food product attributes. In other words, private standards may be seen as more stringent or more extensive than public standards. This is probably the most widely-held perspective on the relationship between private and public standards. Second, private standards may increase the scope of activities regulated by the standard. Standards coverage can be extended both vertically and horizontally. Increased vertical coverage means extending the span of control up and down the value chain. Increased horizontal coverage relates to including new elements to be regulated by the standard. Food safety standards, for example, frequently include additional elements such as environmental and social impacts. Third, private standards are much more specific and prescriptive about how to achieve the outcomes defined by standards than is the case with public standards. In many cases public mandatory standards lay down the basic parameters of a food safety system, while private standards elaborate on what this system should 'look like' in order to be effective. It should be noted that some public regulations also perform this function when they specify particular procedures to be adopted by food producers and processors to assure food safety.

11. In addition to reducing risk, private standards also provide businesses with a basis for product differentiation, although this is not common in the arena of food safety. Standards can be adopted to support claims to consumers that products have certain extrinsic characteristics that reflect the way in which they have been produced. Generally speaking, claims about credence characteristics – attributes of a product that neither the retailer nor the consumer can verify through direct examination of the product or through consumption unlike so-called ‘experience attributes’ – are backed up by standards which aim to provide a credible basis for making the credence claims.

12. The production of private standards varies according to the standards type. Private food safety standards are developed by a variety of private companies and NGOs that differ in their institutional structure and degree of integration of processes of standards development, implementation and adoption. Individual food firm standards are both developed and adopted by private food companies, predominantly, major food retailers and food service companies, such that these two processes are typically closely aligned. These processes tend to be largely closed, with little or no scope for input from stakeholders unless specifically invited to make them by the private food firm that is establishing the standard. Private standards firms or organisations tend to develop standards using internal technical resources and/or external consultants. However, advice and guidance is usually obtained, formally or informally, from potential standards adopters. Collective private standards, whether developed by industry organisations or private standards coalitions, tend to be elaborated by technical committees consisting of member companies and, in some cases external experts, representatives of suppliers. The promulgation of collective private food safety standards is generally undertaken through a 'semi-closed' process, especially where the membership of the organisation elaborating the standard includes the key standards adopters. The openness of this process depends on how broad the membership of the organisation is.

13. These procedures can be compared to Codex. The CAC is a membership-based organisation, open to all Member Nations and Associate Members of FAO and/or WHO. All nation members, currently numbering 180, negotiate agreements on international food safety standards within the framework of the United Nations. Since 2003, the European Commission has joined Codex as a member organisation. Reflecting its far greater size and wider scope, ISO has a highly formalised managerial structure consisting of 160 national standards organisations, variously from the public or NGO sectors. The difference in structure and operation of these two organisations reflects their distinct mandates; whereas ISO's primary role has been the elaboration of voluntary standards, Codex was established to define rules that predominantly guide the establishment of national regulations.

14. With respect to standards-setting, Codex makes every effort to reach agreement on the adoption or amendment of standards by consensus. Decisions to adopt or amend standards at the final stage in the development process may be taken by vote only when efforts to reach consensus have failed. Broadly speaking, the standards-setting processes of Codex are significantly more transparent than those of organisations elaborating private food safety standards, and of ISO. For example, working drafts of standards and reports of meetings of Codex subsidiary committees and the CAC are published and distributed on the Codex website. Codex also has a number of mechanisms through which international NGOs can have a voice in the standard-setting process. The somewhat transparent processes of ISO are not surprising, however; they are directed predominantly at the interests of private standards adopters.

15. Codex does not implement or assess conformity with the international standards, guidelines and recommendations it develops. Rather, implementation is dependent on adoption by Codex members, in whole or in part and formally or informally, and/or incorporation into the standards of other bodies, including private standards setters.

16. At the heart of the on-going debate about the role and implications of private food safety standards are questions about their 'legitimacy', both in general and in comparison to the standards elaborated by established international organisations in the area of food safety, notably Codex Alimentarius and ISO. Anyone can create a new standard, and organisations can decide whether or not to adopt it. But when standards begin to have wide impact, questions can be raised about the extent any impact on third parties is fair and reasonable. The paper discusses the following indicators of legitimacy: extent to which the standards-setting process is transparent; influence of agri-food value chain stakeholders on the standards-setting process; extent to which developing country interests are taken into account in the standards-setting process; speed of the standards-setting process and responsiveness to the demand for new or revised standards; harmonisation; scientific basis for standards. In the paper, legitimacy is not defined in any legal sense and there is no attempt made to prioritise the various indicators that might be applied.

17. Codex has a number of mechanisms to facilitate stakeholder involvement in the standard-setting process, outside of and in addition to the efforts of member governments in this regard. This includes international NGOs that represent the interests of consumers and civil society. In contrast, many organisations that establish private food safety standards only allow involvement in standard-setting procedures by selected (usually industry) stakeholders, with little direct 'voice' for consumers. GlobalGAP appears to be an exception to this picture, as it has developed a relatively open standard-setting process, with periods of consultation and formal mechanisms to canvass the views of key stakeholder groups, as well as a board structure that incorporates producers as well as retailers. This process offers effective representation for larger businesses and trade organisations from developing countries, but will not necessarily incorporate the voices of smaller firms and marginalised groups. Of course, with both Codex and GlobalGAP, these mechanisms only present *opportunities* for the engagement of stakeholders. Developing countries, and more marginal stakeholders therein, typically find it extremely difficult to provide input.

18. Codex takes steps to address issues of finance and capacity for involvement of stakeholders in the standard-setting process. Regular participation by developing countries is typically limited to a relatively small number of larger middle-income countries, but the Codex Trust Fund aims to provide financial and/or technical assistance. In the realm of private standards, GlobalGAP has worked hard to be more inclusive, subjecting standards to two periods of open consultation and creating formal mechanisms for the experiences and interests of certification bodies and of implementers of the GlobalGAP standards at the national level to

be fed back to the GlobalGAP Secretariat. Of course, many developing countries, and marginal groups therein, particularly small producers, have limited capacity to participate in these consultation processes.

19. Public and private standards differ considerably in their speed of response to new challenges. One feature of Codex, and of other international standards organisations, is the time and resources expended in elaborating new or revised standards. It is not unusual for a Codex standard, guideline or recommendation to take a number of years to be finally adopted by the Commission. In contrast, private standards-setting bodies can move quickly to address new issues and establish new or revised standards in these areas. It should be noted that the difference in scope between science-based standards in support of health outcomes and other standards (e.g. quality standard) is an important factor to also consider in this context.

20. A challenge for both public and private standards is harmonisation. Evidence suggests that the harmonisation of national food safety regulations around international standards has been slow. Further, an important criticism of private food safety standards is that they undermine this process of harmonisation, introducing a new layer of governance that further fragments national markets according to the food safety requirements with which exporters must comply. However, private standards organisations have themselves driven processes of harmonisation, and equivalence.

21. A key concern in on-going debates about the legitimacy of private food safety standards, predominantly in the WTO, is whether they are 'science-based'. Although there is little compelling evidence that private food safety standards come under the purview of the SPS Agreement, there are concerns that the requirements of private food safety standards do not provide appreciably higher levels of protection against food safety hazards. Intuitively, private firms would not engage in the setting and/or adoption of standards that impose costs on the value chains in which they operate unless some greater level of protection was afforded than prevailing food safety controls. The one exception relates to the use of standards to differentiate products, although it would appear that food safety is rarely used as a differentiator. At the same time, it is argued in the paper that one of the primary functions of private food safety standards is to define a set of requirements and associated systems of conformity assessment directed at regulatory compliance.

22. A major concern of developing countries regarding private standards has been their impact on small producers, and on farming systems more generally, that are not characterised by high levels of bureaucratic controls. Public standards can also be a challenge, as with the whole chain approach to animal disease control. Where private standards undoubtedly have a significant impact is when they are applied to primary production of food of non-animal origin.

23. The impact of the GlobalGAP standard for fresh fruit and vegetables has been studied extensively in Kenya. The evidence suggests that the participation of small farmers in the export vegetable business has declined following European retailers' requirement for export production to meet the GlobalGAP standard. The cost of maintaining the integrity of its controls is considerably higher in supply chains consisting of appreciable numbers of small farmers than if exporters procure from a limited number of medium or large-scale producers. Costs are also imposed on producers, with particular concerns at the economic burden for smallholders and stimulating debates about whether the distribution of costs along value chains is 'fair'. However, the evidence from Kenya with respect to exclusion of small farmers from export value chains is not conclusive.

24. The impacts of private food safety standards on agri-food exports from developing countries are both complex and uncertain. We are likely to observe 'winners' and 'losers' in a world where compliance with increasingly exacting food safety requirements, driven by both the public and private sectors, is an imperative. Compliance with private standards, as with public standards, can have profound impacts on the structure of value chains. For example, to the extent that there are economies of scale in compliance and/or larger firms are better able to access finance and other resources, compliance processes are likely to induce processes of consolidation and concentration. These issues are seen as much with government-driven policies to introduce HACCP into sectors such as shrimp farming, as in the case of private sector setting of process-based food safety standards.

25. In practice, it is difficult to separate out the specific impact that private standards might have on agri-food exports from developing countries from a host of other factors. For example, exporters of fresh fruit and

vegetables, meat, dairy and seafood must comply with multi-tiered requirements including quality grades and standards, traceability requirements, labels of origin, phytosanitary controls and food safety standards, of both a regulatory and private nature.

26. It is evident that a number of developing countries, and exporters and producers therein, face challenges in complying with private food safety standards. A profound concern of private food safety standards is that the costs of processes of compliance and conformity assessment tend to be pushed down global agri-food value chains away from standards adopters and towards their suppliers, notably developing country exporters and producers. In turn, this prevents developing country producers from reaping the full benefits of implementing standards, reducing the returns to related investments and diminishing the incentives for growers to adopt these standards. There is a compelling case for donor support for capacity-building, predominantly focused around lead firms, producer organizations and the creation of markets for service provision. There is also a role for promoting the interests of developing countries in the private food safety standards arena, although not to the extent that this begins to threaten the role of collective standards; there is little to be gained for developing countries from a return to a world where major retail buyers establish and adopt their own firm standards.

27. In practice, there is a substantial overlap between public and private standards and their impacts on food production and processing and developing countries. Private standards for food safety are often responses to government regulations that build on the framework of public standards. In so doing, private standards are able to reduce the cost of standards formulation and enforcement, for example by providing a detailed 'road map' for compliance and conformity assessment. By defining rules for the elaboration of public and private standards by other entities - member governments, firms and NGOs - Codex plays an important role in guiding the development of private standards. The view that the rise of private food safety standards is acting to undermine the role of Codex is substantially based on a misunderstanding of the role that it plays in the international agri-food standards arena.

28. Private food safety standard can be seen as substantively packaging multiple Codex standards, guidelines and recommendations, along with national legislation that will variously be based on these Codex documents. At the same time, private food safety standards do not confine themselves to areas where Codex has defined norms, but also fill 'voids' where there is seen to be a need for standardisation. The rise of private food safety standards does imply that the clientele of Codex is changing, or at least is being expanded. Traditionally, the role of Codex has been to establish rules for the implementation of official food control systems, suggesting that the main beneficiaries and users are governments. Private food safety standards have added an additional layer to food safety governance and Codex needs to take account of this in directing its work programme and in elaborating standards.

29. The rise of private standards raises challenges for Codex in terms of the speed and complexity of standard-setting processes. These are issues where there are established concerns and where efforts have already been made to streamline systems of decision-making. Private standards organisations are certainly more able to elaborate standards in a timely manner, reflecting their narrower remit and greater confluence of the interests of the standards adopters they serve. It is unrealistic to expect Codex to be able to emulate private standards organisations in this regard, although on-going efforts are needed to streamline decision-making processes.

30. The increasing role of private standards in food safety governance in global agri-food value chains has served to further heighten concerns about the transparency and inclusiveness of standard-setting processes, not only in private standards organisations but also in Codex. The inability of many developing countries to play an active role in Codex is recognised. A number of private standards organisations also take little or no account of the interests of developing countries. The notable exception is GlobalGAP, which has taken some steps to address developing country interests and concerns. Where Codex clearly performs better than private standards organisations is in the representation of consumer groups.

31. It is evident that Codex cannot ignore the increasing role of private standards, given the significant implications for its mandate and modes of operation. It is critical that Codex engages with the organisations involved in establishing and adopting private food safety standards, formally and informally. More profoundly, Codex needs to reflect on its mandate, purpose and work programme in a world where private

food safety standards are likely to become of increasingly important in the governance of global agri-food value chains. Some concrete actions that Codex might take are as follows:

- Engage in an informed debate on the implications that private standards in the area of food safety have for its mandate and work programme. This debate should avoid examining the rights and wrongs of private food safety standards. Rather, it should see such standards as presenting a new reality that Codex must take into account.

- Engage with the GFSI (and maybe also GlobalGAP) with a view to it being made an official observer. This will require that GFSI make a request to be recognised as an international NGO.

- Explore ways in which Codex can engage with collective private standards organisations that do not appear to qualify as international NGOs, but which nevertheless have global reach. Most immediately, this might be through informal dialogue between the Codex Secretariat and/or a one-off interest group meeting with FAO and/or WHO. In the medium term, Codex might consider establishing a public-private consultation platform, perhaps under the Executive Committee.

- Codex should immediately begin to reflect on the implications for its operating procedures. Thus, the Secretariat might be charged with exploring the need for changes in these procedures and how such procedures might better enable the Commission to respond to the challenges and opportunities presented by the rise of private standards.

Ultimately, Codex needs to reflect more profoundly on its areas of activities and priorities in the light of the increasing role played by private food safety standards in global agri-food value chains. For example, should Codex focus on areas where private standards have not been elaborated in order to fill 'voids' in the food safety landscape or continue to elaborate standards, guidelines and recommendations across the entire spectrum of its historic work, in part supporting the further development of private standards?

32. There is a role, more broadly, for FAO and WHO to engage with the organisations that establish private food safety standards and to play a constructive role in on-going debates about the legitimacy and impacts of these standards. It is important that the capacity-building foci of these agencies reflect the increasing role of private food safety standards and the needs of both the public and private sectors in this regard. In this regard, both FAO and WHO should enhance their efforts to support the development of national food control capacity in developing countries.

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1 Background

A key trend in the governance of global agri-food value chains in the last 10 to 15 years is the increasing prevalence of private standards (Jaffee and Henson, 2004; OECD, 2004). Private firms and non-governmental organisations (NGOs) have progressively laid down standards for food safety, food quality and environmental and social aspects of agri-food production, which are generally linked in turn to processes of second or third party certification (Busch *et al*., 2005). While not subject to the same legal processes of enforcement as public regulations, it is argued that market forces can make compliance with private standards mandatory in practice (Henson, 2007). Thus, in the sphere of food safety on which we focus here, many global agri-food value chains are governed by an array of public and private standards, which are variously interconnected and play a leadership role in driving the implementation of food safety controls (Henson and Humphrey, 2008). There are also claims that private standards, which have found their predominant domain in export value chains, are beginning to pervade higher-value markets in developing countries (Reardon *et al*., 2001; Henson, 2007).

The evolution of private food safety standards has raised profound questions about the role of public and private institutions in governing food safety. Embedded in this dialogue are concerns about impacts on the structure and *modus operandi* of global agri-food markets (Henson and Humphrey, 2008) and on the legitimacy of private modes of governance where public regulation has been the dominant institution (Henson and Caswell, 1999). Views on the legitimacy and impacts of private food safety standards vary widely; at one extreme they are seen as potentially eroding the competiveness of developing countries (UNCTAD, 2007a; 2008) and/or excluding smallholders from value chains that present potentially significant opportunities for livelihood enhancement (Dolan and Humphrey, 2000; Graffham, 2007), while at the other they are considered catalysts for necessary processes of upgrading and the enhancement of competiveness (World Bank, 2005; Henson, 2007). The lack of a consistent body of evidence has done little to quell this debate (Henson and Humphrey, 2008).

In a global context the rise of private standards has served to challenge the legitimacy of established international institutions that lay down rules for the promulgation of public food safety standards, notably the World Trade Organisation (WTO) and Codex Alimentarius Commission (CAC) (Henson, 2007). While the trade effects of private standards have been raised within the WTO (see for example Henson, 2007), there is considerable uncertain as to whether it has any legal jurisdiction over private standardisation activities (Roberts, 2009). Within Codex, significant anxiety has been expressed that the rapid pervasion of private food safety standards is serving to undermine the Commission's role in establishing science-based standards, guidelines and recommendations that guide national rule-making and provide the legal reference point for the SPS Agreement (see for example Roberts and Unnevehr, 2005). A number of developing country members, of the WTO and Codex, have been the predominant 'voice' behind these concerns, adding fuel to the debate about the potential detrimental effects of private food safety standards on poorer parts of the world. For example, discussion were held at the 31st session of the CAC (CAC, 2008a) and the 60th and 61st sessions of the Executive Committee (CAC, 2008b; 2008c) in 2008.

Private standards are remarkably varied with respect to who they are developed by, who adopts them, the parameters of agri-food systems they address, etc. Reflecting this diversity, there has been a lack of clarity about which standards count as 'private', the functions they perform and the potential impacts that they have (Henson and Humphrey, 2008). There is often also a failure to appreciate the distinctions and inter-relationships between public regulation and private standards. This lack of clarity has served to cloud debates about the impacts of private standards, both generally and on developing countries specifically, and the trajectory we might expect in their future evolution, and has tended to throw all private standards into the same (often negative) basket. This paper attempts to add some coherence to the debate, both by providing a reasoned analysis of how and why private food safety standards have evolved and their impacts. Of course, a particular focus is the implications for the work of Codex, although this is placed in the wider context of the ways in which private food safety standards interact with public regulation and the consequent effects on the structure and operation of global agri-food value chains.

2 Objectives and scope of the paper

At the 31st session of the CAC, FAO and WHO were invited to prepare and present a paper on the role of private standards, and developments on this subject in the World Trade Organisation (WTO) and elsewhere (CAC, 2008a). This paper provides a substantive input to this submission to the Commission by FAO and WHO that is focused on raising awareness and orienting discussions on private standards.

The overall objective of the paper is to provide an overview of issues associated with the increasing role of private food safety standards in global agri-food value chains, with a particular focus on the implications for the CAC and other international organisations with an interest in food safety. The paper also refers to the non-food safety aspects of private standards to the extent that such aspects are combined with food safety elements in the development of private standards. The specific issues addressed by the paper are as follows:

- Definition of private food safety standards and analysis of the various forms these standards take.
- Drivers of development and change in global agri-food value chains and private standards, and how we might expect these standards to change in the future.
- The inter-relationships between private food safety standards and public regulations.
- Impact of private food safety standards on global agri-food value chains, with a particular focus on developing countries.
- Implications of the promulgation and increasing prevalence of private food safety standards for Codex, and for other international organisations, in particular the WTO.
- Strategies that Codex, in particular, might adopt in order to address the increasing role of private food safety standards in global agri-food value chains, in pursuit of its mandate.

Note that the main focus of the paper is private food safety standards, although these are positioned within the broader context of private standards as a mode of governance across a broader range of agri-food product attributes.

The paper is based on a review and synthesis of recent research and policy papers on private standards, and private food safety standards in particular, in global agri-food value chains. The authors have applied their collective knowledge and experience in bringing together existing empirical research, which differs widely in its scope and quality, to present a coherent and balanced analysis of why private food safety standards have emerged and the implications, most notably for Codex.

3 Nature of private food safety standards

3.1 Overview of private food safety standards

Private standards have emerged as an important mode of market governance in many industrialised countries (see for example Henson, 2007, Humphrey, 2008; Jaffee and Henson, 2004; OECD, 2004; World Bank, 2005). This is particularly true of the agri-food sector, although we do see private standards regimes elsewhere. In turn, the evolution of private standards has raised profound questions about the role of public and private institutions in governing food safety, food quality and the wider social and environmental impacts of the agri-food system. Embedded in this dialogue are various concerns about private standards:

- That they can act to exclude developing countries from potentially lucrative international markets, acting as barriers to entry which countries without well-developed food safety systems struggle to overcome.

- That the demanding nature of private standards, and in particular the use of third-party certification to ensure compliance with complex rules and procedures at various points along the value chain (including pre-farm-gate controls used in the widely-adopted GlobalGAP standard), are too complex and too expensive for small farmers to meet.[3]

- That they impact on the structure and modus operandi of global agri-food markets, further driving processes of consolidation and integration and enhancing the power of dominant firms.

- That they challenge the legitimacy of public modes of governance in areas that have historically been the preserve of public regulation (Henson and Caswell, 2001; Havinga, 2006, 2008). In turn, the growth of private standards, it is contended, is challenging the position of established international institutions, and in particular the SPS Agreement within the WTO and Codex, that establish procedures for ensuring that national measures are compliant with WTO requirements relating to barriers to trade.

- That the non-public nature of private standards means that they are generally developed in a 'top-down' manner and not subject to public scrutiny. This may lead to failures to address issues of equity and access.

These issues have been discussed extensively in the SPS Committee at the WTO (see for example WTO, 2007a; WTO, 2008a).

Collectively, private standards are remarkably varied with respect to who they are developed by, who adopts them, the issues they address, etc. The range of standards that private firms might adopt is indicated in Figure 1 (which we describe in more detail below in the subsection 'A Typology of Standards'). This provides a non-exhaustive list of standards used in four different European countries. There is a substantial range of private sector standards, developed by distinct types of organisations to serve diverse purposes and with different geographical and functional scope. Given this large number of standards, the organisations that sponsor them, their reach and their continued proliferation, it is not surprising that there has been a lack of clarity about private standards that has impeded understanding on this subject.

[3] The nature and the complexities of such standards, particularly pre-farm-gate standards will be discussed further below.

Figure 1: Examples of private standards in agri-food chains

Individual Firm Standards	Collective National Standards	Collective International Standards
• Nature's Choice (Tesco) • Filières Qualité (Carrefour) – version applied in multiple countries • Field-to-Fork (Marks & Spencer) • Filière Controlleé (Auchan) –version applied in multiple countries • P.Q.C. (Percorso Qualità Conad) • Albert Heijn BV: AH Excellent	• Assured Food Standards (UK) • British Retail Consortium Global Standard • Freedom Food (UK) • Qualitat Sicherheit (QS) • Assured Combinable Crops Scheme (UK) • Farm Assured British Beef and Lamb • Sachsens Ahrenwort • Sachsen Qualitatslammfleisch • QC Emilia Romagna • Stichting Streekproduction Vlaams Brabant	• GlobalGAP • International Food Standard • Safe Quality Food (SQF) 1000/ 2000 • Marine Stewardship Council (MSC) • Forest Stewardship Council (FSC)

Source: Based on WTO (2007a), with additional examples from Aragrande *et al*. (2005)

Private standards have become increasingly important in global agri-food value chains, increasingly pervading both domestic business and international trade. These standards may relate to food safety and the integrity of food safety systems, but can also refer to aspects of food such as provenance, environmental impact, animal welfare, etc. One of the defining characteristics of these private standards, particularly as they relate to food safety, is an increasing focus on the processes by which food is produced. Such 'process' standards necessarily involving the following:

- They provide a basis for making claims about processes and practices relating to how food is produced, transported or processed.

- They necessarily involving some form of monitoring and enforcement, through second or (increasingly) third party certification (Busch *et al*., 2005).

- They are codified into a written statement that sets out rules and procedures and provides clear instructions as to how rules are to be implemented, monitored and enforced.

- They include some form of traceability to link particular food products at some point downstream in the value chain to the point of at which the standard specifies and controls processes.

The standard involves not only a specification of what outcomes are to be achieved, but also sets of rules to show how this should be achieved, and a governance structure of certification and enforcement (as well as systems to generate and approve changes to each of these elements as the standards evolve over time. It for this reason that some bodies involved in private standards, such as GFSI, refer to 'schemes' rather than standards. This has implications for the Codex and the relationship between public and private standards, as will be seen below. Now, we explore the forms and functions of private standards in general, with a particular focus on private food safety standards.

3.2 A typology of private standards

Many discussions of private standards begin with a typology of the different types of standards. Behind this approach is an assumption that private standards are easily defined and can be readily distinguished from public standards – or more accurately, public regulations. It is important to realise that this boundary is not actually so straightforward. Understanding better the relationship between the public and the private is a recurring theme of this paper.

Public and private standards

The terms 'private standards' and 'voluntary standards' are frequently used interchangeably. Indeed, private standards developed collectively by private sector actors are frequently referred to as 'private voluntary standards' (see for example OECD, 2004). Implicitly this equates the actions of public authorities with rules backed by legal sanctions (Black, 2002; Havinga, 2006), leaving the territory of voluntary standards to non-governmental entities.[4] In practice, this distinction does not hold. Governments may promulgate standards with which compliance is voluntary, or conversely, they may require compliance with private standards. Indeed, Havinga (2006; 2008) contends that there is a 'blurring' of traditional governance roles in the agri-food system, suggesting the emergence of a continuum between public and private modes of regulation.

To provide clarification on how we define private standards, Figure 2 distinguishes between mandatory and voluntary standards, and between standards set by public and private entities (Henson and Humphrey, 2008). Here, private standards are represented by the right-hand column; they are standards that are *set* (created) by commercial or non-commercial private entities, including firms, industry organisations and NGOs. In turn, the extent to which private standards are voluntary depends on the form and level of power wielded by the entities *adopting* those standards; that is the nature of the entities requiring the standard be implemented by another entity (Brunsson and Jacobsson, 2000). Private standards can be adopted by non-state (private) actors; even if they become *de facto* mandatory in a commercial sense through adoption by dominant market actors, there is no legal penalty from non-compliance. However, private standards may be adopted by state actors and invested with statutory power. In this case, compliance is mandatory, and we refer to these as legally-mandated private standards. This process is seen, for example, with the referencing of ISO 9000 in EU directives covering CE marking for telecommunications and electronic products.

Figure 2: Forms of standards

	Public	**Private**
Mandatory	Regulations	Legally-mandated private standards
Voluntary	Public voluntary standards	Private voluntary standards

With respect to the middle column in Figure 2, public standards, the most familiar form is the regulations promulgated by governments that are mandatory within the sphere of competence of the government. However, governments also promote standards that are voluntary. Brunsson and Jacobsson (2000) refer to these as "optional laws". In the food industry, the 'Label Rouge' originally developed by the French government would be an example.

The position of a particular standard within the grid in Figure 2 may change over time. It is not uncommon for standards to migrate between cells. For example, the Safe Quality Food (SQF) series of standards was originally developed by the Government of Western Australia, which we would categorise as a public voluntary standard (as adoption was not legally mandated), but they were subsequently acquired by the Food Marketing Institute (an industry organisation representing the US food retail and wholesale sectors), implying reclassification as a private voluntary standard. Further, in the EU, organic standards have been promulgated that overlay existing private organic standards. By achieving certification with an approved private organic standard, a producer would in effect be complying with both a voluntary public standard and a voluntary private standard.

Private standards typology

Following the classification of the WTO with respect to private standards, we distinguished three forms of private agri-food standard in Figure 1. This classification is based on the bodies that generate the standards.

[4] The distinction between single-company private standards and private standards developed by coalitions of private actors will be discussed below.

However, the dynamic nature of standards and their evolution over time means that apparently simple classification is more complex than it appears. Specifically[5]:

- **Individual company standards**. These are set by individual firms, predominantly large food retailers, and *adopted* across their supply chains. These are frequently communicated to consumers as sub-brands on their own/private label products. Examples of such brands include Tesco's Nurture[6], Tesco Nature's Choice[7] and Carrefour's Filières Qualité.[8] This communication to the consumer make claims about the superiority of product or process attributes. Such standards may have national or international reach. In some cases, such as Carrefour, the standard is applied in multiple subsidiaries of the parent company. But even if the standard is used by a company for its retailing operations in a single country, the standard itself has international spread as it is frequently applied to suppliers based in many different countries. So, for example, farmers in sub-Saharan Africa will be certified to the Tesco Nature's Choice standard, that underpins the Nurture sub-brand, if they are exporting products to Tesco in the UK.

- **Collective national standards.** These standards are *set* by collective organisations that operate within the boundaries of individual countries, including industry associations and NGOs. These organisations can represent the interests of commercial entities (for example food retailers, processors or producers) or be NGOs. These and other entities are then free to *adopt* them if they wish. It is important to note, however, that some of these standards are inherently national, while others have international reach. Some such collective national standards are specifically designed to establish claims about food from particular countries or regions. The Farm Assured British Beef and Lamb (in the UK) and the QC Emilia Romagna (in Italy) schemes sustain claims about the superior attributes (safety, quality, environmental impact, etc.) of products conforming to these schemes. They are designed to differentiate these products from competing products. As a result, they are usually "visible" to the consumer; announcing their presence in the form of labels and trademarks. Other standards are national in character because they have been developed by national agencies, but they frequently have international reach. This is true of the British Retail Consortium (BRC) Global Standard for Food Safety (see below). Although originally developed by a trade body in the UK, it is applied to suppliers in multiple countries and can be adopted by suppliers not selling into the UK market if they feel that this presents a competitive advantage. It is possible for the standards to move from being national to international if the governance structures of the bodies creating and controlling the standard are internationalised.

- **Collective international standards.** This category of standard is often defined by the reach of the standard; that it is intentionally designed to be adopted (required or used) by organisations in different countries. This frequently means that the organisation that sets the standard has international membership. So, for example, GlobalGAP (formerly EurepGAP) was initially created by an international coalition of European retailers. Its membership now is more diversify and much more international (see below). The SQF series of standards is established by the SQF Institute (SQFI), a subsidiary of the Food Marketing Institute (FMI) which has a membership of companies from many countries.[9] Such standard-setting organisations may have non-business actors. Indeed, we see private standards being set by differing combinations of public, private and NGO actors (Abbott and Snidal, 2008), such that these different entities participate in the governance of these standards in differing proportions. The Forest Stewardship Council, for example, has stakeholders from many different countries and maintains parity between northern and southern stakeholders (Dingworth, 2008). So, the organisations that create collective international standards may represent the interests of commercial entities (for example food retailers, processors or producers) or NGOs, or both.

[5] This typology aims to present the dominant forms of private standard, but given the various forms taken by private standards, is necessarily incomplete. For example, standards may be set by private bodies with the aim of them being international, such as the Naturland organic standard. These do not fit neatly into the typology that is presented.

6 http://www.tesco.com/nurture/ (accessed March 2009)

7 http://www.tescofarming.com/tnc.asp (accessed March 2009)

8 http://www.carrefour.com/docroot/groupe/C4com/Commerce%20responsable/Publications/RDD%202003%20partie%202%20FR.pdf (accessed March 2009)

[9] See http://www.sqfi.com/about_us.htm (accessed March 2009)

Nevertheless, one of the defining features of the standards is that they are designed to be *adopted* and *implemented* internationally. Some standards developed by national entities have the same objectives. So, for example, both the UK BRC Global Standard for Food Safety and the German QS standard are promoted and adopted outside of their country of origin. They become 'internationally available'.

The private standards landscape is highly dynamic, with new forms of standard emerging, which in turn induce changes in the relative importance of particular forms of standard. For example, a number of large UK food retailers established their own private standards in the early 1990s and employed second or third party audits of their suppliers in order to assess compliance (Henson and Northen, 1998). Later, many of these retailers participated in the promulgation of a collective national standard through the BRC. This is described in more detail below. In turn, the scope of collective private standards has tended to become international rather than national, as is seen with GlobalGAP and the International Food Standard (IFS), while national firm or collective standards are being benchmarked through the Global Food Safety Initiative (GFSI). While these processes have driven broad trends of collective action and the internationalisation of private agri-food standards, at the same time as individual firm standards have emerged in new spaces of standardisation of product and process attributes.

This discussion points to the need for greater clarity about the different functions involved in making a standard operational. In this regard, we can distinguish between five different elements:

- **Standard-setting**. The introduction and operationalisation of a standard through the formulation of written rules and procedures.

- **Adoption.** A decision by an entity to adopt the standard. This can take various forms. A private company can adopt a standard by requiring its suppliers to use it. This could be a standard developed by the company itself, or one it helped to develop for example as part of a standards-setting coalition, see below) or a standard created by another body. Equally, groups of producers can develop a standard which they themselves adopt. Companies can adopt standards, such as ISO 14000, which they see as providing a competitive advantage or defining company values and strategy. The decision to adopt is an important driver of the spread and influence of private standards. This stage of standards development is sometimes under-emphasised in the categorisation of standards. For example, recent typologies of standards that identify the actors that define and implement standards, but not actors that adopt them, do not emphasise sufficiently the way in which standards are integrally related to increasing globalised agribusiness value chains (see, for example WTO, 2007b). It is argued in the next section that the decision to adopt is the key issue for understanding the drivers of private standards in the current period.

- **Implementation:** The implementation of the rule is carried out by the organisation that is conforming to the standard. This will not be the standards-setter. In the case of a standard like the BRC Global Standard for Food Safety, the implementer is the company that applies the standard in its own operations.

- **Conformity assessment:** This involves the procedures employed to verify that those claiming to comply with the standard and provide documented evidence to show that this is the case. There are various means of assessing conformity, including self-declaration by the implementer of the standard, inspection by the standards adopter (so-called second-party certification) and inspection by a third party (so-called third party certification). Third-party certification carried out by independent certification bodies has become the norm for many private food safety standards. We term these certification-based private standards. Standards schemes include processes for recognising the certification bodies that are allowed to verify compliance.

- **Enforcement:** Approaches to respond to non-compliance and sanctions to withdraw recognition if corrective action is not taken. The standard setter has to have some procedure for responding to the results of the conformity assessment, either by invoking corrective action or withdrawing the recognition of the organisation as conforming to the standard.

Standard-setting, adoption, implementation, conformity assessment and enforcement may be carried out by public or private entities according to the nature of the standard. This is highlighted in Figure 3. While some public standards have all of the functions carried out by the public sector, some of these functions could be privatised. Equally, in the case of voluntary public standards and mandatory private standards, these functions can be divided between the public and private sectors. These divisions, however, are not hard and fast. New conceptualisations of regulation are ceding a role for the private sector, for example through private firms undertaken conformity assessment on their own compliance with public regulations (Havinga, 2006). Conversely, private standards may build on the public standards infrastructure through their use of accreditation bodies to recognise the certification bodies used for the standard and their specification of public laboratories to be used in product testing.[10]

Figure 3: Functions associated with standards schemes

Function	Regulations	Public Voluntary Standards	Legally-Mandated Private Standards	Private Voluntary Standards
Standard-setting	Legislature and/or public regulator	Legislature and/or public regulator	Commercial or non-commercial private body	Commercial or non-commercial private body
Adoption	Legislature and/or public regulator	Private firms or organisations	Legislature and/or public regulator	Private firms or organisations
Implementation	Private firms and public bodies	Private firms	Private firms	Private firms
Conformity assessment	Official inspectorate	Public/private auditor	Public/Private auditor	Private auditor
Enforcement	Criminal or administrative courts	Public/private certification body	Criminal or administrative courts	Private certification body

Source: Authors' elaboration

The distinction between setting and adoption also clarifies the issue of compulsion and obligation. First, it is possible for private standards to be made mandatory by public bodies. This is the situation with legally-mandated private standards. An example would be obligations placed on companies to have relevant production processes certified to the ISO 9000 standard before products can be imported into the European Union. Second, there are situations where companies freely adopt private standards, either because they see it as a signal to potential buyers or because it contributes to the company's development. Third, while private standards not adopted by public bodies remain voluntary – there is no legal compulsion to comply – they can become quasi-mandatory if powerful companies, or groups of powerful companies, make the standard a condition of entry to their supply chains. Concentration in global food retailing and processing may increase this tendency. It is this type of relationship along the value chain that drives some of the development of private standards, as will be discussed below.

4 Trends in the development of private food safety standards

But why have private food safety standards developed so rapidly in recent years? This issue has to be addressed in two stages. First, it is necessary to understand the overall trend towards increasing concerns about food safety and the adoption of 'whole-chain' approaches to this issue. Second, there is a need to appreciate why increasing controls over agribusiness value chains are expressed in the form of a proliferation of private standards, as opposed to increasing use of public standards or direct business-to-business collaboration to ensure food safety.

10 Further, standards such as GlobalGAP involve selected national certification bodies for processes involved in benchmarking of national standards to the global standard (Sheehan, 2007).

4.1 Drivers of increased controls along food value chains

The evolution of private agri-food standards can be situated within wider processes of regulatory change and the restructuring of global agricultural and food markets. The key factors are:

- Reforms of food safety regulatory systems in response to real and/or perceived risks including a shift to process controls.
- Heightened interest among consumers and businesses in food production processes and their changes in conceptions of food safety and quality.
- The globalisation of food supply and increased role of coordination economies in defining competiveness.[11]
- The devolution of the state and consequent 'privatisation' of market governance.

Reforms of food safety regulatory systems

Although most industrialised countries have well-developed systems of food safety regulation, these have been subject to profound change in recent years. One key driver of this process has been heightened consumer concern about the safety of food. This has put greater focus on food safety and other quality attributes (Kinsey, 2003). Despite significant advances in agricultural and food technology, a succession of high profile food 'scares' in a number of industrialised countries have fuelled consumer concerns and eroded confidence in food safety controls (Henson and Caswell, 1999; Henson and Humphrey, 2008; World Bank, 2005). As a result, consumer confidence has been undermined, with conspicuous instances of food safety failure being seen as signals of system-wide problems. Note that, with the progressively greater globalisation of agri-food value chains, food safety problems in distant countries can be seen by consumers as having local significance.

The proliferation of food scares relates to the persistence of well-established food safety concerns (for example microbial pathogens and pesticide residues). However, it has been further fuelled by new sources of food anxiety whose precise risk factors have been difficult to quantify (such as heavy metal contamination, mycotoxins and Bovine Spongiform Encephalopathy (BSE)) and by 'new' hazards that have become of heightened importance on the political 'radar screen' (for example avian influenza). Collectively, these concerns have stimulated the extension of the scope and rigour of regulatory systems across much of the industrialised world. As a result, firms have confronted new and heightened compliance challenges and looked for mechanisms through which the associated costs can be minimised. New and stricter public regulation has been one of the main drivers of the growth of private standards aimed at food safety.

Food safety concerns have led to increased stringency in more 'traditional' product controls, such as tighter limits on pesticide residue levels and the presence of heavy metals. At the same time, both public regulations and private standards have witnessed a shift towards management-based approaches. Most notable are meta-systems such as HACCP and traceability (Caswell *et al*., 1998). This trend reflects scepticism over the efficacy and economic efficiency of technology and/or performance-based approaches and an increasing focus on risk-based approaches to food safety management. Thus, Unnevehr (2000: 235) suggests that:

> "There is growing adoption in the food industry of management practices that focus on prevention and control of food safety hazards. Many hazards are expensive to test for and may enter food products at several points in the production process. Therefore, documented production practices, that are verified to prevent and control hazards, are becoming accepted as the most cost-effective means of reducing food safety hazards. While testing and verification are essential for establishing good process controls, testing can never be practical as the only means of monitoring safety."

While the predominant focus of management-based food safety controls has largely been on the implementation of HACCP in food processing, the increasing importance of traceability and on the

[11] Including information flows along value chains, coordination of multiple suppliers, logistics capacities, etc.

management of food safety from 'farm-to-fork' has served to draw attention to the integrity of the entire supply chain (Humphrey, 2008). This concern has been expressed in public regulations in the European Union (EU), which has been the centre of the global drive towards private standards. Regulation (EC) No 178/2002, which established the European Food Safety Authority, raised the issue of traceability and controls along the value chain, stating that (CEC, 2002: preamble to paragraph. 12):

> "In order to ensure the safety of food, it is necessary to consider all aspects of the food production chain as a continuum from and including primary production and production of animal feed up to and including sale or supply of food to the consumer because each element may have a potential impact on food safety."

Similarly, an EU summary of import conditions for seafood reiterates the case for process controls (CEC, n.d.):

> "The food law of the European Union implements the principle of quality management and process-oriented controls throughout the food chain – from the fishing vessel or aquaculture farm to the consumer's table. Spot checks on the end product alone would not provide the same level of safety, quality and transparency to the consumer."

Changing conceptions of food safety and quality

Alongside these regulatory and food industry factors, broader demographic and social trends have altered the expectations and demands of consumers with respect to the safety and quality of food (Buzby *et al*., 2001; Jaffee and Henson, 2004). These attributes encompass the manner in which products are produced (for example organic versus conventional agricultural production methods) and the existence of substances in food that are perceived to be unsafe, including those purposefully used in food production (for example pesticides and hormones) and contaminants (for example PCBs and dioxins). Thus, food safety is no longer defined simply as 'fit for human consumption', but rather in terms of a wide array of safety attributes (Reardon *et al*., 2001) that range from search, through experience to credence attributes. A wide range of 'quality' attributes encompassing impacts on the environment, animal welfare, welfare of workers, and so on, have also been added to consumers concerns. Such attributes are almost universally credence in nature. As a result, consumers are looking for greater and more reliable (or at least what is perceived to be more reliable) information and assurance about the nature of the foods they are eating and the social environmental conditions under which it is produced (Jaffee and Henson, 2004; Kinsey, 2003). A multitude of private standards, including organic, SA 8000, Ethical Trading Initiative, Fair Trade and Freedom Food, have emerged in this context.

Globalisation

All of the above changes have taken place in the context of globalisation and its profound transformation of global agri-food markets. Increasingly, supply chains for agricultural and food products extend beyond national boundaries, facilitated in part by new food, communications and transportation technologies and a policy environment that encourages more liberal international trade. Global sourcing creates new sources of risk as food is subject to greater transformation and transportation and supply chains are fragmented across multiple enterprises. Geographic and/or cultural distance creates new challenges for the coordination and control systems that might mitigate these risks (Humphrey, 2008). At the same time, globalisation brings together diverse food production systems in terms of producer characteristics, regulatory frameworks, environmental conditions, technical expertise, etc. Where dominant players have made heavy investments in brand capital, the negative consequences of even a single food safety failure tends to breed high levels of risk adversity.

Actions by dominant players to manage food safety can have profound implications for actors at the other end of the supply chain, despite the fact that they may be geographically, economically and/or politically distant. Although there are limits to the extra-territorial application of national laws, legislation in developed country food markets increasingly specifies conditions of production and processing in food exporting countries and the legal responsibility placed on to business operators is a further driver to the development of private standards and process controls that span national boundaries.

Devolution of the state

Cutting across attempts to enhance the efficacy of regulatory systems in a number of industrialised countries, and most notably in Europe, governments have progressively shifted responsibility for food safety to the private sector, in turn establishing a motivation for private standards. This devolution of the state reflects a more general shift to neo-liberalism, reflected in enhanced fiscal constraints on public regulatory agencies and a belief that regulators should work with the private sector rather than seeing themselves simply as enforcers (Busch *et al*., 2005). For example, the preamble to the European Union's General Food Law legislation states that (CEC, 2002: preamble to paragraph 30):

> "A food business operator is best placed to devise a safe system for supplying food and ensuring that the food it supplies is safe; thus, it should have primary legal responsibility for ensuring food safety."

This implies that food firms should be responsible for establishing their own food safety control system and for ensuring this system works effectively, through some systems of auditing, while the role of government is to inspect and verify these audits (Marsden *et al.,* 2000). This has been combined in some countries with the growth of a 'name and shame' culture with respect to food legislation violations, creating new threats to brand capital. In the UK, in particular, the introduction through the 1990 Food Safety Act of 'strict liability' for food business operators, meant that they could no longer employ a 'warranty defence" (that their suppliers claimed that the food or food products they supplied were safe) and are only able to avoid legal responsibility if they can show that they have exercised 'due diligence' in ensuring that the supply chain is delivering safe food. This was a further significant spur to developing private food safety schemes.[12]

4.2 Private standards as a response to regulatory and consumer concerns about food

The four tendencies discussed in this section – increased concerns with food safety and with the origin of food and its broader social and environmental impacts, globalisation and greater responsibility placed on the private sector by public regulations – combine to create an environment in which businesses are under more pressure to deliver food safety and to maintain the integrity of their brands. They need to do this in the face of increasingly globalised and complex food supply chains.

Private standards act as a response to this challenge. The key role of standards, whether public or private, mandatory or voluntary, is to facilitate the coordination of agri-food value chains across space and between producers/firms and, in so doing, to transmit credible information on the nature of products and the conditions under which they are produced, processed and transported (Humphrey and Schmitz, 2000; 2001; Humphrey, 2008; Henson and Jaffee, 2008). In other words, one of the primary functions of private standards relating to food safety is risk management. This means providing a level of assurance that a product is in compliance with defined minimum product and/or process requirements.

However, given that the overall goals of private food safety standards are often defined in terms of providing assurances that food systems meet the requirements of public standards – such as EU regulations on maximum residue levels (MRLs) for pesticides in fresh fruit and vegetables in the case of GlobalGAP – and that these standards are also built around the public standards infrastructure and processes (use of HACCP,

12 Prior to the 1990 Food Safety Act, UK food legislation allowed for the so-called 'warranty' defence (Henson and Northen, 1998):

> "A person accused of an offence would escape conviction if they could prove that, when he bought the product, he obtained a written warranty from his supplier that the product could be lawfully sold or dealt with; that there was no reason to believe, when the offence was committed, that the true position was otherwise, and that the product was in the same state as when he bought it" (Humber Authorities Food Liaison Group, n.d).

The 1990 Act puts food business operators under 'strict liability' to sell safe food, but there is a statutory defence (i.e. one which is specified in the legislation) of due diligence. If all reasonable precautions are taken, the strict liability does not apply. In many European countries a positive case of negligence has to be proved. So, food business operators in countries which have not implemented strict liability are not subject to the same level of risk as in countries that have.

public laboratories, traceability, etc.), why are they needed at all? And why are companies prepared to go the expense of creating elaborate and costly private standards?

It is frequently suggested that private standards go beyond the requirements of public standards. It is important to understand precisely in which respects this is the case. There appear to be three different ways in which private standards can be seen to 'go beyond' public standards:

1. The private standard sets a higher standard for particular food product attributes, and/or supplements the end-product food safety standards laid down by legislation. The standards demanded by the importer in Box 1 extend to ethical trade, environmental impact and social accountability. Similarly, the Field to Fork standard of Marks and Spencer in the UK includes requirements that 'ban' around 70 pesticides in fruit and vegetables to be sold fresh or to be used as ingredients in prepared foods that are manufactured for sale under the Marks and Spencer own label.[13] This view of private standards as more stringent or more extensive than public standards is probably the most widely-held perspective on the relationship between private and public standards.
2. The private standard is much more specific about how to achieve certain goals and how to operationalise process standards than is the case with public standards. This is the most important function of private standards. In many cases public mandatory standards lay down the basic parameters of a food safety system, while private standards elaborate on what this system should 'look like' in order to be effective. This, for example, would be the relationship between public standards relating to food processing plants and the process controls laid down by standards such as the BRC Global Standard for Food Safety or IFS. The CAC standard specifies that controls should be in place, but it does not provide specific instructions or monitoring for the enforcement of this requirement. The predominant aim of these private standards is to provide for a level of protection against food safety failures beyond that inherent in mandatory public standards and associated systems of enforcement, and in a way that is consistent across supply chains that are increasingly global and thus traverse regulatory jurisdictions.
3. Extending the range of controls achieved by the standard beyond that provided for by the public mandatory standard. The coverage of standards may be extended both vertically and horizontally. Increased vertical coverage refers to how far along the value chain controls are in place. In the case shown in Box 1, the requirement for Best Aquaculture Practice (BAP) means much tighter regulation of shrimp ponds than would be provided for by national legislation. Thus, a series of additional process requirements with respect to food safety can be put in place, which extends down the value chain beyond the current scope of regulatory requirements. Similarly, the GlobalGAP standard operates as a pre-farm-gate process standard that is largely aimed at ensuring that fresh produce meets an EU mandated product standard; the regulations on MRLs for pesticides in fresh fruit and vegetables. Thus, private standards implement a series of process requirements that are specifically directed at compliance with a regulatory standard governing end-product safety. Alternatively, standards can extend requirements horizontally. In the case of the importer shown in Box 1, suppliers are also expected to meet non-mandatory standards such as the SA8000 social accountability standard and the ISO 14000 environmental standard.

In the second and third cases, private standards provide additional security against non-conformance with regulatory requirements and/or the erosion of brand capital. In further pursuit of these goals, a broader array of product and process attributes (for example environmental protection and labour conditions) is also established as requirements by the adopters of private standards, as referred to in the first case above.

Implementing a system of conformity assessment that provides a greater level of oversight than is afforded by prevailing systems of regulatory enforcement involves two elements. First, the predominant use of third party certification that takes both the standards adopter and the standards implementer out of the conformity assessment process.[14] This allows for an independent system of conformity assessment against an agreed and objective protocol. Second, the application of a governance structure and support system that ensures this system of third party certification works effectively. Examples include processes for certifier approval,

[13] See http://www.agrifoodstandards.net/en/news/global/m_s_revises_field_to_fork_assurance.htm (accessed March 2009)

[14] There are some exceptions here. In the case of private standards organizations and companies (see below), conformity assessment tends to be undertaken through second party certification, which is using the certifier's own auditing staff.

complaint handling, compliance monitoring, etc. The parameters for this governance structure are largely laid down by the international standards developed by ISO.

Thus, we see that private standards in the realm of risk management are multi-layered – hence the GFSI refers to these as 'schemes' rather than 'standards' – consisting of the standard *per se*, systems of certification and a standards and conformity assessment governance structure. While private standards, notably for food safety, do lay down requirements that are 'additional' to legal requirements, the predominant focus of these is regulatory compliance. At the same time, standards directed at risk management are encompassing a broader range of attributes; for example GlobalGAP has evolved to encompass elements of environmental protection (that lay outside of the realm of regulatory requirements) alongside the predominant focus on food safety (that remains largely focused on regulatory compliance).

Box 1: Certification demanded by UK seafood importer

"All prospective suppliers to … must now have achieved, or be working toward:

- Certification to the BRC, IFS or ISO 22000 standards for Quality Management.
- Certification to ISO14001, be preparing for it, or pass an independent inspection for responsible environmental management.
- Certification to the GAA standards for BAP conducted by an authorised ACC inspector.
- Successfully complete a third party inspection against the ETI Base Code.
- Successfully satisfy an inspection covering all aspects of GMP, GAP, GEM, and Social Accountability, conducted by one of the [company] technical team."

Source: Company presentation on supplier vetting

This concern with regulatory compliance and the mechanisms to achieve it is not, in fact, restricted to the private sector. When the EU sets out specific conditions for importing food from non-EU countries that require the competent authority in these countries to demonstrate that their food safety systems offer equivalent levels of safety to those provided by the EU (see for example, CEC, 2004: Article 48), it is also going beyond the Codex Alimentarius. Inspections and subsequent recommendations by the EU Food and Veterinary Office (see for example, European Commission, 2005) provide monitoring of the efficacy of the national enforcement system and suggestions as to how the system might be strengthened, together with penalties for non-compliance (in the case of the FVO inspection cited above, mandatory 100% inspections of seafood arriving in the EU). Here, as with many private standards, the issue is not the process standards themselves, but how effectively compliance is monitored and enforced.

The same arguments can be made with respect to public regulations concerning food of animal origin. The introduction of HACCP-based approaches in seafood production by governments in many different countries (see Cato, 1998; Allshouse, 2003; Haque, 2004) create many of the same challenges along the value chain and are aimed at securing safe food through process controls.

A second objective of private standards is to provide product differentiation. Standards can be adopted, such as the SA 8000 social accountability standard, to support claims to consumers that products have certain desirable characteristics. Generally speaking, claims about credence characteristics – attributes of a product that neither the retailer nor the consumer can verify through direct examination of the product – are backed up by standards which provide a credible basis for making the credence claims. Examples would be fair trade, eco-friendly, etc. There is relatively little evidence that private standards aim to achieve product differentiation on the basis of food safety, except perhaps as part of a blend of product and process attributes cutting across environmental protection, ethical and social issues and food safety. Most of the major food retailers, for example, recognise that market competition on the basis of food safety is likely to erode consumer confidence, although following widely-publicised claims about excessive pesticide residues, German supermarkets have been making competing claims about residues. More often, food safety claims are bundled with other claims, relating to factors such as environmental impact. Thus, Tesco's Nature's Choice is being used to support a broader branding strategy Nurture that differentiates fresh fruit and vegetables sold by this retailer:[15]

[15] See http://www.tesco.com/nurture/?page=nurturevalues (accessed March 2009)

> "Nurture was launched in 1992, to ensure Tesco delivers world class quality fruit and vegetables for our customers. It is an exclusive, independently accredited, quality standard that assures you, our customer, that Tesco fruit and vegetables are grown in an environmental and responsible way. Each grower is independently audited and monitored regularly to ensure we continue to meet the exacting standard."

Note here that food safety is not mentioned, explicitly, with the focus being placed on environmental and ethical aspects. It is evident that, in the context of Nurture, Tesco use their Nature's Choice standard to minimise the risk of food safety failures, but use the non-food safety aspects of the standard, along with other mechanisms[16], to differentiate on the basis of quality, environment and ethics.

The pursuit of risk control and differentiation can be motivated by different factors and adopted by different agents. For example, one outcome of consumer concerns about food safety has been that private sector actors have looked to offset the general decline in consumer confidence by presenting additional guarantees about the safety of the food that they provide to consumers. The origin of produce-origin standards, such as the UK's 'Red Tractor' label, lies in the damage caused by previous food scares. Similarly, the recent proliferation of competing claims by German supermarkets about how they control for pesticide residues originates in the damage caused by revelations about excessive pesticides in fresh fruit and vegetables.

In this context, it is possible to find competing standards adopted by different parts of agribusiness as a means of enhancing the value of their products and presenting differing claims to consumers. Following Aragrande *et al*. (2005), it can be observed that:

- Retailers make claims about superior characteristics of products (product differentiation) through developing company standards that support credence claims. These are company rather than collective standards because the aim is to differentiate one company's products from another.

- With respect to standards designed to achieve conformance with public regulations (such as the BRC Global Standard for Food Safety and GlobalGAP), the goal is to meet a minimum standard and avoid brand damage. Characteristically, this goal is achieved through the development of collective private standards. These business-to-business standards are not visible to the consumer. These may be national or international and scope and design.

- Producer associations may focus on safety questions, such as in the case of the 'Red Tractor' label in the UK, but the standards are made visible to the consumer as the intent is to argue that the food of one particular origin is safer than other food.

- In practice, particular standards often combine various elements. So, GlobalGAP is primarily concerned with food safety and pesticides, but has included elements relating to environmental impact, hygiene and labour (although the balance between these items has changed in different iterations of the standard). Similarly, Tesco Nature's Choice, through the sub-brand Nurture, is presented to the consumer largely in terms of quality and environmental benefits, but many of its elements relate to food safety and closely track GlobalGAP.

The foregoing discussion suggests that the predominant focus of private standards in the realm of food safety is risk management, predominantly motivated by the need of dominant players in the value chain to achieve a higher level of assurance with respect to regulatory compliance. This generally involves the development and/or adoption of private standards that drive the implementation of more rigorous process controls, either reinforcing regulatory requirements at a particular level of the value chain or extending process controls along the value chain. The main adopters of these private standards (including BRC Global Standard for Food Safety, IFS, SQF 2000 and GlobalGAP) are dominant buyers, predominantly large food retailers and food service companies. Where attempts to differentiate on the basis of food safety are observed, private standards are generally developed and implemented further up the value chain, notably in production, as a

[16] Notably compliance with the Ethical Trading Initiative (ETI) and reporting through the Supplier Ethical Data Exchange (SEDEX).

means to communicate to consumers that food of a particular origin or from a particular system of production is safer. An example is the Assured Food Standards in the UK. In most cases, private food safety standards have come to be developed collectively, reflecting that, at any level of the value chain, food safety has largely become a non-competiveness issue.[17] In the limited cases where individual firms promulgate standards that encompass food safety (for example Tesco's Nature's Choice), the food safety element is not presented to the consumer as basis for differentiation.

5 Governance of private food safety standards relative to Codex

Having outlined the institutional structure of private standards and the processes that have driven the development and evolution of these standards, this section turns to the governance structure of private standards setters, notably the specific organisational forms involved in establishing these standards and the processes by which standards are developed. In so doing, the aim is to compare and contrast the governance of private food safety standards and ISO with those of Codex. Thus, how do the processes by which standards are developed differ in terms of the structure of decision-making processes, the rigidity of these processes over time, and the degree of inclusivity and transparency?

5.1 Structure and decision-making structure of Codex Alimentarius

The CAC was established in 1963 to develop food standards, guidelines and related texts as part of the Joint FAO/WHO Food Standards Programme.[18] Codex has as its dual functions the enhancement of consumer protection and promotion of fair practices in international trade in food products. Specifically, it sets standards on food quality and safety, including food commodity standards and codes of hygienic or technological practice. In addition, Codex evaluates pesticides, food additives and veterinary drugs and establishes limits for pesticide residues and guidelines for contaminants.

Over time, Codex standards have been promoted as the key reference point for the development of national technical regulations in the area of food safety and quality. Thus, in 1985, United Nations Resolution 39/248 adopted guidelines for the elaboration and reinforcement of consumer protection policies, which stated:

> "When formulating national policies and plans with regard to food, Governments should take into account the need of all consumers for food security and should support and, as far as possible, adopt standards from the Food and Agriculture Organization's ... and the World Health Organization's Codex Alimentarius ..."

Further, the SPS Agreement determined that international standards, guidelines and recommendations were the key benchmark against which national technical regulations are evaluated within the legal parameters of the Uruguay Round Agreements (WTO, 1995):

> "Sanitary or phytosanitary measures which conform to international standards, guidelines or recommendations shall be deemed to be necessary to protect human, animal or plant life or health, and presumed to be consistent with the relevant provisions of this Agreement and of GATT 1994."

In this context, standards, guidelines and recommendations for food safety were defined as (WTO, 1995):

> "…..the standards, guidelines and recommendations established by the Codex Alimentarius Commission relating to food additives, veterinary drug and pesticide residues, contaminants, methods of analysis and sampling, and codes and guidelines of hygienic practice"

It is important to recognise these functions of Codex, and the increasingly formal position that the Commission plays in establishing rules for the elaboration of public mandatory standards (what are termed

[17] In the case of private food safety standards in production, there may be efforts to 'brand' food from the UK (for example) as safer than that from other countries, but these standards are not used to suggest that food from one UK producers is safer than that from another UK producer.

[18] See http://www.codexalimentarius.net/web/index_en.jsp (accessed March 2009)

'technical regulations' by the WTO) by Member nations, in understanding how and why international standards guidelines and recommendations for food safety are established.

Codex Alimentarius is a membership-based organisation, open to all Member Nations and Associate Members of FAO and/or WHO. All nation members, currently numbering 181[19], have equal status and ultimate authority lies with the Directors-General of FAO and WHO. Codex has a formal administrative and decision-making structure. It appoints Commission Officers as well as an Executive Committee composed of a chairperson and vice-chairpersons and seven regional members. The day-to-day work of Codex, however, is undertaken by a Secretariat at FAO under the charge of a Secretary, who serves as the Chief of the Joint FAO/WHO Food Standards Programme.

Codex Alimentarius has subsidiary bodies that are charged with the development and revision of international standards, guidelines and recommendations. Codex Committees are permanent entities with responsibilities for particular areas of food safety, for example veterinary drug residues in food or food import and export inspection systems, whilst time-limited *Ad Hoc* International Government Task Forces are formed to elaborate standards in specific areas. Both Codex Committees and *Ad Hoc* International Government Task Forces are chaired by a single member nation, which takes on the responsibility for managing the work programme and related costs. A parallel structure of Co-ordinating Committees exists through which regions or groups of countries co-ordinate food standards activities, for example through the elaboration of regional standards.

Codex has a highly structured process for standards-setting, as outlined below (CAC, 2007):

- The first phase in the standard-setting procedure begins with submission of a proposal for a standard to be developed by a national government or a subsidiary body of the Commission. This is followed by a decision by the Commission or the Executive Committee that a standard is developed as proposed. Formal criteria have been established to assist the Commission or Executive Committee in such decisions and in selecting or creating the subsidiary body to be responsible for steering the standard through its development.

- The preparation of a proposed draft standard is arranged by the Codex Secretariat, and is circulated to Member Governments and relevant international organisations for comments. The subsidiary body charged with the development of the standard considers these comments and incorporates these into a draft standard.

- The draft standard is sent to the Executive Committee for review and to the Commission for formal adoption as a draft standard. Standards can be developed through an accelerated process and, if so, at this stage the draft standard is presented to the Executive Committee for review and to the Commission for adoption as a Codex standard, omitting the stages below.

- The adopted draft standard is sent out for review by member governments and relevant international organisations. These comments are considered by the subsidiary body charged with the development of the standard.

- The draft standard is sent to the Executive Committee for review and to the Commission for adoption as a Codex Standard.

Codex makes every effort to reach agreement on the adoption or amendment of standards by consensus. Decisions to adopt or amend standards at the final stage in the development process may be taken by vote only when efforts to reach consensus have failed. Every member of the Commission has one vote and, if a vote is taken, must exercise it at the meeting in question. There is no electronic or postal voting. To date, Codex has had to resort to voting on a new or revised standard very rarely.

[19] Consisting of 180 member countries and one member organisation (see http://www.codexalimentarius.net, accessed May 2009).

Codex does not implement or assess conformity with the international standards, guidelines and recommendations it develops. Rather, implementation is dependent on adoption by Codex member governments, in whole or in part and formally or informally, and/or incorporation into the standards of other bodies, including private standards setters.

Participation in Codex meetings, including the Commission and subsidiary bodies, is open to member nations and *international* NGOs that have been granted observer status. A significant number of international industry and consumer organisations have been given observer status. However, only member governments have voting rights, and generally there is a hierarchy with which comments are taken by meeting chairs, with preference given to official member delegations. Members are also free to determine the composition of their own official delegations at Codex meetings, providing a route through which *national* industry and consumer organisations, for example, can participate. Further, most Codex members have established National Codex Committees, the structure of which often parallels the Codex Alimentarius Commission, through which national stakeholders can provide input to national positions on proposed standards.

5.2 International Organisation for Standardisation (ISO)

The main international organisation that develops food safety standards aside from Codex is ISO. While it is useful to compare the decision-making structure and processes of Codex and ISO, it is important to recognise the historically rather different mandate of these organisations, that sets the context in which they operate and their distinct membership. While Codex was established to define international standards, guidelines and recommendations that guide and establish rules for the elaboration of national regulations in the area of food safety and quality (see below), ISO's function is to set international standards that are predominantly voluntary in nature and extend across a wide range of products, services and management systems.

The ISO is an international NGO that develops standards across a wide range of areas and sectors, from product specifications through to management systems. In the realm of food safety, ISO has developed the ISO 22000:2005 standard on Food Safety Management Systems: Requirements for Any Organisation in the Food Chain. More broadly, ISO has developed a series of generic guides on the operation of systems of standards-setting and conformity assessment, for example on third party certification (Guide 28) and on the operation of inspection and certification bodies (Guides 62 and 65).

Reflecting its far greater size and wider scope, ISO has a highly formalised managerial structure akin to Codex. Thus, the membership of ISO consists of 160 national standards organisations. The mission of ISO is to promote the development of standardisation throughout the world in order to facilitate the international exchange of goods and services, as well as to develop co-operation in the spheres of intellectual, scientific, technological and economic activity (Henson *et al*., 2001). It establishes international standards in all technical fields, with the exception of electrical and electronic engineering. The operations of ISO are governed by a Council made up of five Principal Officers and 18 elected member bodies. The Council meets three times per year to develop proposals that are presented to ISO members at the annual general assembly. The Council appoints a Treasurer, a Technical Management Board and the Chairs of the Policy Development Committees. The Council is also responsible for setting the annual budget.

In terms of the definition of private standards employed in this paper, ISO standards occupy somewhat of a vague territory, reflecting the manner in which they are adopted by member standard-setting organisations. Thus, some members are public sector bodies and may implement ISO standards as either public voluntary or public mandatory standards. Other members are private entities, and tend to implement ISO standards as private voluntary standards, although implementation may become mandatory where governments reference such standards in regulatory requirements. Further, ISO holds a quite formal and influential position within the global trade governance and international standards-setting arena, being formally recognised by the TBT Agreement, and an observer to the SPS Committee in the WTO and Codex.

The technical work of ISO is decentralised, carried out through a hierarchy of technical committees, subcommittees and working groups. The participants in these committees include qualified representatives from industry, research institutes, government authorities, consumer bodies and international organisations. The major responsibility for administrating a standards committee is undertaken by one of the national standards bodies among the ISO membership. The member body holding the secretariat of a standards

committee normally appoints one or two persons to do the administrative and technical work. A committee chair assists members in reaching consensus. Technical Committees are made up of ISO members either as Participating members, who are obliged to attend the meetings and vote on documents, as well as Observer members who have the right – but not the obligation – to vote and attend meetings.

The standards-development procedure within ISO is highly structured and common to all standards. There are three key phases:

- The first phase involves the definition of the technical scope of the future standard. The need for a standard usually comes from an industry sector, which communicates this need to a national member body. The latter proposes the new work item to ISO, which allocates it to a Technical Committee. The proposal is circulated to the members of the Technical Committee and the desirability of the standard is voted upon. Once the need for an International Standard has been recognised and formally agreed, a working group made up of technical experts from interested countries defines the technical aspects to be covered in the standard.

- The second main phase is the consensus-building phase. When agreement has been reached on the technical scope of the standard, countries negotiate the detailed specifications within the standard. Every effort is made to achieve consensus at this stage, although a standard can proceed if two thirds of the members of the Technical Committee vote in favour.

- The third phase is formal approval of the resulting draft international standard. The draft standard is distributed to national standard organisations for approval and comments, first as a Final Draft International Standard and then as an International Standard. Formal approval is required at each stage from two-thirds of the ISO members that have participated actively in the standards development process and 75 percent of all members that vote. The final agreed text is then published as an ISO international standard.

ISO directives emphasise consensus as a procedural principle and a necessary condition for the preparation of international standards that will be accepted and widely used. Accordingly, the directives stress participation at the earlier stages of preparation and mutually agreed deadlines.

Once ISO has established a national standard, implementation is organised by member national standards bodies. For example, national standards bodies are responsible for certifying against ISO standards and/or accrediting other bodies to perform this function. In some cases, ISO standards are translated into national (for example UK or US) or regional (for example European) standards. Thus, as with Codex, ISO's role within the standards process is simply as a standards setter.

5.3 Governance of private food safety standards

Private food safety standards are developed by a variety of private and non-governmental organisations that differ in their institutional structure and degree of integration of processes of standards development, implementation and adoption. Figure 4 classifies these organisations according to their institutional form, which distinguishes between individual firm and collective private standards, as defined above. Thus, private food safety standards can be developed by individual firms – food firms that are also the adopters of these standards or by specialised standards firms. These private firm standards can either be subject to third party certification (for example Tesco's Nature's Choice) or be certified by the standards firm itself (for example AIB International). Alternatively, they can be developed collectively by private food firms, either through industry organisations (for example BRC) or by coalitions of firms that form for the specific purpose of standards development (for example GlobalGAP). Collective private food safety standards are generally linked to systems of third party certification.

Over time the relative importance of these different organisations in the elaboration of private food safety standards has changed profoundly (Henson and Northen, 1998); the drivers of this process are discussed above. In Europe, for example, this can be characterised as a shift from individual food firm and third party firm standards to collective private standards, developed by industry organisations and the formation of private standards coalitions (see below).

The genesis of private food safety standards in Europe can be traced back to the UK food retail sector in the mid-1990s. At this time, most of the major retailers had either developed their own food safety standards, and often inspected suppliers using their own technologists, or had adopted the standards developed and certified by a number of independent organisations or companies (for example EFSIS, RSSL, LawCred, etc.). It was recognised, however, that there was a considerable degree of overlap in the requirements of the major food retailers and that food processors supplying a number of these firms were subject to multiple audits. Thus, the concept of a collective private food safety standard evolved. It is not surprising that the BRC was involved; this was an existing trade organisation through which the food retailers already interacted on issues of common interest. Thus, the BRC Standard (now called the BRC Global Standard for Food Safety) emerged in 1998. As a consequence, most (but not all) of the major UK food retailers started to move away from implementing their own individual firm food safety standards, while existing independent standards organisations and companies shifted the focus of their business to certification against the BRC Standard.

Figure 4: Organisational forms of private food safety standards-setters

Category of Standards	Organisational Form	Examples
Individual Firm Standards	Private food firms	Nature's Choice (Tesco) Filière Qualité (Carrefour) Field-to-Fork (Marks & Spencer)
	Private standards firms	ProSafe Certified SCS Clean Food Standard PrimusLabs GAP Certification Program EFSIS Standards for Companies Supplying Food Products AIB Consolidated Standards
National or International Collective Standards	Industry organisations	BRC Global Standard for Food Safety International Food Standard SQF1000/2000
	Private standards coalitions	GlobalGAP Dutch HACCP Code Assured Food Standards

Source: Authors' elaboration

In turn, retailers in continental Europe saw the utility of a collective private food safety, and in 2000 a group of leading German food retailers developed the International Food Standard (IFS), again through an existing trade organisation, the Hauptverband des Deutschen Einzelhandels (HDE). In 2003, the Fédération des Entreprises du Commerce et de la Distribution (FCD), an organisation representing French food retailers, became involved in the further elaboration of the IFS. In so doing, the IFS became the first pan-European collective post-farm-gate private food safety standard.

Where there are no pre-existing industry organisations or where existing organisations are not considered to provide an appropriate institutional 'home' for private standards development, private standards coalitions tend to emerge. Two prominent examples are Dutch HACCP and EurepGAP/GlobalGAP. In the case of Dutch HACCP – a collective private post-farm-gate food safety standard in the Netherlands – a Dutch National Board of Experts was formed consisting of government, enforcement agencies, food retailers, food manufacturers, trade associations and consumer organisations. The Dutch HACCP standard was subsequently put under the ownership of a not-for-profit foundation. The EurepGAP standard – a collective private standard for fruit and vegetable production – was promulgated by the Euro-Retailer Produce Working Group (EUREP), a coalition of 13 major food retailers in Europe established in 1997. By 1999, a trans-national private protocol for the application of GAP by fresh produce suppliers had been agreed. By the mid-2000s, around 30 major food retailers in 12 European participated in EUREP, controlling an estimated 85 percent of fresh produce retail sales (Garcia Martinez and Poole, 2004).

The next, and most recent, stage in the evolution of private food safety standards was the emergence of the Global Food Safety Initiative (GFSI) as a benchmarking platform for private food safety standards. As in the UK in the late 1990s, but this time on a global scale, it was recognised that many food retailers (and also food service companies) had adopted similar private food safety standards. In Europe, the BRC Global Standard for Food safety, Dutch HACCP and the IFS were operating side-by-side in Europe, while the SQF standard had been developed in Australia and subsequently migrated to the United States (Henson, 2007). Thus, many of the larger food processors were simultaneously complying with, and being certified to, multiple private food safety standards. While the harmonisation of these standards was considered too great a challenge, the scope for these standards to be benchmarked was recognised towards the vision of "once certified, accepted everywhere". The GFSI has developed a benchmarking platform against which four collective private post-farm-gate food safety standards are currently recognised (GFSI, 2008). It has also implemented a comparable platform for private food safety standards in primary production, to which two standards are currently benchmarked.

We also observe considerable geographical differences in the relative importance of different institutions in the promulgation of private food safety standards, reflecting different regulatory systems and the structure and *modus operandi* of value chains. Thus, often long established private standards firms continue to play a key role in the United States, often providing certification services with respect to regulatory requirements and/or the voluntary food safety standards of the US government.[20] For example, the standards of AIB International are predominantly based on the collective of regulatory requirements of the Food and Drugs Administration (FDA) and/or USDA. Likewise, a number of standards companies have developed standards for the fresh produce sector, in response to the demands of the larger food retailers which require their suppliers to adhere to the FDA's Guide to Minimise Microbial Food Safety hazards for Fresh Fruits and vegetables (FAO, 2007). The apparent lack of private standards coalitions in the United States is also noteworthy, although it should be recognised that US producers and retailers have engaged with GlobalGAP, as the geographical focus of this series of standards has spread from Europe to being more global (and hence the change in name from EurepGAP). Food retailers, food service firms and food manufacturers in the US are also becoming more involved in GFSI.

5.4 Mechanisms of standards-setting of some major food private standards

The specific mechanisms employed to set private standards differ across and within the different forms of organisation outlined above. Below an attempt is made to identify the general characteristics of the standards-setting process in each type of organisation, illustrated with some specific examples.

Food firm standards

Individual food firm standards are both developed and adopted by private food companies, predominantly major food retailers and food service companies, such that these two processes are typically closely aligned. In companies that have retained appreciable technical capacities in the area of food safety (for example Tesco Stores and Marks and Spencer in the UK), these standards may be elaborated in-house, while companies that have more limited technical capability will tend to use external consultants. These processes tend to be largely closed, with little or no scope for input from stakeholders unless specifically 'invited' by the private food firm that is establishing the standard. In practice, however, it may be in the interest of firms that are developing private food safety standards to put in place a mechanism, whether formal or informal, to allow for wider input. On the one hand, this can provide a vehicle through which new developments and experiences can be brought into the standards-setting process. On the other, it may be in their interest to couch the standard as 'independent' for reasons of credibility with standards implementers and, if the standard is communicated to them, consumers. For example, on-going revisions to the Tesco Nature's Choice standard are guided by a Technical Advisory Committee consisting of members of Tesco's own technical team, producers, independent technical experts and CMi, the registrar of the Nature's Choice scheme (see below).[21]

[20] The well-established role of private standards firms in the US is illustrated by the fact that AIB International standards were first elaborated in 1956.

[21] See http://www.tescofarming.com/tnc.asp (accessed March 2009)

The primary driver of food firm standards is the perceived needs of the private firm itself, as both the developer and adopter of the standard. It should be recognised, however, that private food firms have no interest in food safety standards that their suppliers will struggle to comply with and/or that will impose inordinate costs on the value chains they participate in given the level of food safety protection afforded. The costs of complying with these standards have to be borne somewhere in the value chain, although they may be offset somewhat by improvements in overall system efficiency, either through higher prices paid by the standards adopter and/or lower margins for their suppliers. While there may be a tendency for dominant buyers to resist absorbing these costs, they are also mindful of the need to retain a critical base of reliable suppliers.

Private food firm standards are typically linked to second or third-party systems of certification whereby suppliers are audited annually. In the case of third-party certification, private certification firms are generally approved by the food firm elaborating the standard. For example, Tesco Stores contracts an external company (CMi) as the registrar of Nature's Choice. CMi manages the registration and certification of growers, using both its own auditing staff and independent auditors from approved international certification bodies. Marks and Spencer, conversely, manages the implementation of its Field to Fork standard in-house, while supplier audits are undertaken by its own technical staff and by approved independent auditors. The choice between these various approaches to supplier auditing and certification reflects the balance between cost and risk on the part of the firm setting and adopting the standard; third party certification, for example, pushes costs down the value chain but may be perceived as providing less security than if the firm undertakes its own audits of its suppliers (Henson and Northern, 1998).

Private standards firms and organisations

Private standards firms or organisations tend to develop standards using internal technical resources and/or external consultants. However, advice and guidance is usually obtained, formally or informally, from potential standards adopters. Most of these companies are 'for-profit' and their commercial success is dependent on the adoption of their standards within food value chains, predominantly by food retail and food service companies. As described above, in the US, where private standards companies remain a key element of the private food safety standards landscape, many of these standards are explicitly linked to compliance with regulatory requirements. Indeed, such standards largely consist of a synthesis of published regulatory documents or public voluntary standards.

Food safety standards established by private standards firms are generally certified by the standards firm itself. Indeed, the fees paid for certification are often the key revenue stream for such firms. For example, AIB International, an institute involved in education, technical advice and research as well as food safety services, derives at least 45 percent of its income from the provision of auditing and certification services to the food industry.[22] It is reasonable to infer that the viability of AIB International has become dependent on its audit and certification income.

Collective private standards

Collective private standards, whether developed by industry organisations or private standards coalitions, tend to be elaborated by technical committees consisting of member companies and, in some cases external experts, representatives of suppliers, etc. In many of these organisations the secretariat plays a key role in directing the standard-setting process. The central aim of the standards elaboration process is to reconcile the competing needs and demands of the ultimate adopters of these standards; as noted above, private standards are of little utility unless they are adopted. For this reason, the elaboration of collective private standards can take considerably longer than with food firm standards. While the costs for individual participants in the standard-setting process may be less than if they elaborated their own standard, the trade-off is the compromises that have to be made in order to establish an agreed collective standard.

The promulgation of collective private food safety standards is generally undertaken through a 'semi-closed' process, especially where the membership of the organisation elaborating the standard includes the key standards adopters. Typically, a multi-tiered decision-making structure exists that allows for technical inputs

[22] See https://www.aibonline.org/about/history/ (accessed March 2009)

from members of the industry organisation or standards coalition, and also other 'invited' stakeholders. Some examples are provided below.

The BRC Global Standard for Food Safety is an example of a standard where all of the major adopters of the standard – the major UK food retailers – are substantively involved in the standards-setting process. Revisions to the BRC Global Standard for Food Safety are managed by an internal Global Standards Team that receives guidance from a Technical Advisory Committee consisting of food retail and other stakeholders. The entire standards-setting process is overseen by a Governance and Strategy Committee consisting of BRC members and other international representatives.

The SQFI, which sets the SQF series of private food safety standards, operates largely autonomously of FMI, its parent organisation.[23] The declared mission of SQFI is: "To facilitate the independence and the integrity of SQF system and to provide leadership and service for all sectors of the global food industry by overseeing the technical aspects of the SQF Program." On-going review of the SQF standards is undertaken by a Technical Advisory Committee consisting of representatives of the food retail, manufacturing and production sectors, drawn from both the US and internationally. A series of Technical Sub-committees provides guidance on the implementation of the standards in particular sectors. The Technical Director of SQFI manages the activities of the Technical Advisory Committee and prepares and distributes documents for consideration by committee members. Given the large potential base of standards adopters, not all can be involved in the standard-setting process, and the Technical Director often solicits views more widely, for input to the Technical Advisory Committee. The eventual decision on changes to any of the SQF standards is made by the SQFI.

Arguably, the most open process of standards-setting within the realm of collective private food safety standards is undertaken by GlobalGAP. GlobalGAP is a single integrated standard with modular applications for different product groups, ranging from plant and livestock production to plant propagation materials and compound feed manufacturing. It has a quite highly structured process of decision-making with respect to standard-setting, which has evolved appreciably over time, reflecting broader organisational changes underlying the standard. Thus, over time the influence of the key standards adopters – the major European food retailers – has diminished, as the formal representation of producers/suppliers has been enhanced. The drivers of these changes are perhaps of lesser importance here than the implications for the standard-setting process, which has become progressively more open to input from stakeholders.[24] The substantive elements of the standards-setting process as it currently operates are as follows (GlobalGAP, 2008):

- The decision to proceed with work on a new or revised standard is taken by a Board of Directors, consisting of elected members with equal numbers from the food retail sector and production/supply sectors. Decisions are by consensus. The terms of reference are then drafted and posted on the GlobalGAP website, and stakeholders invited to comments.

- GlobalGAP Sector Committees are responsible for technical decision-making on elements of the standards that are relevant to their sector. The members of the Sector Committees are elected, with a balance between food retail and producer/supplier sector representatives. In practice, however, the Secretariat plays a key role in directing the establishment and revision of GlobalGAP standards.

- At two stages in the standards-setting process, draft standards are published on the GlobalGAP website for a period of 60 days and comments invited from stakeholders. These comments are compiled by the Secretariat and fed into the relevant Sector Committees.

- New or revised standards are first agreed by the relevant Sector Committee, by consensus where possible or a simple majority vote. The elected Board of Directors is responsible for final approval of the standard.

[23] See http://www.sqfi.com/about_us.htm (accessed March 2009)

24 In practice, representatives of the major food retailers retain the substantive have retained the substantive power in approving new or revised GlobalGAP standards. As the ultimate adopters of these standards, they are the ultimate arbiters of whether these standards are implemented or not in global value chains.

Beyond the two periods of stakeholder consultation undertaken as part of the standards-setting process, formal institutions have been established to facilitate and coordinate relations between GlobalGAP and stakeholders. For example:

- A Certification Body Committee, consisting of representatives of approved certification bodies, aims to provide feedback on implementation issues and enables certifiers to have a 'voice'.

- National Technical Working Groups, established voluntarily by GlobalGAP members, provide clarification on the implementation of standards on a local scale. The guidelines developed by these working groups are approved by the relevant Sector Committee and published on the GlobalGAP website. National Technical Working Groups also provide substantive input during the formal standard-setting process.

- In May 2007 a Smallholder Ambassador/Africa Observer project was established with funding from GTZ and DFID. The objective of this project was to provide feedback from smallholders to the Sector Committees on practical ways in which to facilitate smallholder compliance with the GlobalGAP standards.

The rapid growth of GlobalGAP has stimulated the development of private and/or public codes of good agricultural practice that have subsequently been formally recognised as equivalent in a number of countries. A formal benchmarking process has been established for this purpose, whereby an approved independent body undertakes an assessment process. To date, 13 national GAP schemes have been formally recognised as GlobalGAP equivalent, of which four are in developing countries.[25]

None of the organisations promulgating collective private food safety standards, whether industry organisations or standards coalitions, undertakes audits or certification to these standards, as required by ISO Guide 65. Rather, independent third party certification organisations are approved and permitted to certify to these standards. Firms that implement these standards are then free to choose from among the approved certifiers. For example, certification to the BRC Global Standard for Food Safety is undertaken by approved third party certification bodies. The BRC operates a formal referral/complaints procedure whereby feedback on the performance of certified processing facilities and/or approved certification bodies can be provided. Likewise GlobalGAP has signed agreements with over 100 independent certification bodies, which act as independent auditing and certification companies. These bodies are checked through a global integrity programme to ensure consistency and compliance with ISO Guide 65.

5.5 Global food safety initiative and benchmarking processes for private standards

As outlined above, the GFSI has developed as a benchmarking platform for established private food safety standards, which aims to reduce the duplication of certification and work towards a vision of "once certified, accepted everywhere". The GFSI has established a Guidance Document that has so far been applied to benchmark four private food safety standards applicable post-farm-gate (namely BRC Global Standard for Food Safety, IFS, Dutch HACCP and SQF 2000). As a result, seven of the major global food retailers have agreed to accept as equivalent these four benchmarked standards (GFSI, 2008).

The GFSI has a rather 'closed' system of decision-making with limited mechanisms for stakeholders, beyond members, to have a substantive role in the definition of the Guidance Document and/or the benchmarking of standards. At the same time, the GFSI has evolved over time from essentially a club of the largest food retailers to include other agri-food value chain stakeholders. Thus, a number of larger food manufacturers and food service firms have come to play a role in the decision-making processes of the GFSI. Smaller food retailers and manufacturers, however, have little or no voice.

The strategic direction and daily management of GFSI are overseen by the GFSI Foundation Board, consisting of large food retailers, food service operators and food manufacturer that are appointed by invitation. The Board has to approve any revisions to the Guidance document and the recognition of benchmarked standards. The Board is advised by the GFSI Technical Committee that consists of food

[25] See http://www.globalgap.org/cms/front_content.php?idcat=62 (accessed March 2009)

retailers, food service operators, food manufacturers, standards organisations, certification bodies, accreditation bodies, industry associations and other technical experts. Membership of the Technical Committee is by invitation. At a broad policy level there is scope for input from stakeholders more widely, through the GFSI Stakeholder Forum that meets annually to discuss food safety issues. Any issues raised at the Stakeholder Forum are considered by the GFSI Foundation Board in establishing the work programme for the GFSI Technical Committee.

6 The legitimacy of private food safety standards

The foregoing discussion has highlighted the motivations for the elaboration of private food safety standards and the use of associated processes of second or third party certification, and the governance structure of organisations that elaborate these standards with a particular emphasis on decision-making processes. The increasing importance of private standards in the production and trade of food raises the issue of the legitimacy of these standards. As Brunsson and Jacobsson (2000) argue, anyone can create a standard, and standards are merely rules that people can choose to follow or not. However, when standards are made legally mandatory through their adoption by governments (the case of legally mandated private standards presented in Figure 2 above), or when standards are adopted widely enough to change conditions of market access (i.e. they become *de facto* market requirements, their impact becomes an issue. If, in the extreme case, compliance with a standard becomes a pre-condition for access to important markets, it has direct effects on those who are obliged to adopt it. There will be concerns about along the same lines as with regulations introduced by national governments – are they proportionate to the risk, are they scientifically-based, and is the burden of compliance distributed fairly?

Putting aside the administrative position of private food safety standards with respect to the WTO, which is discussed below, the following indicators might be used to assess the 'legitimacy' of these standards. Note that the term legitimacy is used loosely to mean 'fairness' rather than in a strict legal or ethical sense:

- Extent to which the standards-setting process is transparent.
- Extent to which agri-food value chain stakeholders can have a substantive influence on the standards-setting process.
- Extent to which developing country interests are taken into account in the standards-setting process.
- Speed of the standards-setting process and responsiveness to the demand for new or revised standards.
- Degree to which the standards-setting process itself can evolve as needs change.
- Degree to which standards promote processes of harmonisation and/or benchmarking of food safety requirements.
- Degree to which these standards are risk-based and/or permit particular levels of food safety protection to be achieved more efficiently.

We consider each of these indicators of legitimacy below. In so doing, no attempt is made to prioritise these indicators, and there may be other metrics that could be considered. The aim is not to judge whether Codex (for example) is more or less legitimate than GlobalGAP or the BRC (for example) as setters of private food safety standards. Rather, this section highlights the 'strengths' and 'weaknesses' of Codex and private standards with respect to the broad indicators that are defined above.

Broadly, the standards-setting processes of Codex are significantly more transparent than those of organisations elaborating private food safety standards, and of ISO. For example, detailed reports of meetings of Codex subsidiary committees and the Codex Alimentarius Commission are published and distributed on the Codex website. Further, some member governments compile and disseminate their own summary reports on Codex meetings, for example the US. In contrast, the minutes of meetings of private standards-setting organisations are generally not made public, making it difficult to see how competing

interests have influenced the elaboration of private standards. The rather translucent nature of private standards-setting should, perhaps, not be a surprise. These standards are predominantly driven by the needs of standards adopters, which are also the predominant 'voice' in the standard-setting process and there is no evident benefit from enhanced disclosure of how these standards are set, especially where these are business-to-business standards that are not communicated to consumers.

With respect to the inclusivity of agri-food value chain stakeholders, Codex has a number of mechanisms through which international NGOs can have a voice in the standard-setting process. International NGOs, including industry and consumer organisations, can attend meetings of subsidiary bodies of the Commission as official observers. Depending on the country, national NGOs are permitted to attend Codex meetings as part of official delegations and can also participate in National Codex Committees. It is evident that a significant number of international and national NGOs do participate in this way (Henson, 2002). Indeed, the evaluation of Codex concluded in December 2002 considered that it was considerably more open and accepting of NGOs than many international organisations (CAC, 2002). In contrast, most private food safety standards are elaborated through a rather 'closed' process in which only select (usually industry) stakeholders can participate. In general, consumer organisations have little or no role in this process. Indeed, Hirst (2001) claims:

> "The inclusiveness and transparency of the private standard-setting process can be at least as problematic as that of public regulations, but without the multilateral guarantees of the SPS and TBT Agreements."

GlobalGAP, however, stands out as an organisation in which standards-setting is relatively open. Draft standards are subject to two periods of open consultation, with responses feeding into the formal decision-making procedures. Further, formal mechanisms exist for the experiences and interests of certification bodies and of implementers of the GlobalGAP standards at the national level to be fed back to the GlobalGAP Secretariat. Of course, the ability of stakeholders to engage with GlobalGAP and to represent their interests will reflect their capacity – technical, financial and human – to do so and there are evident concerns in this regard with respect to developing countries, consumer organisations, etc. Large exporters and trade associations in leading exporting countries will be more able to participate and set agendas.

The level of developing country participation in the elaboration of international standards by Codex, ISO and other international standards organisations has long been recognised to be a problem (Henson *et al*, 2001; World Bank, 2005; CAC, 2002; UNCTAD, 2007a). In the case of Codex, despite efforts to provide financial and/or technical assistance, for example through the Codex Trust Fund, regular participation by developing countries is typically limited to a relatively small number of larger middle-income countries (for example Argentina, Brazil, Chile, China, India, Malaysia, Mexico, South Africa, and Thailand). Most other developing countries (and especially the majority of low-income countries) attend meetings only irregularly. Indeed, their participation in meetings of subsidiary bodies, where standards are actually elaborated, remains very low.

In the case of private food safety standards, it would appear that developing country interests play little role in the setting of standards, reflecting the fact that the key stakeholders in these organisations are commercial interests (rather than nation states) in industrialised countries. The one exception is GlobalGAP, which has engaged with DFID and GTZ to establish a Smallholder Consultation/Africa Observer that has been charged with making recommendations as to how the GlobalGAP standards can be made more appropriate for smallholder production with a view to reducing costs of compliance. Whether this has an appreciable impact on the standard-setting process is yet to be seen. Much of the impetus for this initiative has been the quite considerable criticism of the GlobalGAP standard and its effects on smallholders, predominantly in sub-Saharan Africa (see below). Indeed, GlobalGAP has arguably become the *cause celebre* among critics of private food safety standards, both in the WTO and more broadly (see below). Some other private standards have also been the course of considerable consternation among advocates of smallholders in developing countries (for example Tesco Nature's Choice) although it is not evident that this has brought about similar initiatives to those in GlobalGAP.

One of the greatest criticisms of Codex, and of other international standards organisations, is the time and other resources expended in elaborating new or revised standards (Henson, 2002). It is argued that, because

of the drive to achieve consensus among 180 nation state members that differ widely in their priorities and levels of economic development, the elaboration of standards is slow and cumbersome. Thus, it is not unusual for a Codex standard, guideline or recommendation to take a number of years to be finally adopted by the Commission (Henson, 2002). This contrasts with the needs of agri-food value chain stakeholders, and notably larger food retailers and manufacturers, for standards to be elaborated or revised rapidly as circumstances change. Indeed, many private standards organisations have streamlined standards-setting processes that are also well resourced; as well as a paid Secretariat, the commercial members of these organisations provide the services of their technical personnel and cover the associated travel costs to attend meetings. At the same time, of course, a rather narrow set of interests enters into the standards-setting process, such that much of the substantive debate relates to technical issues rather than the need for the standard and its overall objectives. For example the BRC Global Standard for Food Safety was revised five times over the period 1998 to 2008 (Swoffer, 2009). Likewise, while differences have been noted between the ISO 22000 standard and the GFSI Guidance Document (notably related to accreditation processes, best manufacturing practice and ownership) (GFSI, 2008), the CIAA (a European food and drink industry organisation) has developed a pre-requisite programme that, in conjunction with ISO 22000, is likely to be benchmarked against the current version of the GFSI Guidance Document. The private standards organisation that perhaps has the most elaborate standards setting process, GlobalGAP, is nevertheless able to update its standards every four years.

One of the factors contributing to the efficiency of standards-setting in private standards organisations is their ability to adapt as circumstances change. For example, both GFSI and GlobalGAP have widened their membership to include new agri-food value chain stakeholders, and have assimilated this broader base of stakeholders into the standard-setting process. GlobalGAP also shows a capacity to track changing EU legislation, introducing new elements into the standard as the regulations in the EU market change. Again this reflects the fact that these organisations are driven by rather narrow sectoral interests and have lean managerial structures. This contrasts to Codex which, as in the standard-setting process itself, is largely driven by decision-making on the basis of consensus. Thus, it is perhaps not surprising that a number of the institutional changes recommended by the review of Codex in 2002 were not subsequently adopted.

One of the key drivers of Codex is the elaboration of international standards that will foster the progressive harmonisation of food safety standards globally. Indeed, the SPS Agreement specifically references Codex standards, guidelines and recommendations and provides an automatic route through which WTO Members can comply with the Agreement; by basing their national measures on the standards, guidelines and recommendations adopted by Codex (Roberts, 1998). Evidence suggests, however, that the harmonisation of national food safety regulations around international standards has been relatively slow (Roberts and Unnevehr, 2005).[26] One of the key criticisms of private food safety standards is that they undermine the process of harmonisation, introducing a new layer of governance that further fragments national markets according to the food safety requirements with which exporters must comply (Henson, 2007). While it is undoubtedly true that private food safety standards have served to discriminate agri-food value chains according to the food safety standard adopted by major buyers, it is also evident that private standards organisations have themselves driven processes of harmonisation, and equivalence.[27] Some notable examples described above are the elaboration of the BRC Global Standard for Food Safety in the UK (Henson and Northen, 1998) and the subsequent establishment of the GFSI at the global level. Arguably, these processes of harmonisation and equivalence have proceeded much faster than could be achieved under the Codex and WTO framework. Further, it might be hypothesised that, given the proportion of global food trade the major food retailers, food service firms and food manufacturers now represent, the elaboration of collective private food safety standards and their benchmarking to one another has made a substantive contribution to the harmonisation of food safety standards globally.

[26] It is important to recognise that measurement of the degree of harmonisation of food safety standards is far from straightforward. At the same time, many Codex standards, recommendations and guidelines act as the foundations of national public standards, and also private food safety standards (as is discussed in this paper), such that the level of harmonisation that can be observed is probably greater than would be the case if Codex did not exist.

[27] At the same time, the highly prescriptive nature of private food standards standards can impede processes of equivalence. Such specify reflects, in part, the fact that private standards are auditable according to ISO Guide 65.

Finally, even where the elaboration of private food safety standards on the part of agri-food chain stakeholders is recognised to be legitimate in principle, one of the key concerns about these standards in practice is that they are purported not to be science-based (WTO, 2008b). The SPS Agreement requires that WTO members demonstrate that their national food safety measures have been based on a science-based risk assessment (Roberts, 1998). Where these national measures are based on a Codex standard, Guidelines or recommendation, this requirement is deemed to be satisfied, such that risk assessment has also become central to standards-setting in Codex. It is important at this point to be clear about what is meant by a risk assessment. Thus, WTO members are free to determine their own 'appropriate level of protection' (Henson, 2001), but must then demonstrate that the measures they put in place are compatible with this declared level of protection.

Private food safety standards, to the extent that they fall outside of the purview of the WTO (see below) are not bound by such rules. At the same time, one of the predominant drivers of private food safety standards is risk management (see above), driven by the level of protection required of standards adopters in the context of the regulatory requirements in which they operate. Presumably, adopters of private food safety standards would not engage in the development of these standards and/or impose additional costs on their supply chains unless further and necessary protection was provided to them. Thus, in certain cases private food safety standards simply put in place process requirements in pursuit of end-product food safety performance as required by regulations. Here, private standards may not enhance appreciably the level of food safety afforded by regulatory requirements, but provide additional assurances that the desired level of protection has been achieved and/or lay out a road map through which legal compliance is to be achieved. In other cases, private food safety standards may extend regulatory requirements or indeed put in place stipulations where no regulatory requirements exist. Here it might be expected that the level of food safety protection afforded is enhanced. The key driver in such cases is likely to be consumer demand; presumably standards adopters see that the consumers they supply are looking for additional (real or perceived) food safety protection and are responding accordingly. Again, why would profit-making businesses engage in costly system of private food safety control if there is not a sound commercial reason for doing so?

7 Impact of meeting private standards along the food chain

7.1 Impact on producers

There are substantial impacts along agri-food value chains arising from the introduction of certification-based private food safety standards. These reflect the scale of the changes that are required to be made to established methods of production and the degree to which the associated costs are ‘shared’ along the value chain. The basic principles of standards schemes are:

- Control of risks through introduction of control points and use of procedures specified in the standard.
- Verification of application of specified process controls through documentation.
- Internal audit by the business operator.
- External audit by a certification body, which is generally itself accredited by an (often official) accreditation body.

Arguably, at the level of post farm-gate, and specifically in processing facilities, the introduction of such standards does not represent a major break with pre-existing controls. Comparable systems of control are increasingly inherent in contemporary public regulations governing production and processing of food of animal origin. The costs of implementing HACCP-based systems in processing have been analysed extensively (see for example, Cato, 1998). In cases of animal disease control, public regulations may impose complex controls at multiple points along value chains. Such an approach, however, does represent a radical shift when applied to primary production, and this is the main focus of this section. Widely-implemented private standards such as GlobalGAP and the Aquaculture Certification Council's Best Aquaculture Practice

(BAP) standard for shrimp require substantial changes in practices and controls at the level of the farm or the pond.[28]

In this section, the focus is on three elements of this impact: 1) the complexity of implementation; 2) the costs of implementation and who bears them; and 3) the potential exclusion of small producers. Particular attention will be given to GlobalGAP because a number of in-depth studies of the implications of this standard at the farm level have been undertaken in Africa in recent years, and because it is a high-profile well-known private standard.[29]

Before proceeding, it is important to note that private food safety standards only affect those firms and farms which decide to implement them, or which are integrated into the supply chains of firms that make them obligatory for their suppliers. Clearly, processes of industry concentration in food processing and retailing mean that the reach of these standards is increasing. At the same time, however, there remain many food products that are traded internationally through wholesale markets and through outlets that do not require adoption of private food safety standards (Jaffee, 2003; World Bank, 2005).

Complexity of implementation

For many small farmers, introducing process-based food safety standards represents a radical departure from previous practice. The main exception is farmers that are already integrated into exporter out-grower scheme, with associated systems of technical support. The objective of a process standard is to limit risk through the introduction of process controls and allied procedures for their verification. The core nature of these controls and procedures is illustrated in Box 2 that shows procedures relating to one small part of the standard, rules for pesticide applications. The critical point to note is that these procedures relate not only to the way that pesticides are applied, but also the decision-making processes involved and the competence of staff: farms have to demonstrate that specific procedures designed to produce particular desired outputs are being followed and that decision-making relating to these procedures is appropriate and informed. In turn, this requires that documentation and record-keeping systems are established and maintained. When, as is possible with GlobalGAP, small farms join together to obtain group certification as a means of reducing inspection and certification costs, there are further hurdles to overcome relating to the development of a Quality Management System (QMS). This is designed to ensure that the integrity of the process control system is maintained in spite of the involvement of multiple farms in the group.

Costs of implementation

How much would it cost a farmer to start from scratch and reach the level required to obtain GlobalGAP certification? Although it is argued below that this is the wrong question to ask, a number of researchers have explored this issue. The costs of introducing GlobalGAP include:

- Changing farming practices. This includes using non-chemical pest controls and crop rotation.
- Training farmers in the principles of GlobalGAP.
- Capital investments in infrastructure required for the standard, including pesticide stores, latrines, properly constructed grading sheds, running water and chemical disposal pits.
- Soil and water analysis.
- The costs of certification itself.
- Investments in control systems and the costs of maintaining the system (the daily cost of monitoring, control and form filling).

28 GlobalGAP is best known through its application in the production of fresh fruit and vegetables, which was the original focus of the standard. However, now the standard can be applied to a range of products, including plants, livestock and aquaculture (http://www.globalgap.org/cms/front_content.php?idcat=3). The focus of the discussion in this section of the paper is on its impact on producers of fresh fruit and vegetables where penetration to date has been greatest.

29 This section draws substantially on Humphrey (2008), and on a workshop hosted by IIED in London in March 2008.

Various studies have tried to estimate these costs. Two substantial analyses have been undertaken for export horticultural production in Kenya by Graffham *et al.* (2007) and by Mithöfer *et al.* (2007) and Asfaw *et al.* ((2008). The findings of these reports with respect to costs are mostly consistent and can be summarised as follows:

Box 2: Specifications for pesticide use in EurepGAP, Revision 2

1. Show that crop protection has been 'achieved with the appropriate minimum crop protection products input' (Control Point 8.1.1). This is to be achieved through documentation of crop protection product inputs, including the justifications for their use, their targets and the intervention thresholds.
2. The farm receives assistance with implementation of integrated pest management either through formal, documented training of the technically responsible person on the farm, or from an external consultant whose technical qualifications can be demonstrated (Control Point 8.1.4).
3. Crop protection products applied are appropriate for the target crop (Control Point 8.2.1).
4. Only registered crop protection products are used (Control Point 8.2.2).
5. Crop protection product application records 'confirm that no crop protection product has been used within the past 12 months on the crops grown under EUREPGAP destined for sale within the EU having been prohibited by the EU' (Control Point 8.2.5).
6. Confirm that the choice of crop protection products has been made by a competent person, indicated through records as to the person making the choice and documentation of the person's qualification or training. If the farmer makes the choice, his/her competence must also be indicated in this way (Control Points 8.2.6 and 8.2.7).
7. Crop protection records must indicate the name and variety of the crop treated, the geographical area, the exact date and the name and active ingredient (Control Points 8.3.1 to 8.3.4).
8. Use of the previous item together with harvesting dates to indicate that pre-harvest intervals have been met (Control Point 8.3.10).

Source: EUREPGAP (2005)

- The costs of introducing GlobalGAP are substantial, although they vary considerably. Graffham *et al.* (2007) calculated the cost of various schemes introduced by exporters to meet the EUREPGAP standard in the run-up to its introduction for Kenyan exports to some EU supermarkets in January 2005. The cost per farm of different schemes ranged from £100 per farm to £2,800. These variations are partly the result of different scales: schemes involving more farmers reduce the per farm cost, and the cost per farm reduces substantially when more than 50 growers are involved (Graffham *et al*., 2007). However, it seems likely that, in addition to inconsistencies in the way that companies calculate costs, these estimates reflect substantial differences in the preparedness of different exporters. Exporters with highly organised out-grower schemes would already have had in place many of the elements required by GlobalGAP (see below).

- In many cases donors provided subsidies, particularly for start-up costs. The extent of donor support for initial costs varied substantially between exporters, ranging from 100 percent of the initial costs of one scheme to zero percent for others. Across 10 exporters, donor support for initial costs averaged 20 percent. The farmers themselves contributed 36 percent and the exporters 44 percent (Graffham *et al.* 2007).

- Notwithstanding the high level of exporter contributions to recurrent costs, these still represent a substantial burden for small farmers. Graffham *et al.* (2007) calculate that the true cost per farm of small farmer certification is over £1000, and that an average 36 percent of total cost contributed by farmers works out at £433. They further calculate that this initial investment would have to be

financed out of a production margin before labour costs for small farmers of only £182 per annum. Similarly, Asfaw *et al.* (2008) found that the initial and recurrent cost per group member of GlobalGAP certification amounted to one third of farmers' annual income even when exporters and donors paid for substantial costs such as external auditing, certification, training and soil analysis.

These findings lead Graffham *et al.* (2007) to the conclusion that the financial viability of GlobalGAP is marginal and that, without substantial initial subsidy, it would be impossible for farmers to be financially viable in this context. Such estimates of financial viability are, however, very sensitive to both the share of initial costs borne by farmers and future variations in recurrent costs. Mithöfer *et al.* (2007) compared farmer groups and larger farms, finding that, even with substantial support from exporters and donors, the break-even period for small farmer investments in GlobalGAP compliance was three years, compared to one month for exporter-owned farms and 12 months for large contract farms.

Both of these studies do identify some positive outcomes for small farmers of the introduction of GlobalGAP. For example, some costs are reduced, particularly those relating to reduced pesticide application. Furthermore, there are clear gains with respect to the health and safety of both farmers and family members. There are also some indications of enhancement in farm efficiency, that can spill over into other crops, including those produced for own consumption. Despite these offsetting benefits, however, the 'bottom line' from the small farmer perspective is that GlobalGAP does not make economic sense. We will discuss this argument further below.

Potential exclusion of small producers

There is an on-going debate about the impact of private standards on small producers, which has presented an increasing spectre of smallholder exclusion (Dolan and Humphrey, 2000; Jaffee, 2003; Okello, 2005; Jensen, 2004; OECD, 2006), with a particular focus on GlobalGAP (see for example Graffham *et al*., 2007). Evidence from Kenya seems to suggest that the introduction of GlobalGAP has reduced the participation of small farmers in the export vegetable business. A study of 10 exporters by Graffham *et al.* (2007) shows that the number of small-scale growers fell by more than 50 percent in the year following January 2005 when certification supposedly became obligatory for farmers supplying UK supermarkets. However, the data on this issue appear to be somewhat unreliable. There is evidence of 'churning' of small farmers and the outsourcing of vegetable production from large exporters to subcontracted farms that have developed their own out-grower schemes. As a result, the fall in out-grower numbers at particular exporters registered by Graffham *et al.* may be offset by increases elsewhere. Sources from Kenya suggest that, on the ground in rural areas, there is no convincing evidence of a large-scale expulsion of small farmers from a production segment that has been very lucrative for these farmers in the past. Arguably, had expulsion taken place on a large-scale, one would have expected to find more evidence.

Notwithstanding this uncertainty, there is little doubt that the cost burden per unit of production of introducing GlobalGAP on small farms is much greater than on larger farms. First, the degree of transformation of pre-existing farming practices is likely to be more substantial, particularly with respect to low-pesticide production methods. Second, there are economies of scale in certification and in some parts of compliance, such as soil and water testing. Third, there are significant differences in recurrent costs for farms of differing size. In particular, Mithöfer *et al.* (2007) report that farmer groups had to input 3.5 hours per acre per week to monitoring activities, compared to only 0.1 hours per acre per week for large contracted farmers. So, it does appear that GlobalGAP reduces the cost advantage that small farmers are generally held to possess in the production of labour intensive crops such as fresh vegetables, and in particular green beans.

The small producer exclusion argument, however, turns out to be rather more complex than is often suggested. The introduction of GlobalGAP, and by implication the introduction of similar process-based standards at the farm level, certainly does change the economics of small-scale farms. Thus, GlobalGAP increases the costs faced by exporters; the costs of operating the certification scheme and maintaining the integrity of its controls is considerably higher in supply chains consisting of appreciable numbers of small farmers than if exporters procure from a limited number of medium or large-scale producers. To the extent that small farmers are maintained as suppliers, many of the costs of GlobalGAP fall to the exporter. The exporter, in order to stay in business, has to provide their customers with certified produce. Consequently,

they are not able to force down the revenue of farmers to low levels (for example as suggested by Graffham *et al*., 2007) and maintain supply.

Given this picture, why would exporters not switch away from small producers as an increasing proportion of their customers adopt GlobalGAP? Switching production towards large farms is only possible when land is available for large-scale farming, and when such a shift is politically acceptable. In many parts of Africa and Asia this may not be the case. At the same time, small producers are an effective mechanism to spread risk, such that some exporters maintain a supply base of small producers to complement their own production and/or sourcing from larger producers. Small producers themselves have also responded to the challenges presented by GlobalGAP. Thus, there is a definite shift towards more educated farmers working on larger plots. These farmers have the skills and resources needed to meet the GlobalGAP standard. Producers have also organised themselves, for example into marketing organisations. Recent evidence from Morocco suggests that the level of organisation of farmers is more critical to the participation in export value chains for tomatoes than farm size (Chemnitz, 2007).

Putting aside the debate about whether or not small producers are excluded from value chains as a result of private standards such as GlobalGAP, to what extent would such a trend undermine poverty reduction in rural areas? There are three reasons for suggesting that the impact would not be substantial. First, there is convincing evidence that the numbers of smallholders that are potentially affected is actually quite small. For example, estimates of the number of smallholders engaged in the production of horticultural crops for export in Kenya, which is the dominant exporter in sub-Saharan Africa, range from a low of around 10-15,000 (Mithöfer *et al*., 2008; Jaffee, 2003) to a high of 108,000 (Minot and Ngigi, 2003), with various estimates in-between (Ebony Consulting International, 2001; Karuga and Masbayi, 2004). Regardless of which of these estimates is accepted, it is evident that only a relatively small proportion of the 100,000s of smallholders in Kenya are engaged in the production of horticultural crops for export and might be affected by GlobalGAP in the foreseeable future.

Second, there is also evidence that small producers that produce for export tend not to be among the poorest (Maertens and Swinnen, 2009). This is perhaps not surprising; in general, to participate in export value chains for perishable or semi-perishable products, a farmer needs to have land, have reasonable access to water, be relatively near to reliable transport infrastructure, have reliable means to communicate with exporters, etc. Thus, studies have shown that producers of horticultural crops for export tend to be larger, are better educated, have more assets and higher levels of household wealth and have better access to services and to family labour than non-participants (Swinnen, 2007; Asfaw *et al*., 2008). Third, comparisons of the poverty reduction impact of large-scale and smallholder fresh vegetable production suggest that this impact is roughly the same whichever production system is used (McCulloch and Ota, 2002; Maertens and Swinnen, 2009).

7.2 Food processing and handling

There has been relatively little analysis of the impact of private food safety standards on the structure and *modus operandi* of the processing sector in developing countries, reflecting the predominant concern about effects on small producers. The evidence that does exist, however, suggests that the challenges and costs of compliance can induce processes of rationalisation that tend to expel smaller and/or more marginal processors/exporters, despite the fact that the level of transformation of many export products is actually rather small. This reflects economies of scale in processes of compliance (see for example OECD, 2006). For example, in the Kenyan context, Jaffee (2003) suggests that many of the original exporters of fresh vegetables have left the sector, which has been progressively dominated by a handful of large firms. The skills required to manage processes of compliance with private food safety standards can also act as barriers to entry, suggesting that there may be an appreciable first mover advantage. Thus, we are likely to observe that private standards, alongside other competiveness factors, bring about processes of consolidation and concentration in global value chains that can have important (and potentially negative) welfare implications. More research is needed on this issue.

The increasing role of private food safety standards in export value chains from developing countries has served to enhance the critical role that exporters play in linking producers and industrialised country buyers (OECD, 2006). Thus, exporters provide the main mechanism through which demand specifications are

transmitted along the value chain, and through which compliance processes are managed. The critical role of exporters in providing technical and financial support to small producers in achieving compliance with standards such as GlobalGAP has been highlighted above. At the same time, leading exporters can provide an efficient entry point for donor support; this is seen, for example, with the EU-funded Pesticide Implementation programme (PIP), a major element of which has been the enhancement of exporter capacity to procure from small producers in the context of private food safety standards (Henson and Masakure, 2008).

7.3 Welfare of domestic consumers

Broadly, export value chains in many developing countries operate quite separately from value chains to domestic markets. Thus, there may be little direct impact on the welfare of domestic consumers, except through income flows to producers, farm workers, employees in processing facilities, which number of studies have shown employment to be considerable (see for example McCulloch, 2002; Dries and Swinnen, 2004; Gulati *et al*., 2007; Minten *et al*., 2008; Maertens and Swinnen, 2009). Sub-standard or excess supplies of export produce may flow into domestic markets, and have arguably been produced to higher safety standards than most other products that flow onto domestic markets, although the volumes are low and many of these products see very little local demand.

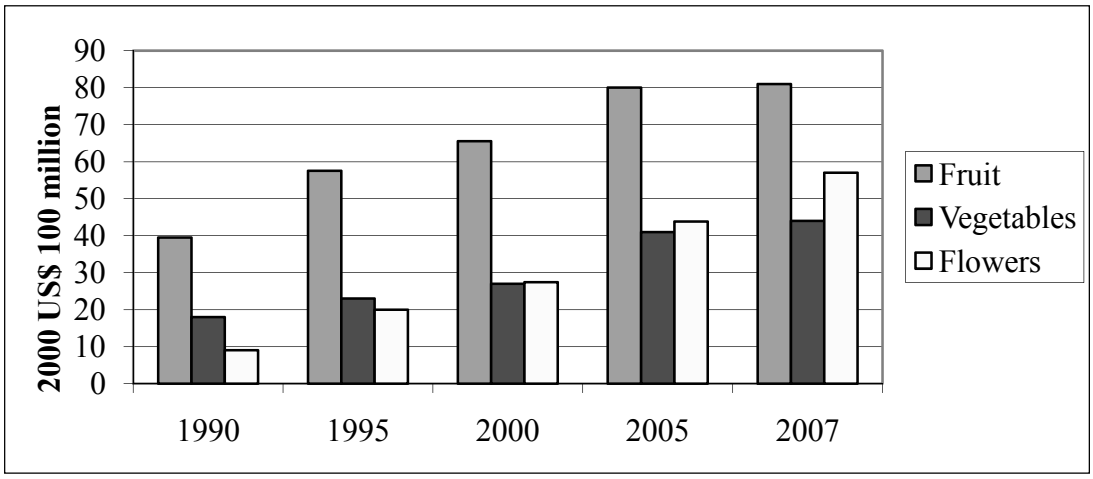
Where private food safety standards may bring about appreciably improvements in the welfare of domestic consumers in developing countries, through enhanced product safety and quality, is their adoption in local value chains. The predominant driver here is the emergence of the domestic supermarket sector in developing countries, and also the emergence of some market-led processing firms (see for example Reardon *et al*., 2003; Weatherspoon and Reardon, 2005). While talk of a 'supermarket revolution' has recently been tempered somewhat, especially in the context of sub-Saharan Africa (see for example Humphrey, 2007), there are undoubted examples of multinational food retailers, in particular, starting to employ private food safety standards. For those consumers that have the disposable income to patronise supermarkets, there are evidently benefits in terms of food safety and quality, choice, etc.

8 Private food standards and trade

8.1 What impact do private food safety standards have on trade?

Trends in food consumption patterns in industrialised countries are bringing about profound changes in markets for agricultural and food products that present potentially valuable opportunities for developing countries (Jaffee and Henson, 2004). Consumers are demanding a wider choice of agro-food products year-round, that they are confident are safe and that encompass an increasing array of quality attributes. These trends have brought about shifts in global agricultural and food products trade flows, with increased developing country exports of unprocessed and processed 'non-traditional' exports, including fruit and vegetables, spices and fish and seafood (Jaffee and Henson, 2004). Indeed, already fresh and processed fruits and vegetables, fish, meat, nuts and spices collectively account for more than 50 percent of the total agri-food exports of developing countries (World Bank, 2005). Their share of developing country trade continues to rise while that of traditional commodities – such as coffee, tea, cocoa, sugar, cotton, and tobacco – declines. As an example, Figure 5 presents the real value of sub-Saharan African (excluding South Africa) exports of horticultural products to the European Union (EU) over the period 1990 to 2007.

Figure 5 Real value of horticultural products from sub-Saharan Africa (excluding South Africa), 1990-2007



Source: Golub and McManus (2008)

These trends present a rather optimistic picture for the increasing integration of developing countries into the global trading system, and for processes of agricultural and rural development. However, concerns are being raised about the ability of developing countries to gain access to and/or compete in contemporary agri-food value chains, and thus to exploit the potentially high-value opportunities being presented by industrialised country markets, especially in the context of private food safety standards (World Bank, 2005; Henson and Jaffee, 2008). Such concerns have been raised on numerous occasions now in the SPS Committee (WTO, 2007a; Henson, 2007; Roberts, 2009). Certainly, appreciable technological, infrastructural and institutional investments are often required to comply with private food safety standards, some of which are described above, which can put resource-scarce countries and/or firms at a disadvantage.

There are two key ways in which private food safety standards can potentially impinge on agri-food exports:

- Existing exporters will see their competiveness diminished in the face of significant costs of compliance with private food safety standards, benefitting industrialised countries over developing countries and/or one developing region/country over another. While all exporters are presumably required to comply with these standards, they will tend to benefit those exporters that can achieve compliance more efficiently, whether because of the structure of production, previous investments in compliance capacity, knowledge and experience at the firm, value chain or national level, etc. For example, at the same time that its total exports of fresh fruit and vegetables to the EU have been rising, the share of sub-Saharan Africa in total extra-EU imports of fresh fruit and vegetables has been declining. Over this same period, the share of Extra-EU imports of fresh fruit and vegetables from Latin America has been increasing. The need to comply with private standards is put forward as one factor potentially explaining this trend (UNCTAD, 2008). At the same time, it is recognised that a multitude of other factors may explain such trends, for example exchange rates, freight costs, etc.

- Private food safety standards act as barriers to entry for new developing country exporters and firms therein, effectively precluding access to potentially lucrative export markets. Thus, exports of fresh vegetables from sub-Saharan Africa remain dominated by Kenya (the first major exporter form the sub-continent), which accounted for 41 percent of exports in 1990, and still accounted for 43 percent in 2007. According to one Kenyan exporter:

  > "I tend to be particularly positive about this [certification]. It might sound a bit cynical, but it's an entry barrier to the business. The more standards there are the less competition we are going to have. It's difficult for other people to get them. It's a competitive advantage. It costs us a lot of money. But it is still a competitive advantage" (quoted in Humphrey, 2008: 39).

At the same time, however, some new exporters have emerged; exports from Ethiopia, Ghana, Senegal, Uganda and Zambia expanded appreciably over the period 1990 to 2007, such that they have become significant secondary exporters. This suggests that, even in the context of challenging export markets, there may be scope for new agro-food exports to be established and grow.

In practice, it is difficult to separate out the specific impact that private standards might have on agri-food exports from developing countries from the host of other factors. For example, FAO (2007) lays out the multi-tiered requirements that exporters of fresh fruit and vegetables must comply with, including quality grades and standards, traceability requirements, labels of origin, phytosanitary controls and food safety standards, of both a regulatory and private nature. The fact that private food safety standards are highly visible, and indeed have caught the attention of developing country governments, NGOs and other advocates of developing country interests, has probably meant that there has been over attribution. For example, the SPS Secretariat recently surveyed WTO Members on their experience of private food safety standards (WTO, 2008c). Most of the (as yet unpublished) responses are rather general and fail to relate specific export problems to compliance with particular private food safety standards. Thus, hard evidence is difficult to find.

At the same time, it is important to recognise that private food safety standards are themselves evolving – while importers to the UK might previously have had to comply with multiple food firm standards, they likely now only have to meet one or two collective food safety standards – and are also largely a reflection of regulatory requirements in the importing country. The evolution of private food safety standards has taken place alongside changes in EU and Member State regulatory requirements, and indeed these two processes have been quite tightly intertwined, as is argued above. Indeed, private food safety standards can act as a mechanism through which regulatory requirements are transmitted down value chains and can reduce the attendant transaction costs associated with uncertainty over what needs to be done in order to achieve compliance (Henson 2007). It may also be difficult to see where regulatory requirements end and private standards begin. For example, while the traceability provisions of Regulation EC/178/2002 have no extra-community effect, the responsibilities placed on food business operators for food safety have led them to maintain traceability right along the value chain. In this case, are the traceability requirements of the importer a private standard or a public regulation? More broadly, how do we separate out the effects of changes in public regulations from those of private food safety standards; we have no way of knowing what the world would be like today if private food safety standards, for whatever reason, did not exist.

It is safe to say that the predominant discourse on the trade effects of private food safety standards has focused on their scope to act as barriers to trade. However, it is increasingly being recognised that private standards, alongside the regulatory requirements of export markets, can act as catalysts to processes of capacity-building and competitive positioning in global agri-food value chains (World Bank, 2005; Henson and Jaffee, 2008). Jaffee (2003) highlights how rising private and public standards have posed challenges to the Kenyan fresh produce industry, yet at the same time they have also thrown a 'life line' to the industry in the face of stiff international competition. Jaffee and Henson (2004) show how Peru has positioned itself as a globally competitive exporter of fresh and processed asparagus through concerted efforts to upgrade food safety capacity in line with GlobalGAP. Finally, UNCTAD (2007b) shows how Thailand, Malaysia and Vietnam, that were proactive in introducing national GAP standards and were historically less reliant on EU markets than some of their international competitors, have found it relatively easy to comply with private standards such as GlobalGAP.

The 'bottom line' here is that, while some countries and firms will undoubtedly struggle to comply with private food safety standards, others will flourish in this environment. From this perspective, private food safety standards are simply one of a number of drivers of competiveness in global agri-food value chains. At the same time, however, processes of upgrading that are induced by private standards can be accompanied by profound processes of restructuring in global agri-food value chains, to the benefit of countries, and exporters and producers therein, which have more enhanced capacities. Thus, we are likely to see exports from developing countries increasingly commanded by a smaller number of larger and more able enterprises.

8.2 Alternatives to cope with private food safety standards

The foregoing discussion suggests that the impacts of private food safety standards on agri-food exports from developing countries are both complex and uncertain. We are likely to observe 'winners' and 'losers' in a

world where compliance with increasingly exacting food safety requirements, driven by both the public and private sectors, is an imperative. Which leads to the question, what is needed to assist developing countries in the task of meeting this challenge?

- **Donor assistance**: It is recognised that there is significant need for donor support towards building compliance capacity in the public sector and in value chains and firms. This reflects the fact that prevailing capacity in many (but not all) developing countries is weak and public and/or private sector resources are often highly constrained. Indeed, concern about the potential negative impacts of private food safety standards has evidently generated significant donor attention in recent years (Humphrey, 2008). One concern, however, is that much of the focus of donor support has been on major exporters; in sub-Saharan Africa, for example, the vast majority has flowed to Kenya (UNCTAD, 2008). Smaller exporters have struggled to gain the attention of many donors. Interestingly, therefore, donors might inadvertently be enhancing the competiveness of an already established exporter at the cost of newer entrants that were already struggling to get a 'foothold' in export markets.

- **Lead firms:** It is becoming increasingly apparent that lead firms in developing countries play a key role in driving compliance with private food safety standards, through the provision of technical and/or financial assistance to producers, establishment of food safety control systems, etc. Indeed, Graffham *et al*. (2007) found that in many of the cases where Kenyan smallholders had achieved compliance with GlobalGAP, there had been substantial investments by a lead exporter. The role of lead firms is increasingly reflected in donor strategies, for example of USAID and the PIP (Humphrey, 2008). This, of course, raises questions over what can be done in context where lead firms have not yet emerged? The practical reality is that such countries and value chains are likely to struggle. While more 'bottom-up' approaches can be employed to enhance farmer capacity, and there may be a role for intermediaries to mediate relations between farmers and exporters, unless there is a lead firm able to integrate farmers into global value chains and support on-going processes of compliance, the chances of success are not good. There may be a significant role for multinationals firms to drive processes of upgrading in this context.

- **Promoting developing country interests**: The reality is that the main preoccupation of firms that adopt private food safety standards, notably major food retailers in industrialised countries, will be on the impacts – chiefly security of supply and costs – on substantive parts of their supply base. For most products this will tend to be larger manufacturers and producers in industrialised countries and also some of the bigger middle-income countries. Major food retailers, for example, are unlikely to expend significant time and other resources on examining the concerns of developing countries and adjusting their standards accordingly. If these interests are to be represented at all they need to be 'forced' onto the agenda of standard adopters and/or setters, predominantly through political action. In the UK, DFID is making efforts in this regard through the Pro-Poor Procurement Forum. Alternatively, support could be given by donors to firms or organisations that establish and/or adopt private food safety standards, which defrays the associated costs of making adjustments to these standards and/or how they conformity is assessed. This is seen with the Smallholder Consultation/African Observer in GlobalGAP, supported by DFID and GTZ (see above). A further example is the Food Retail Industry Challenge Fund (FRICH) in the UK, again supported by DFID.

- **Supporting processes of harmonisation and equivalence among private food safety standards**: Perhaps ironically, processes of harmonisation and equivalence appear to proceed more effectively in the arena of private food safety standards than with public regulations across nation states.[30] Indeed, the emergence of a relatively small number of collective private food safety standards both for post- and pre- farm-gate that are increasingly benchmarked to a common platform has served to offset the proliferation of standards and associated systems of certification. Arguably, public institutions, nationally and internationally, should provide support for such processes of harmonisation and benchmarking, suggesting a shift in focus from challenging the legitimacy of private standards in the sphere of food safety to working with private standards setters to make such

30 The one major exception to this 'rule' is the establishment of harmonised Directives and Regulations for food safety in the EU.

standards work better and to examine ways in which regulatory processes and private standards compliance can be further aligned.

A profound concern of private food safety standards is that the costs of processes of compliance and conformity assessment tend to be pushed down global agri-food value chains away from standards adopters and towards their suppliers, notably developing country exporters and producers.[31] In turn, this prevents developing country producers from reaping the full benefits of implementing standards, reducing the returns to related investments and diminishing the incentives for growers to adopt these standards. More broadly, it raises issues of 'fairness' in value chains that are seen to allocate the costs of compliance with private standards away from large food retailers and agribusinesses in industrialised countries to smaller and more vulnerable exporters and producers in developing countries. One of the most striking impacts of the codification that is introduced by private standards is that monitoring and control previously exercised by the buyer is substituted by certification paid for by the supplier. None of the initiatives discussed above substantively addresses this issue. Indeed, critics argued that standards adopters should make contributions to the costs borne by their suppliers, and especially small farmers, in effect sharing the costs along the value chain.

But what would compel the adopters of private food safety standards, such as major food retailers, to share the costs of compliance borne by exporters and/or producers lower down the value chain, at least in the absence of legal compulsion, which is difficult to perceive? Given that industrialised country food retailers and other standards adopters rarely bear the cost of certification, the incentives to offset the investments required from suppliers are likely to be weak. At the same time, for many products export buyers enjoy a multitude of competing suppliers. Any actions that increase their costs of procuring from any one, for example exporters that procure from small farmers, is likely to compel them to look elsewhere, potentially leading to the exclusion of the very small producers that such initiatives are designed to support. As was suggested above, the critical factor is the existence of alternatives. If buyers (exporters or retailers) need the product supplied by small farmers, they will bear the burden. If there are competing suppliers they will not. The only likely way of addressing this issue is through codes and initiatives around fair trade and trade justice, which effectively pressure buyers to take more of the costs by turning the issue into one of brand image and brand value.

9 Implications for the Codex standard-setting process

9.1 What does Codex do? [32]

While the work of Codex is generally described in terms of standards-setting, it is more useful to think about its activities as defining a set of rules in which national governments establish regulatory requirements (Humphrey, 2008). It is possible to discern three distinct types of rule in this regard (Figure 6). Thus, Codex standards, guidelines and recommendations both provide guidance to governments and also act as the reference point for compliance with obligations under the WTO. The ISO standards play a similar and often complimentary role. At the same time, Codex principles provide guidance, and set rules, for the development and implementation of private standards. Indeed, many private food safety standards make explicit reference to Codex Standards, guidelines and recommendations (for example SQF 2000).

The first group in Figure 6 refers to rules about products. For example, the Codex Alimentarius contains a rule about veterinary drugs in meat; it provides a recommendation that the maximum residue level of the veterinary drug Abamectin in the kidney tissue of cattle is 50 micrograms per kilogram (CAC, 2006). This product standard can also be thought of as an outcome standard; the output of a food safety system should result in a residue of this particular veterinary drug no greater than the recommended limit. This rule has no direct legal force. It is a recommendation aimed primarily at governments to guide their own rule-making. National governments can make rules (develop standards) that are not based on these recommendations, but these are open to challenge within the WTO and should be justified using a science-based risk assessment. Note also that Codex defines rules (or recommendations) about methods of analysis and sampling for

[31] Note that it is argued above that this is one of the functions of private standards as a mechanism of food safety governance in value chains.

32 This section draws substantively on Humphrey (2008a).

veterinary drugs in food. In other words, as well as defining rules about product characteristics, it also suggests ways in which these rules should be implemented through testing procedures.

Figure 6: Three types of rules in the Codex Alimentarius

Codex standards: • Referring to specific commodities – standards for specific products • Referring to ranges of commodities – standards for ranges of products • Codex methods of analysis and sampling
Codex codes of practice for production, processing, manufacturing, transport and storage: • For individual foods • For groups of foods • General principles for all products, such as the Codex General Principles of Food Hygiene
Codex guidelines: • Principles that set out policy in key areas • Guidelines for the interpretation of these principles or for the interpretation of other Codex standards • Interpretative Codex guidelines for labelling and claims about food • Guidelines for interpreting Codex principles for food import and export inspection and certification, etc.

Source: CAC (1997)

Within this first group of rules, the Codex also contains product standards that are more concerned with establishing common reference points (David, 1995). The issue here is not whether one reference point is better than another, but that everyone uses the same reference point in order to facilitate transactions, interfaces between products, etc.

The second group in Figure 6 refers to Codex codes of practice for production, processing, manufacturing, transport and storage. These are the meta-standards that are incorporated into specific standards. These relate to processes: the means by which products are produced, handled and processed on their way to the consumer. Process controls have three main objectives. First, they provide a means of controlling quality and safety in a way that is more cost-effective than testing (Unnevehr 2000). Second, process standards are a means of controlling for food safety hazards that are either impossible or very difficult to detect, such that the most effective approach is to implement food safety and hygiene regulations at source to reduce the risk of contamination. Third, process standards allow the monitoring and control of characteristics that are extrinsic to the product (for example environmental protection and animal welfare), which have no physical presence in the product and so are not revealed by inspection.

The Codex codes of practice for production, processing, manufacturing, transport and storage referred to in Figure 6 are frequently expressed in guidelines that have been drawn from best practice on food safety, codified by Codex and incorporated into many standards. These meta-standards include Good Agricultural Practice (GAP) and Good Manufacturing Practice (GMP), which are then adopted by both private standards setters and governments (Busch *et al.* 2005; Henson 2007). For example, the Recommended International Code of Practice – General Principles of Food Hygiene has evidently formed the basis of many private food safety standards for food processing (WTO, 2007a), including the BRC Global Standard for Food Safety, IFS and SQF 2000, and also the GFSI Guidance Document for the benchmarking of such standards. Likewise, ISO 22000 substantively defines a HACCP-based food safety management system in accordance with Codex guidelines (WTO, 2007c).

The third group of Codex guidelines listed in Figure 6 are more general, setting out principles and providing guidelines for interpreting principles. In effect, these are rules that specify the ways in which food safety rules are formulated and implemented – for example inspection and controls on imports and/or exports. They are addressed to governments, but many private standards for food safety are also constructed around these same principles. There are at least three reasons for this. First, these guidelines represent best practice, and

private firms often participate in their formulation through their membership of bodies such as the ISO or through their participation in national Codex committees (see above). Second, private voluntary standards for food safety are often responses to government regulations and are aimed at the same outcome. Third, by building on the framework of public standards, private standards are able to reduce the cost of standards formulation and enforcement. Private standards can use the facilities provided by the public infrastructures for standards: for example recognition of laboratories or rules regulating Certification Bodies.

9.2 Do private standards jeopardise the work of Codex?

A key concern in fora such as the SPS Committee and the Codex Alimentarius Commission is that private food safety standards are acting to supplant or weaken Codex's role in the area of food safety. This is occurring in the context of wider debates about the legitimacy of Codex and the extent to which its current governance structures are compatible with defining legal benchmarks for the purposes of the WTO, facilitating inclusiveness of decision-making processes and elaborating standards in a timely manner (Henson *et al*., 2001; Rosman, 1993; Livermore, 2006). To some extent this argument, however, is based on false premises regarding the roles that Codex plays and the degree to which private standards have penetrated agri-food value chains and the role that they play, as we have hinted in the foregoing discussion.

Seeing Codex as an organisation that defines rules for the elaboration of public and private standards by other entities – member governments, firms and NGOs– suggests that Codex has had a role in guiding the development of private standards. It has set out both a framework and common vocabulary that enables the developers and adopters of private standards across the globe to communicate with one another and to agree on what these standards should strive to achieve. In the same way that national regulations are formulated to build on and fill out Codex guidelines, turning rules into standards schemes, private standards setters interpret and elaborate Codex standards, guidelines and recommendations. Indeed, this may serve to promote the legitimacy of private food safety standards and also reduces the costs of standards development; in many areas Codex standards reflect current consensus on food safety issues.

Thus, private standards setters can be seen as translating the rules of Codex into standards that provide sufficient guidance for implementers to know what they are required to do in order to comply and also for conformity assessors to undertake an objective assessment of when compliance has been achieved. Indeed, this process of translation is necessary in order that such standards can be audited in a manner that is compatible with ISO guidelines (for example Guide 65 on General Requirements for Bodies Operating Product Certification Systems). For example, the Recommended International Code of Practice – General Principles of Food Hygiene of Codex stipulates that a food safety system should enable traceability, while private standards such as the BRC Global Standard for Food Safety and IFS specify the substantive elements this system should contain, how this system should perform and how the effectiveness of this system should be monitored.

Nevertheless, in translating the general rules of the Codex into standards that provide guidance to implementers – and equally important, unambiguous statements about how compliance is to be assessed – there is scope for differing degrees of prescription and differing arrangements for establishing equivalence. For example, it is generally accepted that chemicals should be stored safely on a farm, but the arrangements for this can be specified in different ways. The 2001 version of the EurepGAP protocol requires pesticides should be stored in "a sound, secure, frost resistant, fire-resistant, well ventilated (in case of walk-in storage) and well lit location" (EUREPGAP, 2001: item 8k). In contrast, the aquaculture compliance criteria of the SQF1000 standard states specifically that the safe storage of chemicals requires concrete buildings and steel doors of a prescribed thickness. The latter prescribes very specific solutions to the risks identified with chemical storage, while the former states a desired outcome and allows the auditor to judge whether or not particular means of achieving it are adequate.[33] This difference in approach can apply more broadly. The more private standards allow for clear procedures for establishing equivalence of approaches, the more they can be adapted to local circumstances.

It is important to recognise that the scope of many private food safety standards extends beyond single Codex standards, guidelines and recommendations, at times making it difficult to discern where and the

[33] The authors are grateful to Pepijn van de Port of the Free University of Amsterdam for making this point.

extent to which there is a disconnect between the two. Thus, it is more accurate to see private food safety standard as substantively packaging multiple Codex standards, guidelines and recommendations, along with national legislation that will variously be based on these Codex documents. For example, the GFSI Guidance Document contains substantive elements of all of the following (Swoffer, 2009):[34]

- Recommended International Code of Practice-General Principles of Food Hygiene 1969 Rev 4 2003.
- Principles for Food Import and Export Inspection and Certification, 1969.
- Guidelines for the Validation of Food Safety Control Measures, 2008.
- Principles for Traceability/Product Tracing as a Tool within a Food Inspection and Certification System, 2006.

Private food safety standards thus define a system around these core principles in terms of their substantive elements and how these are managed, and related systems of conformity assessment. The international standards of ISO provide many of the key principles (or rules) behind this system.

Of course private food safety standards do not confine themselves to areas where Codex has defined international standards, guidelines and recommendations. Here, private standards can be seen as filling a 'void' in international rules. This is seen, for example, with the GlobalGAP standard that defines requirements for GAP in primary production where international and national regulatory standards are scarce. A major driver behind such pre-farm-gate standards, however, is regulatory requirements with respect to microbiological contaminants and MRLs for pesticides in fresh produce. Private standards, and especially collective private standards, generally do not define such parameters. Rather, the target levels for pesticides residue (MRLs), for example, are often stipulated by national governments that may or may not be based on Codex MRLs. To the extent that national governments do or do not base their legal requirements on Codex MRLs, private standards will or will not be directed at complying with Codex MRLs. Similarly, private food safety standards for food processing, such as the BRC Global Standard for Food Safety and IFS, incorporate requirements that are not integral to the Recommended International Code of Practice-General Principles of Food Hygiene, for example related to product analysis, internal audit, purchasing procedures, etc.

It is important to recognise that private food safety standards are far from universal; there are many areas where Codex standards, guidelines and recommendations, and national legislation, has been laid down and private standards are less important, or indeed do not exist at all. Thus, there are significant differences in the importance of private food safety standards across sectors (for example fresh fruit and vegetables versus dairy products), between levels of the value chains (for example food processing versus production), geographically (for example Northern Europe versus the US or Japan), etc. At the same time it must not be forgotten that private standards are only relevant to the extent that they have been adopted in the value chain. While there is an evident increase in the use of private standards, this is far from universal. Despite the great attention given to these standards, more global markets make no reference to private standards such as GlobalGAP than require strict compliance.

9.3 Challenges and opportunities for Codex

While there is little compelling evidence that private food safety standards are appreciably undermining the role of Codex standards, guidelines and recommendations, their emergence as an increasingly dominant mechanism of governance in global agri-food value chains does raise challenges and opportunities for Codex Alimentarius. These relate predominantly to the speed and inclusiveness of the standards-setting process. Private food safety standards illustrate the ability and willingness of private sector stakeholders to bring about new governance institutions where existing arrangements are not deemed to provide the required level of protection, both against non-compliance with legal food safety requirements and against losses to market share and brand capital. While private standards operate within the framework of rules defined by Codex and

34 The GFSI clearly recognises the importance of Codex as a global reference point and is anxious to demonstrate where its Guidance Document and Codex standards, guidelines and recommendations coalesce. Thus, it is currently cross-referencing the Guidance Document and the four recognised post-farm-gate standards with Codex standards.

ISO, they are also able to step outside of this framework when it is perceived that this is required. The challenge for Codex, thus, is to continue to elaborate standards, guidelines and recommendations that are relevant to adopters, both in the public and private sectors.

The speed (or lack of) and complexity of the standards-setting process within Codex Alimentarius has long been a cause of concern (Henson *et al*., 2001), including by the evaluation concluded in 2002 (CAC, 2002). The concern here is that Codex is not able to elaborate new or revised standards at the rate that adopters require them. This is in contrast to the relatively rapid development of private standards (see above), reflecting the limited membership, narrower focus and more common interests of the firms and organisations involved. For example, the Recommended International Code of Practice – General Principles of Food Hygiene has been revised four times since its original adoption in 1969, while the BRC Global Standard for Food Safety has been revised five times since its initial implementation in 1998. Many Codex standards take appreciably longer to establish and/or revise. While the emergence of private food safety standards arguably provides scope for Codex's influence within the global food safety system to be enhanced (rather than diminished as has been implied by some), this will be dependent on its ability to elaborate standards, guidelines and recommendations at a faster rate as new issues emerge, established approaches and practices change, etc. The move to annual rather than biennial meetings of the Commission should mark a significant improvement in this regards.

The rise of private food safety standards also implies that the clientele of Codex is changing, or at least is being expanded. Traditionally, the role of Codex has been to establish rules for the implementation of official food control systems, suggesting that the main beneficiaries are governments. Private food safety standards have added an additional layer to food safety governance and Codex needs to take account of this in directing its work programme and in elaborating standards. It must be remembered that Codex's influence and relevance is dependent on the adoption of its standards, guidelines and recommendations, both by governments and private standards setters. This latter group are not bound by the rules of the WTO; they will base their standards on Codex to the extent that it reflects recognised good practice, but will look elsewhere if not. Private standards provide considerable scope for Codex to have more influenced, provided it meets the needs of the adopters. Just as an increasing number of regulatory authorities in member countries are embracing private food safety standards as a means towards achieving higher levels of compliance and/or reducing costs, Codex needs to see the adopters and setters of these standards as 'legitimate' clients.

While Codex remains the only truly international body for the elaboration of standards, guidelines and recommendations related to food safety, the emergence of organisations such as GlobalGAP and GFSI is serving to raise questions about the degree to which Codex is truly representative of stakeholder interests, globally and especially within developing countries. The decision-making process of Codex is essentially driven by governments, which variously take account of national stakeholder interests. International non-governmental organisations can be recognised as observers at Codex, but have no decision-making power. The 'voice' of developing countries at the Codex table is also appreciated to be limited (Henson, 2002). While the range of interests that feed into the elaboration of private food safety standards is much narrower than for Codex, the organisations involved have become significantly more open over time and come to incorporate a wider range of interests. This is seen with the membership of GlobalGAP and of the GFSI, both of which have moved appreciably away from the original core of major European food retailers (see above). Arguably, the interests of developing country producers, for example, are heard more loudly in GlobalGAP than in Codex. Paradoxically, the private sector may have more interest in opening up the standards-setting process to a wider range of stakeholders, deflecting criticism and building the legitimacy of their standards, than national governments and international standards-setting organisations such as Codex.

9.4 Private standards and the WTO

The evolution of private food safety standards has important implications for the WTO, and specifically the SPS Agreement, and the role of Codex within this Agreement (see for example Henson, 2007; Gascoigne, 2007; Stanton, 2007). It could be argued that, as private food safety standards become an increasingly predominant form of food safety governance in global agri-food chains, the WTO will become less relevant (Henson, 2007). In this respect, the key issue is whether private food safety standards come under the umbrella of the rights and obligations established by the SPS Agreement, or whether they might conceivably do so in the future. At the same time, the evolution of private food safety standards does not imply that

regulatory food safety (and plant and animal health) requirements will go away, and these will certainly remain under the purview of the SPS Agreement.

The SPS Agreement permits measures that are: “necessary to protect human, animal or plant life and health,” yet requires governments to: (1) base measures on a scientific risk assessment; (2) recognise that different measures can achieve equivalent safety outcomes; and (3) allow imports from distinct regions in an exporting country when presented with evidence of the absence or low incidence of pests and diseases. In addition, the Agreement encourages (yet does not require) the adoption of SPS measures based on international standards, guidelines and recommendations, making explicit reference to those of Codex in the case of food safety (Roberts and Unnevehr, 2005). Importantly, however, the Agreement protects the right of a country to choose its own 'appropriate level of protection', while guiding members to 'take into account the objective of minimising negative trade effects'. The SPS Agreement thus sets out broad ground rules for the legitimate application of food safety measures, many of which have the potential to impact on international trade.

The subject of private food safety standards has been discussed extensively within the SPS Committee, most notably with particular reference to GlobalGAP on which the discussion below focuses as illustration (Henson, 2007; Roberts, 2009; see WTO, 2008b for a summary of related documents). Much of the focus of this discussion has been on the degree to which private food safety standards are consistent with the SPS Agreement, with most of the protagonists arguing to the contrary. For example, the OIE has argued that: “….there is reason to believe that many private standards are not consistent with SPS obligations” (WTO, 2008c).

Even if private food safety standards such as GlobalGAP are 'guilty as charged', it is not evident that they are subject to the rules of the SPS Agreement. The predominant focus of the SPS Agreement is the public mandatory standards ('technical regulations') adopted by Member States. This leaves questions over the jurisdiction of the Agreement over measures that are adopted by private entities; whether an individual firm or some form of non-governmental organisation, and/or measures that are not legal requirements. The crux of the matter is whether, given that GlobalGAP is a private standard over which no WTO Member State has legal jurisdiction in the realm of food safety regulation, the rights and obligations of the SPS Agreement apply. The rather ambiguous language of the SPS Agreement has left this open to much uncertainty (Huige, 2008).

Under the SPS Agreement, Member States are directed to take "reasonable" measures to ensure that "non-governmental entities" comply with the SPS Agreement. Thus Article 13 specifies:

> “Members are fully responsible under this Agreement for the observance of all obligations set forth herein. Members shall formulate and implement positive measures and mechanisms in support of the observance of the provisions of this Agreement by other than central government bodies. Members shall take such reasonable measures as may be available to them to ensure that non-governmental entities within their territories, as well as regional bodies in which relevant entities within their territories are members, comply with the relevant provisions of this Agreement. In addition, Members shall not take measures which have the effect of, directly or indirectly, requiring or encouraging such regional or non-governmental entities, or local governmental bodies, to act in a manner inconsistent with the provisions of this Agreement. Members shall ensure that they rely on the services of non-governmental entities for implementing sanitary or phytosanitary measures only if these entities comply with the provisions of this Agreement.”

This implies that, if GlobalGAP and/or the private firms adopting this standard can be considered "non-governmental entities", the rights and responsibilities of the SPS Agreement would apply and WTO Member States would be required to address the concerns raised by their trading partners. Unfortunately, the concept of "non-governmental entities" is not defined in the SPS Agreement, although the TBT Agreement does elaborate on this in Article 4.1 (which is arguably similar in spirit to Article 13 of the SPS Agreement),

making reference to "non-governmental standardising bodies".[35] Likewise, Annex 1 to the TBT Agreement defines a "non-governmental body" as a:

> "Body other than a central government body or a local government body, including a non-governmental body, which has legal power to enforce a technical regulation."

Roberts (2009) suggests that key to the definition of a "non-governmental" entity, and in particular distinguishing "private bodies", is the level of government involvement. Thus, a private body (such as GlobalGAP) might be deemed a "non-governmental body" if there is sufficient government involvement with it.

Arguably it is difficult to see that the bodies establishing collective private food safety standards, such as GlobalGAP, and/or firms adopting these standards can be regarded as 'non-governmental entities' and come under the remit of the SPS Agreement. This applies even more so to the standards elaborated and adopted by private food firms (such as Tesco Nature's Choice). Paradoxically, it would be particularly difficult to argue that the organisation developing GlobalGAP is a "non-governmental entity" under the jurisdiction of a WTO Member State given that the technical committee advising on the GlobalGAP standard includes representatives of retailers and producers, including suppliers from developing countries (Lee, 2006).

It is argued above that private food safety standards have evolved predominantly in response to regulatory changes, most notably in the UK and the EU more widely. At the same time, there are signs that government is seeking to promote the adoption of private food safety standards, seeing them as an efficient and effective way in which to pursue public food safety objectives. For example, as far back as 2002, the UK Food Standards Agency issued guidance to farm assurance schemes on best practice and has since assessed the extent to which this guidance has been taken up (Kirk-Watson, 2008). More recently, the Food Standards Agency has instructed enforcement authorities to take account of membership of a "recognised" farm assurance scheme in determining the frequency of inspection of production facilities (Food Standards Agency, 2008). In this way, the boundary between private voluntary standards and public mandatory standards is becoming decidedly 'blurred'; could this eventually 'open the door' for private food safety standards to come under the jurisdiction of the SPS Agreement?

10 How should Codex respond?

The Foregoing discussion suggests that private food safety standards present both challenges and opportunities for Codex; certainly, their emergence as increasingly prominent mechanisms of food safety governance cannot be ignored. But how should Codex respond? Part of the answer lies in the need for more fundamental reform of Codex, in part along the lines recommended by the evaluation in 2002 (CAC, 2002), not all of which were accepted by the membership of Codex and subsequently implemented. However, there are perhaps more specific steps that can be taken to address attendant issues related to the challenges and opportunities presented by private food safety standards.

10.1 Informed debate

As a first stage, Codex needs to engage in an informed debate on the implications that private standards in the area of food safety and quality have for its mandate and work programme. This debate should avoid examining the rights and wrongs of private food safety standards. Rather, it should see such standards as presenting a new reality in which Codex must operate. It is only on the completion of such a debate and having agreed on *whether* Codex should respond substantively to the emergence of private standards that it can begin to explore *how* to respond. This paper aims to provide a starting point or catalyst for this debate.

10.2 Engagement with private standards organisations

Concurrent with this debate, it would seem appropriate that Codex should engage with some major private food safety standard organizations such as GFSI with a view to it being made an official observer. Of the organisations engaged in the setting of private food safety standards, GFSI is the one that would appear to

35 Note that the WTO is single agreement and that its individual parts should be interpreted as an integrated whole (Roberts, 2009).

best fit the criteria that international NGOs must meet in order to be an official observer, as laid down by the operating principles of the Commission. Private standards setting bodies such as GFSI could play a key role in representing the interests of private food safety standard setters, although this would require that the GFSI sees this as a legitimate function, and in turn applies to become a recognised international NGO. If the GFSI, for example, was to take on this role, evidently a significant increase in the flow of resources from its member companies would be required. In the longer term, such resources will only flow if the members of GFSI see appreciable benefits from engaging with Codex, which in turn will reflect Codex's own ability and willingness to engage.

Codex should also explore ways in which it can engage with collective private standards organisations that do not appear to satisfy the criteria of an international NGOs under the operating principles of the Commission (for example BRC and IFS), but which nevertheless do have global reach in terms of the governance of global agri-food value chains. Indeed, the Codex Procedural Manual (CAC, 2007) may provide scope for this, specifying that organisations with observer status shall undertake:

> "….in cooperation with the Secretariat, to determine the ways and means of coordinating activities within the scope of the Joint FAO/WHO Food Standards Programme, with a view to avoiding duplication and overlapping;"[36]

This is also in accordance with Codex strategic plan Goal 4, namely "Promoting Cooperation Between Codex and Other Relevant International Organizations" and specifically Activity 4.1: "Track the activities of other international standard-setting bodies", Activity 4.2: "Encourage Codex contributions to the work of other international bodies", and Activity 4.3: "Encourage contributions from other international bodies in Codex work"

Most immediately, engagement with private standards-setting organisations more widely might be through informal dialogue between the Codex Secretariat and these organisations, or through the National Codex Committees and/or delegations of Codex members and/or a one-off interest group meeting with FAO and/or WHO. In the medium term, Codex might consider establishing a public-private consultation platform, perhaps under the Executive Committee, that could meet once or twice per year to identify areas where action is recommended to enhance the use of Codex standards, guidelines and recommendations by private standards organisations.

10.3 Operating procedures, activities and priorities

While substantive changes to the operating procedures and work programme of Codex in the light of private standards for food safety and quality will be dependent on agreement among members as to the need and most appropriate way in which to respond, the Commission should immediately begin to reflect on the implications for its operating procedures. Thus, the Secretariat might be charged with exploring the need for changes in these procedures and how such procedures might better enable the Commission to respond to the challenges and opportunities presented by the rise of private standards. Such reflections could feed into the on-going debate on the implications for Codex and guide the 'thinking' of member governments.

Ultimately, Codex needs to reflect more profoundly on its areas of activity and priorities in the light of the increasing role played by private food safety standards in global agri-food value chains. For example, should Codex focus on areas where private standards have not been elaborated in order to fill 'voids' in the food safety landscape or continue to elaborate standards, guidelines and recommendations across the entire spectrum of its historic work, in part supporting the further development of private standards? These are profound questions that are at the heart of current debate about the role of national and international public institutions in a world where private governance is playing a much greater role. They are not easy questions, but they are necessary questions nonetheless.

10.4 Strengthening of Codex Secretariat

The activities outlined above substantively imply considerably more activity on the party of the Codex Secretariat. This suggest that the Secretariat may need to strengthen its capacity; while engaging with private

[36] Point 5.2 (b), Page 37.

standards-setting organisations and exploring the implications of the increasing role of private standards as modes of food safety governance, the Secretariat will need to continue with the established work of Codex. It is hard to see that this is possible unless the permanent staffing of the Secretariat is enhanced.

11 Broader FAO/WHO Policy issues

Beyond the work of the Codex Alimentarius Commission, private food safety standards have significant implications for the work of FAO and WHO. Clearly, the elaboration of food safety controls can no longer be seen as the preserve of government, but rather the role of the private sector – both individual firms and collective actions to elaborate standards – must be recognised and the work programmes of these organisations adjusted accordingly. Luckily, on the part of FAO, for example, there is evidence of this. Thus, a series of studies and other activities has focused on the impact of private food safety and other standards on small producers in developing countries; interest in private food safety standards has been observed in a number of divisions of FAO, and increased coherence across these divisions might be desirable. FAO has also held discussions with the GFSI towards the establishment of a cooperative arrangement (Memorandum of Understanding?) between the two organisations.

Both FAO and WHO appear to observe private food safety standards with some concern, either because there are doubts about the motives behind such standards and/or concerns about their impacts on developing countries, or because they are seen as infringing on areas that have historically been seen as public policy, at both the national and global levels. Finally, there is concern about the potential to create confusion between science-based standards in support of health outcomes, and other standards. In fact, there is much to be gained from increasing mutual understanding by all parties. The ultimate goals are the same – credible systems of food safety. Recognising that public regulation has been a major driver of private food safety standards will hopefully serve to offset much of the unease experienced by FAO and WHO in this area and form the basis of more concerted and coordinated efforts to understand the impacts of private food safety standards on global agri-food value chains and implications for trade and public health. Some concrete recommendations for action include the following:

- FAO should pursue the establishment of a cooperative arrangement with GFSI and look at ways in which the two organisations can work together, most notably in emerging markets. More generally, there is a need for both FAO and WHO to engage more actively with the private sector in the area of food safety standards and certification. Part of this process will involve understanding the unevenness of private standards development across the developed world and its causes.

- Both FAO and WHO should continue to explore the implications of private food safety standards for both industrialised and developing countries. In this regard there is a need for more rigorous economic analysis at the enterprise and macroeconomic levels, in particular impacts on the structure and *modus operandi* of global agri-food value chains and distribution of value along these. There is also a need to reflect on the opportunities that the emergence of private food safety standards present, for example the role of private food safety standards in global competiveness and the potential use of co-regulatory approaches in the food safety arena that combine public regulation and private standards and associated systems of certification.

- Related to the above, FAO and WHO can play a vital role in promoting informed and balanced debate on the role of private food safety standards in the governance of global agri-food value chains and the associated opportunities and challenges for both industrialised and developing countries.

- Both FAO and WHO should enhance their support for the development of food control capacity in developing countries, such that the public and private sectors have greater ability to comply with emerging food safety standards in export markets, ideally in a proactive manner. At the same time, the capacity-building activities of FAO and WHO in developing countries need to be adjusted to reflect better the increasing role of private food safety standards in domestic and export markets. This might include, for example, changes to the focus and scope of related projects under FAO's Technical Cooperation programme (TCP) and/or the 'tools' employed to assess capacity-building needs of national food control systems.

- FAO and WHO might explore the feasibility of establishing voluntary principles of good practice for private standards organisations in the area of food safety and quality, with a particular focus on the special needs of developing countries. This might take as a starting point the 'Code of Good Practice for the Preparation, Adoption and Application of Standards' of the Technical Barriers to Trade (TBT) Agreement. Such a code could only be promulgated with the active involvement of the major private standards setters and adopters, which might see such an initiative as a potential mechanism through which to anxieties that inform much of the current debate about private food safety standards and developing countries.

12 Conclusions

Over the last 10 to 15 years, private standards have emerged as a key element of food safety governance in global agri-food chains. A heighted debate has ensued about the potential impacts on the structure and *modus operandi* of global agri-food value chains, with accusations that private food safety standards threaten to marginalise developing countries and exclude more marginal producers therein from potentially lucrative markets. While critics argue that such standards need to be 'reigned in' there are fears that the SPS Agreement within the WTO and Codex, global institutions charged with establishing rules for the elaboration of national food safety measures, have little scope to act and that their mandates are being marginalised as private modes of food safety governance come to the fore.

There is little doubt that private food safety standards do present challenges for developing countries and do raise profound questions about the role of governmental institutions in the regulation of food safety at the national and international level. At the same time, much of the debate about private food safety standards has been fuelled by misunderstandings of why such standards have evolved and the functions they perform, and by a body of evidence that has too much circumstantial evidence and too little rigorous analysis. Key here is a failure to recognise that private food safety standards are quite closely attuned to regulatory requirements; at times private food safety standards do extend beyond the requirements of public mandatory standards, but in many cases their key functions is to provide assurances to buyers in global agri-food value chains that regulatory requirements have been satisfied. Further, the great diversity of private food safety standards, in their institutional form, scope and prevalence across value chains, belies attempts to draw general conclusions.

In much of the current debate there is an almost automatic tendency to see private food safety standards as having less legitimacy than public regulation, for example on the basis of openness and transparency of standard-setting procedures, sensitivity to developing country interests and the degree to which requirements are risk-based. A closer examination, however, suggests that, some private standards institutions arguably perform better according to these metrics than Codex and ISO, and also public regulatory processes. Indeed, arguably there may be greater incentives for the setters of private standards to open up the standards process to stakeholder involvement, for example, than for national and/or global public institutions to do the same. This is not to say that there are not legitimate concerns about the inclusivity and accountability of private food safety standards, but that such concerns may be no greater than for public food safety standards, whether national or international.

The increasing adoption of private food safety standards in global agri-food value chains clearly raises important questions about the role played by Codex, both broadly and within the context of the SPS Agreement. There has been an undue tendency, however, to see private food safety standards as threatening the status of Codex standards, guidelines and recommendations, and undermining the Commission's mandate to promote consumer protection and fair agri-food trade. However, there is little evidence to support this contention. Where private food safety standards exist, they appear to take Codex standards, guidelines and recommendations, alongside national regulatory requirements, as their starting point and build a system of process requirements and conformity assessment around these. There are also many commodities and markets where private food safety standards have not been elaborated and Codex remains the key driver of international food safety standards.

Evidently, Codex needs to respond to the challenges and opportunities presented by private food safety standards. There is certainly a need for an informed debate within the Commission about the implications for its mandate and work programme; it is unlikely that Codex can move forward substantively on this issue

unless there is broad agreement on the part of its membership. In the meantime, ways need to be found for Codex, and also FAO and WHO, to engage more effectively with the organisations involved in setting and/or adopting private food safety standards in order to build trust and mutual understanding. There would appear to be much to gain from a cooperative relationship between international standards organisations such as Codex and private standards organisations.

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