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Implications of agri-food standards for Sri Lanka: Case studies of tea and fisheries export industries

by

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Introduction

During the past two decades, public awareness and concern regarding food safety in developed countries have increased as a result of a series of highly-publicized food scares and scandals (Henson and Caswell, 1999). In response to these events, regulations governing food production in those countries have been tightened. This has been accompanied by significant institutional changes and intensified border control of food imports in the industrialized countries. Separate and independent regulatory bodies that focus on public health and consumer protection have been set up in Australia, Europe, Japan, New Zealand and the United States of America. In parallel with this development, a number of concerted private initiatives have been undertaken that address consumer confidence regarding food safety together with the tightening of regulations. This has resulted in the proliferation of private standards that are more stringent than public ones. Private standards have been established by major food retailers, food manufacturers and restaurant chains in developed countries, largely to mitigate any reputational or commercial risks arising out of supplier failure. Moreover, private food safety standards are increasingly being used as a means of product differentiation. While public standards can be both mandatory in a legal sense as well as voluntary, private standards are voluntary in kind and are not legally required.

The proliferation of public and private standards, and the increase in their stringency has been accompanied by an expansion of their coverage. More emphasis is now given to how a good is produced along the supply chain ("process standard") than ever before, whereas previously the emphasis was on meeting the standard of the end product ("product standard"). Several private standards combine food safety with quality, social and environment issues, and go beyond what is generally required by regulations. These developments are largely responding to consumer and civil society concerns over the conditions under which goods are produced.

The increasing complexity of the standard environment has made compliance a difficult task for many developing countries, which depend on lucrative markets in industrialized countries. Understandably, the proliferation of standards is a cause for concern for many developing countries as standards can be a potential "behind–the-border" barrier to trade when tariffs have been lowered through successive multilateral trade negotiations. In a recent interview with the *Financial Times*, World Trade Organization (WTO) Director-General Pascal Lamy noted that the increase in standards was likely to cause a clash between developed and developing countries, as the latter feared the introduction of new barriers to their exports. He underlined this concern when he stated that "developing countries are certainly beginning to have a real problem, and the question of standards is becoming a real issue" (International Institute of Environment and Development, 2010).

While the emergence of standards poses a challenge for developing countries, it also provides a number of potential opportunities in the short term, such as greater market access and higher prices for the certified products. Some countries/industries have managed to gain access to markets in the industrialized nations despite the existence of stringent standards. In fact, some have even used standards to successfully reposition themselves in competitive global markets. Thus, the situation for developing countries is not problematic and is less

pessimistic than the "standards as barriers" perspective that is usually presented (Jaffee and Henson, 2004). But how well a country, industry or business responds to evolving standards depends on the strategies pursued, with some achieving more success than others in the past.

In the context of the growing importance of standards in international trade and production, this study examines the implications of standards on two agricultural and food exporting sectors in Sri Lanka – tea and fisheries – and their strategic response. These two export industries were chosen as they make a significant contribution to the country in terms of foreign exchange earnings and employment generation. In addition, both the tea and fisheries industries are increasingly confronted with challenges in meeting various standards when accessing markets abroad, especially in industrialized countries. Given that there are hardly any studies on this issue in Sri Lanka, this study attempts to fill this gap in the literature by examining the following questions:

(a) What are the different types and forms of standards required for exporting tea and fish from Sri Lanka? International trade in agriculture and food is increasingly governed by a range of standards (covering quality, safety, social and environmental issues) that are set and enforced by both the public and the private sectors. The study provides a typology of standards governing the two industries.

(b) What are the costs and benefits in meeting these standards? Have standards acted as non-tariff barriers (NTBs) to trade by imposing additional production costs or have they helped to expand export opportunities by improving their competitive advantage?

(c) What are the implications of standards for tea and fish exporters, especially small and the medium-size enterprises (SMEs)? Does the implementation of standards lead to marginalization of SMEs?

(d) What strategic responses have been made by the tea and fish exporters to meeting the standards demanded by markets abroad? How did the tea and fisheries exporters respond to this emerging challenge and how successful was their response? It is typically assumed that developing countries are "standard takers" with few, if any, alternatives available to them, but this far from truth. In fact, developing countries frequently have room to manoeuvre when confronted with standards. They can choose to comply with the standard, challenge it or even exit from supplying a particular market.

This study is organized as follows. Section A highlights major trends in the standards of agri-food business. Section B examines the implications of the proliferation of standards for developing countries, in terms of the costs and benefits of compliance, distributional impact and strategic options available for responding to the challenges of conforming. Section C outlines the methodology used to answer the above research questions. Section D provides brief background information on the tea and fisheries industries in Sri Lanka while section E discusses the findings from the interviews. Section F summarizes the main findings with reference to the research questions, and provides broad directions for policymakers in terms of assisting exporters to meet emerging standards.

A. Trends in standards in agriculture and food business

The standards environment has transformed in recent years (Humphrey and Memodovic, 2006). Standards now encompass much more than product standards and include standards related to production, handling and processing, in order to ensure that products meet certain desired physical characteristics. "Standards are agreed criteria, or as Hawkins stated, 'external points of reference', by which a product or service's performance, its technical and physical characteristics, and/or the process and conditions under which it has been produced or delivered can be assessed" (Hawkins as cited in Nadvi and Waltring, 2004). Labour and environmental standards are two examples of process standards where the objective lies not in the product but in the process itself. According to Humphrey and Memedovic (2006), the standard environment of agribusiness shows four main trends: (a) increasing stringency of public mandatory standards; (b) a shift from product standards to process standards; (c) increasing importance of private standards; and (d) increasing scope of standards.

1. Increasing stringency of mandatory public standards

Food safety standards have increased in scope and stringency during recent years as a result of increasing consumer concern over food safety, following highly publicized food scares.[1] This increasing public awareness has led to the tightening of standards. In the European Union, for example, controls on pesticide residues as well as colouring and purity have been tightened. Similar tightening can be seen in other countries such as in the United States. In agribusiness, standards have been tightened in other areas; for example, certain veterinary drugs have been banned in meat and seafood while the tolerance levels of other goods have been lowered. Shipments of seafood have been regularly rejected in Europe, North America and Japan due to the presence of veterinary drugs as well as microbiological contamination.

2. Shift from product standards to process standards

Traditionally, standards have focused on product characteristics. Product standards as opposed to process standards specify characteristics of the final product. These characteristics can include shape, size, weight, safety, texture etc. One example of a product standard is the maximum amount of pesticide residue permitted in a food product. In general, product standards are unambiguous and require single-point verification at the end of the production process (Kaplinksy, 2010).

Since the 1980s, there has been shift in emphasis from product to process standards (Nadvi, 2004). While product standards define particular outcomes to be achieved, process

[1] For example, the beef hormone scare in Italy/European Union in 1987/1988, the poultry salmonella outbreak/scandal in the United Kingdom in 1988, the E. coli outbreak in fast-food hamburgers in the United States in 1993, BSE in the United Kingdom in 1996, microbiological contamination of berries in the United States and Canada during 1996/1997, avian flu in Hong Kong, China and Taiwan Province of China during 1995/1997, dioxins in animal feed in Belgium in 1999, large-scale food poisoning in Japan in 2000, and, contaminated olive oil in Spain in 2001 (Jaffee, 2005).

standards indicate particular procedures that need to be put into place.[2] A notable example of a process standard is the Hazard Analysis and Critical Control Points (HACCP),[3] which has been adopted by food processing industries in many countries. The United States has made it mandatory in plants that process meats, poultry, fish and fruit juices, while the European Union requires HACCP from suppliers of dairy, meat and fish products.

HACCP is just one example of the increasing trend towards the broader application of systematic approaches to food safety that emphasis risk identification and management along the food value chain (from farm to fork). The shift towards process control in food safety is clearly established by the European Food Safety Authority. In the European Union's approach, food safety is seen as a product of the value chain and, as such, risks have to be managed at all points of the chain together with traceability of the product.[4] The European Union's approach places the responsibility of food safety on the food operators and builds upon the United Kingdom's Food Safety Act, which requires retailers to demonstrate that they have taken the necessary steps to ensure the product safety during manufacturing, transportation, storage and preparation.

3. Increasing importance of private standards

Standards can be classified broadly into private and public standards, but the line separating them is not always well defined or clear. In many instances, standards adopted by governments have their origins in the private sector (OECD, 2006). Public standards often specify minimum safety requirements, leaving the private sector to fill the gap beyond the minimum (Henson and Reardon, 2005).[5] While public standards can be either mandatory or voluntary, private standards are, by definition, voluntary. Nevertheless, some private standards can become de facto standards if they gain a significant share of the market, and adhering to them becomes critical to gaining access to the supply chains. The role of private standards has been growing in importance since the 1990s (Garcia-Martinez and Poole, 2004). Private standards refer to particular labels used by private companies to differentiate their products and to indicate their superior quality. For example, the Nature's Choice label developed by the

[2] Although they are conceptually distinct, it is not always possible to separate product or process standards from one another. In most cases, a particular product standard requires the application of a particular process standard. Conversely, a process standard does not necessarily produce the required product standard. For example, the ISO quality and environment standard (ISO900 and ISO1400) series require that relevant information is systematically collected. However, it is possible that producers can meet the required process standards without actually improving the quality and environmental performance (Kaplinksy, 2010).

[3] HACCP is a systematic preventive approach to food safety that addresses physical, chemical and biological hazards as opposed to finished product inspections. HACCP is used in the food industry to identify potential food safety hazards, so that measures can be put in place to reduce or eliminate the risk of the hazards occurring. The system is used at all stages of food production and preparation processes including packing, distribution etc.

[4] If problems are detected in the food chain, traceability systems allow these products to be traced back to the source of the problem. European Union traceability requirements only extend as far as the importer, who must be able to identify the exporter supplying the product but not beyond that point except in the case of particular products (i.e., meat).

[5] This also holds true for international standards. Governments tend to under-invest in international public standards. However, in limiting public standards to a minimum, they run the risk of being outmoded, prompting the private sector to create their own standards.

United Kingdom supermarket chain, Tesco, guarantees superior safety, quality and environmental standards through monitoring and certification of its suppliers.

Private standards can also be collectively developed by groups of firms and business associations. In the food industry, these standards include EurepGAP (now known as the GlobalGAP standard developed by EUREP (an association of European fresh food producers and retailers[6]), the United Kingdom's British Retail Consortium (BRC)[7] standard for food processing and the Franco-German International Food Standard (IFS).[8] These vary according to the food products they cover, the points in the value chain on which they focus, and the extent to which they rely on certification and third-party verification (Humphrey and Memedovic, 2006).

The private sector is increasingly taking the lead in setting and enforcing standards due to several reasons. First, private standards can supplement missing or inadequate public standards.[9] Second, firms can increase profits through product differentiation, using private standards. Third, food companies can reduce costs and risks in their supply chains by standardizing products across suppliers. These efforts have been most prominent in industrialized countries, where ownership is becoming increasingly concentrated among a handful of key players. The consolidation has given rise to "buyer-driven chains" and sourcing patterns extending well beyond national boundaries, facilitated by developments in communications and transportation, and a policy environment conducive to more liberal trade (Henson and Reardon, 2005; OECD, 2006; Fulponi 2005; and Nadvi and Waltring, 2004). Consequently, exporters from developing countries must not only meet regulations of importing countries but also satisfy a plethora of private standards (OECD, 2006; and Henson and Reardon, 2005).[10]

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[6] The name of the programme was changed in 2007 to GlobalGAP in order to reflect its expanding role as one of the major international private standards. GlobalGAP is a private-sector body that sets voluntary certification standards and procedures for good agricultural practices. It was originally created by a group of European supermarket chains. GlobalGAP aims to increase consumers' confidence in food safety by developing good agricultural practices that must be adopted by producers. The focus of GlobalGAP is on food safety and traceability, although it also includes some requirements on worker safety, health and welfare, and conservation of environment

[7] The BRC standard is a private voluntary standard developed by the British Retail Consortium. The standard was set up in order to protect consumers and to enable British retailers to comply with the United Kingdom's Food Safety Act. The standard requires the adoption and implementation of HACCP principles, the setting up of a documented and effective quality management system as well as the control of the working environment, products, processes and personnel. It can be applied by any food supplier company.

[8] International Food Standard (IFS) is a food safety management system developed by German and French retailers. The IFS standard has been designed as a uniform tool to ensure food safety and to monitor the quality level of producers of retailer-branded food products. The standard can apply to all steps of food production.. IFS certification is required by almost all German and French retailers and by retailers in a number of other European countries. At present, retailers demand IFS certification only from the suppliers of private-label food products.

[9] In fact, public standards cannot keep up with rapidly changing trends in agro-food markets and private standards are therefore increasingly filling this gap.

[10] Unlike public standards, private standards encompass both product and process standards, such as food safety/hygiene protocols (i.e., British Retail Consortium). Other private standards combine a mixture of food safety, environmental and social dimensions (i.e., EurepGAP).The remaining private standards are primarily concerned with social and environmental issues (i.e., Social Accountability 8000, the Ethical Trading Initiative and the Marine Stewardship Initiative).

Standards can also be set by non-government organizations (NGOs). Such organizations tend to be non-profit oriented and do not necessarily pursue the same objectives as those of governments or businesses. These standards are voluntary but this does not make them less important, especially if producers are seeking to sell into niche markets (Kaplinksy, 2010) Although still a small segment of the global market, pressure is leading to their adoption; for example, Starbucks has adopted the Rainforest Alliance[11] label, which focuses on environmental and sustainable issues. Table 1 provides a typology of food safety and quality standards as defined by who sets and enforces them.

Table 1. Examples of public and private food safety and quality standards

	Public – mandatory	**Public – voluntary**	**Private – collective**	**Private – individual**
National	- National legislation (pesticide use, sanitary inspections)	-Food safety enhancement programme - HACCP advantage -SQF -USDA National Organic Programme	- Dutch HACCP - BRC Global Standard - Assure Food Standard - Qualitat und Sciherhei Intergrate Keten Beheersing -United States Pork Quality Assurance Programme	- Nature's Choice - Field-to-Fork (Marks and Spencer, United Kingdom) - Filiere Agriculture Raisonnee (Auchan, France) - Filiere Qualite (Carrefour, France)
International	-EU regulations -WTO regulations	-ISO9000 -ISO22000	- International Food Standard - SQF - GlobalGAP	- Same as above for multinational companies

Source: Henson, 2006.

4. Increasing scope of standards

Food safety standards are not only becoming more stringent but are also widening in coverage and include a range of issues, i.e., quality, social and environmental concerns (table 2). For example, while the EurepGAP's main objective is safety of fresh fruit and vegetables, it