# CHAPTER 17
# STANDARDS

Two related agreements, the Agreement on Technical Barriers to Trade (TBT) and the Agreement on Sanitary and Phytosanitary Standards (SPS), together cover the issues relating to standards in the World Trade Organization (WTO). The TBT Agreement aims to ensure that regulations, standards, testing and certification procedures, which vary from country to country, do not create unnecessary obstacles to trade. The SPS Agreement aims to prevent domestic sanitary and phytosanitary standards from being trade restrictive and protectionist. It focuses on protecting human, animal and plant life and the importing country from risks arising from the entry of pests, toxins, diseases and additives (box 17.1). Under the TBT and SPS Agreements, countries are encouraged to adopt international standards, though they are given flexibility in introducing more rigid or more lax regulations. Scientific justification is required for more rigid regulations.

Standards are important for human development for three main reasons. They protect public health by specifying safety standards. They facilitate trade by clarifying requirements and procedures. But they can be (and often are) used as protectionist barriers to trade by prohibiting the entry of imports that fail to meet the safety regulations of the importing country.[1]

There are three types of standards:

- Product standards, referring to characteristics that goods must possess, such as performance requirements, minimum nutritional content, maximum toxicity or noxious emissions or interoperability with component systems or networks.
- Production standards, referring to conditions under which products are made.
- Labelling requirements, enabling consumers to be informed about a product's characteristics or its conditions of production (Maskus and Wilson, 2000).

The WTO agreements encourage countries to use international standards issued by international standard-setting organizations—such as the International Organization for Standardization (ISO) for product and production standards for the manufacturing of goods, the Codex Alimentarius Commission for food safety,

**BOX 17.1 MULTILATERAL AGREEMENTS ON STANDARDS: A BRIEF HISTORY**

The 1947 General Agreement on Tariffs and Trade (GATT) specified that countries could take measures to protect human, animal or plant life or health as long as these did not unjustifiably discriminate between countries where the same conditions prevailed or were not a disguised restriction on trade (article XX (b)). This concept eventually formed the basis of the Agreement on Sanitary and Phytosanitary Standards (SPS).

By the time the Uruguay Round was launched in 1986, there was a general consensus on the need to reform agricultural trade, and elements of the SPS Agreement were brought into the trade negotiations. At the start of the Uruguay Round the US and the European Community proposed measures, endorsed by the Cairns Group and Japan, for harmonizing standards based on those of international organizations. Developing countries proposed removing sanitary and phytosanitary standards that acted as non-tariff barriers to trade and supported the international harmonization of such standards so that industrial countries would be unable to impose arbitrarily strict ones. These positions were incorporated during the mid-term review of the Uruguay Round, which identified harmonizing international standards, developing an effective process for World Trade Organization members to notify other members about standards, having members provide scientific expertise and judgements to the multilateral trade regime and creating an effective dispute settlement mechanism as priorities.

The Agreement on Technical Barriers to Trade was initially negotiated during the Tokyo Round (1974–79). It was later revised during the Uruguay Round and included in the final act of that round.

*Source*: Zarilli, 2000b.

the International Office of Epizootics for animal health and the Secretariat of the International Plant Protection Convention for plant protection. Countries can introduce stricter measures but should justify these measures on the basis of a risk assessment. The agreements also allow countries to adopt standards lower than those set internationally.

## ISSUES FOR DEVELOPING COUNTRIES

Standards have both direct and indirect links with human development. They have implications for human safety and public health. They can be used as protectionist devices. And they can have substantial implementation costs. Moreover, they may be inappropriate for the situation of developing countries.

### *Human safety*

Governments need to ensure that goods and services in an economy, whether imported or domestically produced, adhere to basic minimum standards of safety relating to toxins, additives, disease-causing organisms and the like. In determining standards at the domestic level, it is important to take into account the country's industrial and resource capabilities. Also important, though more difficult, is to balance domestic public health concerns with differing levels of acceptable standards internationally.

### *Public health*

Developing countries have been required to provide scientific justification for their sanitary and phytosanitary standards since 1999. But many lack the laboratories and technical personnel to conduct proper scientific tests. This affects their ability to set and defend their own standards as well as to meet the proof burdens of importing countries. It also limits their ability to negotiate mutual recognition agreements. These bilaterally negotiated agreements can improve market access by reducing duplicative testing, discrimination of products and the delays involved in both time-consuming processes. Because of the lack of confidence in the laboratory testing of developing countries, few mutual recognition agreements include these states (Zarilli, 2000b). As Zarilli explains (2000a, p. 40),

> *'As importers, developing countries are facing a different risk in the biotechnology field—that of importing and utilizing products which may prove to be harmful for human health or the environment. The limited capacity of developing countries to check products at the border and make their own assessment of the risks and benefits involved, and the lack of domestic legislation in this field, make their concern serious'.*

Standards considered important for public health in one country are sometimes seen as protectionist measures in another (box 17.2). For example, the response to bovine spongiform encephalopathy (BSE), or mad cow disease, led to serious trade conflicts. In 2001 Canada banned the import of beef from Brazil not because of scientific evidence that infected cattle were present in Brazil but because of a lack of documentation proving conclusively that the country's cattle were BSE free. Pursuant to rules under the North American Free Trade Agreement, Mexico and the US followed suit, affecting more than US$85 million of Brazilian processed beef exports. The ban, the latest in a series of trade disputes, led to concerns that the issue was less about health and more about trade. Less than a month later, after a Brazilian, Canadian and US technical team conducted on-site validation tests and Brazilian officials supplied extensive documentation, the ban was revoked.

### *Standards as non-tariff barriers*

Developing countries worry that increasingly restrictive sanitary and phytosanitary standards can also act as a non-tariff trade barrier. The decision by the European Union to apply restrictions going beyond international standards on the level of aflatoxins (highly toxic substances produced by certain moulds) in imports of nuts, cereals and dried fruits, for example, will have a significant impact on exports from Africa and Latin America. Otsuki, Wilson and Sewadeh (2001) estimate that African exports of these products to Europe will fall by 64 per cent (US$670 million a year) relative to sales under current international aflatoxin standards. The US groundnut industry, which will also be affected, estimates that complying with the EU sampling

**BOX 17.2 THE MEAT HORMONE DISPUTE**

Since 1989 the European Union (EU) has banned the import of meat and meat products from cattle treated with six growth hormones prohibited in its territory because they are seen as threatening human health. Canada and the US, believing that the use of these hormones is safe, considered the EU measure scientifically baseless and designed to protect EU producers from import competition. In 1996–97 the US challenged the ban in the dispute settlement body of the World Trade Organization (WTO), claiming that it violated the WTO's Agreement on Sanitary and Phytosanitary Standards (SPS).

The WTO dispute and appellate panels ruled in August 1997 that the ban was not based on scientific evidence nor justified by a risk assessment. The European Union had the option of conducting a risk assessment of the hormone-treated meat, and the WTO arbitration panel later gave it 15 months to bring its ban into compliance with rules on sanitary and phytosanitary standards. The appellate body upheld the panel's ruling but also ruled that the EU ban did not result in discrimination and was not a disguised restriction on trade. In addition, the appellate body disagreed with the panel's ruling that the ban was not based on international standards.

After conducting the risk assessment, the European Union decided to continue the ban after the WTO deadline of 13 May 1999. The European Commission offered evidence showing that one of the US-approved hormones was carcinogenic. US trade and health officials dismissed the evidence based on other scientific studies, and the WTO ruled in their favour, allowing the US to retaliate with tariffs on US$116.8 million of EU agricultural imports. Since then the European Union has offered to compensate by liberalizing imports of non-hormone-treated beef but has refused to remove the ban on one of the hormones and has lifted the ban on others only provisionally. US beef producers worry that this leaves the European Union with the option of asking the WTO to stop US retaliation without completely removing the ban.

The dispute highlights the tensions between multilateral rules and domestic policy concerns. From the US perspective it vindicated the SPS Agreement's aim of preventing the misuse of standards as protectionist tools. At the same time the WTO decision attracted widespread criticism from consumer associations and food safety organizations for giving trade priority over health and food safety concerns and for impinging on domestic policy issues.

*Source*: Zarilli, 2000a; Hanrahan, 2001.

method will increase the costs per lot (16 tonnes) by US$150. The cost is likely to be higher for Africa because of a higher expected rejection rate.

In another case the European Commission banned the import of frozen shrimp from Bangladesh from August to December 1997, citing hygiene concerns. The ban cost Bangladesh US$14.6 million in lost revenue, while upgrading sanitary conditions in the shrimp industry cost US$17.6 million (Henson and others, 1999).

### *Participation in setting standards*

Developing countries have had little if any role in designing international standards. The SPS Agreement, for example, was developed outside the WTO, based largely on existing standards and regulations in industrial countries, and then brought in as a companion to the Agreement on Agriculture during the Uruguay Round. When developing countries have participated in developing standards, those standards were often adopted by a simple majority vote, without amendments to reflect the

concerns of those in the minority (Zarilli, 2000b). Although developing countries now have greater opportunities to voice their opinions, full participation is often beyond the financial and technical means of even middle-income countries. Take the example of the Philippines. As a member of the 24 ISO Technical Committees, it participates only through correspondence. And it lacks the expertise to provide technical inputs or to gather information from industry and present its position effectively (WTO, 2001).

The attempt to harmonize international standards based on those of industrial countries has led to severe problems in implementation because of countries' varying circumstances and, for many, inadequate capacity. In October 2001, recognizing the need to respect the principle of equivalence, WTO members developed guidelines allowing countries to set standards based on their own capacity and requirements while providing adequate information to permit equivalence in standards to be measured.

### *Implementation costs*

Once standards are in place, developing countries have little option but to comply with them—or risk being excluded from international trade opportunities. Compliance can require extensive investments. A five-year World Bank project to aid Argentina in declaring some agricultural zones free of pests and diseases cost US$82.7 million. And Hungary spent more than US$40 million to improve sanitary conditions in its slaughterhouses (Finger and Schuler, 1999).

Beyond concerns about market access, the SPS and TBT agreements also raise issues relevant to the newer debate over international trade in genetically modified organisms. There is still relatively little information about the potential health and environmental effects of many genetically modified products. Developing countries in particular lack the capacity to completely assess the safety implications of such products, and many are hesitant to allow their import.

Article 5.7 of the SPS Agreement allows countries to provisionally adopt a sanitary and phytosanitary standard affecting the import of a product if it is imposed when relevant scientific information is insufficient or on the basis of pertinent information available. The measure needs to be temporary unless the country seeks to obtain additional information necessary for a more objective risk assessment or reviews the measure within a reasonable time (Zarilli, 2000a). While reaffirming the need to base such measures on scientific evidence, the article does not prevent countries from temporarily restricting imports perceived to be harmful.

The TBT Agreement is more ambiguous: if genetically modified products are classified as 'like products' to conventional products, the agreement provides no grounds for treating them differently. This has important consequences for labelling requirements and thus for public health measures. Since 1998 several EU environment ministers have maintained a de facto moratorium on the authorization of genetically modified organisms for planting or use based on public concerns about

their long-term effects on the environment. The US argues that the moratorium is a trade barrier, leading to losses of more than US$200 million a year for US corn farmers. It also argues that mandatory labelling and traceability requirements are inconsistent with WTO rules because they are excessively trade restrictive. The clash between the US and the European Union over the safety of genetically modified foods continues despite efforts to reach an agreement in October 2002. And even though new rules came into force in October that the European Commission hopes will help restart the approvals process, some EU member states are still refusing to lift the ban.

While the issue remains unresolved, there is clearly a thin line between protecting public health and preventing the misuse of standards as protectionist tools, especially where new technologies are concerned. From a human development perspective, public health concerns deserve priority.

## A WAY FORWARD

Sanitary and technical standards are important for protecting public health and safety in developing countries, but they need to be developed and implemented at the national level. The SPS and TBT agreements create problems for developing countries: they establish standards that were set without consulting most developing countries, they impose huge implementation costs, and when used as tools of protection, they can drag countries into protracted disputes involving substantial legal and administrative costs.

International standards must be renegotiated to reflect more equitably the policy concerns of developing countries. Moreover, developing countries should be given sufficient financial and technical assistance to participate in setting international standards and to comply with them, enabling them to take greater part in international trade. Financial assistance to train scientific personnel and establish laboratories, perhaps at the regional level, would allow developing countries to better negotiate mutual recognition agreements. The laboratories could also provide technical assistance to industries to facilitate their upgrading. And both developing and industrial countries need adequate capacity to deal with the challenges of new technologies.

The WTO agreements' fundamental principle, requiring scientific evidence as the basis for restricting imports, is a sound one. But it is inadequate for technologies for which the scientific evidence is missing. In cases such as these, the agreements need to give public health concerns priority over trade expansion.

## NOTE

1. Theoretically, standards have public good properties. Individual firms are unlikely to absorb the costs of investing in standards unless required to do so, since that may lead other firms to free ride on their efforts (Maskus and Wilson, 2000). In addition, standards may increase trade, since conformity makes goods more substitutable. For example, users may mix and match components within a system if the system is subject

to a certain standard. Under this scenario standardization leads to a more elastic increase in the demand for imported goods than under non-standardization (Baldwin, 2000).

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