

FOOD SAFETY IN FOOD SECURITY AND FOOD TRADE

Food Safety Issues in International Trade

SPENCER HENSON

FOCUS 10 • BRIEF 5 OF 17 • SEPTEMBER 2003

While not trade measures per se, food safety regulations and standards can impede trade and significantly affect the ability of developing countries to access markets, particularly in industrialized countries (see Brief 6 for examples). In part, this reflects the growing use of these measures globally in response to the rapid increase in scientific and technical understanding of food-borne hazards to human health (see Brief 4).

In extreme cases, countries are denied access to export markets: their exports may be banned from other countries because they fail to meet food safety standards, or the costs of compliance may be prohibitively high. Outright bans are mostly applied as temporary measures when acute food safety issues are identified (see the account of Nile perch exports from Kenya to the European Union in Brief 8). Even when exporters can comply with food safety requirements, their competitiveness relative to other exporters may be diminished because of their relatively high compliance costs (see Briefs 7 and 9). Both macro- and microeconomic effects of food safety regulations can be extremely damaging for export-oriented countries.

In developing countries compliance may require action by both government and individual exporters. Introducing certification procedures would be a government action, for example, while improving hygiene in processing facilities would be a private action. Typically, the less developed a country, the higher the costs of compliance, since its food safety capacity and regulations tend to be less strict.

Most of the effects of food safety requirements on trade stem from government regulation. It is increasingly recognized that voluntary food safety standards can also impede trade (see Brief 12). Exporters may comply voluntarily with established standards because customers require it or to meet food safety regulations. If such standards are so widely applied that in effect they become mandatory within a product market, exporters may have little or no choice but to comply.

The case studies in this set of briefs show how food safety requirements have affected exports of fish, groundnuts, meat, grains, and fresh fruits and vegetables. In some cases, exporters have been unable to gain market access because of stiff requirements; in others, existing export flows are threatened or curtailed by new regulations.

Food safety requirements in export markets can have a profound impact on the way that supply chains for agricultural and food products in developing countries operate. For example, evidence suggests that exporters of fresh vegetables in Kenya have responded to stricter pesticide controls in the European Union by procuring from a few large commercial farmers who are easier to oversee than numerous small-scale producers. Similarly, the European Union's stricter hygiene requirements for fish and fishery products have induced the Indian shrimp sector to employ a permanent workforce instead of casual labor.

THE SPS AGREEMENT

To establish and enforce rules regarding the application of food safety, the Sanitary and Phytosanitary (SPS) Agreement of the World Trade Organization (WTO) permits countries to take legitimate measures to protect the life and health of consumers (as well as animals and plants), provided such measures can be justified scientifically and do not unnecessarily impede trade. The Agreement requires that risks be kept to an acceptable level, however. WTO members are asked to accept the food safety measures of other members if they impose an equivalent level of protection. Before any new measure is implemented, a formal notification must be submitted through the WTO and a minimum period provided for comments from other members.

The SPS Agreement makes specific reference to international standards as the benchmark against which national measures are judged. In the case of food safety, the key international standard-setting body is the Codex Alimentarius Commission. The international harmonization of food safety measures potentially benefits developing countries, although many do not have the capacity to participate effectively in the Codex Alimentarius. Consequently international standards may fail to take adequate account of their needs and special circumstances (see Brief 11).

Given that developing countries typically implement less strict food safety regulations and standards than industrialized countries, in principle the SPS Agreement should help to facilitate trade by improving transparency, promoting harmonization, and preventing the implementation of measures that cannot be justified scientifically. Much depends, however, on the ability of developing countries to effectively participate in the reformed trade arena. The Agreement itself tries to facilitate this by acknowledging the problems that developing countries face in complying with SPS measures and allowing for special and differential treatment. For example, members are instructed to take account of the special needs of developing countries, particularly the least developed, when adopting food safety and other SPS measures. Such needs might include extended time for meeting new standards or the provision of technical assistance.

Implementation issues—many involving the SPS Agreement—for developing countries were negotiated prior to the 2001 Doha meeting of the WTO. Participants agreed that (1) better guidelines are needed to help establish equivalent regulations in different countries; (2) to encourage participation in standard setting, developing countries will receive assistance from five major international organizations; and (3) developing countries should receive financial and technical assistance, for example to facilitate participation in international standard-setting organizations.

CONSTRAINTS TO COMPLIANCE

Considerable investment is required to enhance food safety capacity in developing countries, in order to comply with regulatory requirements in export markets and in the SPS Agreement. Given that industrialized countries largely set the standards that apply in world trade, the burden of retooling often falls heaviest on developing countries. Moreover, at the current time many developing countries lack the necessary capacity to use the provisions of the SPS Agreement to defend their exports against questionable food safety measures or to justify the food safety requirements they apply to imports.

Capacity to implement effective food safety controls is of vital importance to agricultural and food exports from developing countries. For example, importing countries frequently require guarantees that minimum standards of hygiene have been applied in the manufacture of a food product or that fresh fruits and vegetables do not have excessive residues of pesticides. The exporting country must be able to comply with these requirements and to demonstrate that compliance has been achieved. While basic scientific and technical infrastructure is clearly vital, administrative structures, management, financing, and human capital are also important elements. Indeed, the experiences of many countries suggest that the lack of efficient management or sustainable levels of resources can seriously compromise the effectiveness of food safety controls.

The role of the private sector is often neglected in discussions of national food safety capacity. Often, however, it is through the specific actions of individual producers and processors that compliance with food safety requirements is achieved. An example is the application of Hazard Analysis Critical Control Point (HACCP) approaches and other hygienic practices by private enterprises in the production, processing, and handling of agricultural and food products. Further, capacity building in the private sector can complement, and indeed may be a substitute for, the development of public sector capacity. An example is investment in laboratory testing facilities. In a number of developing countries, the private sector has established its own laboratories, either within individual enterprises or through an industry organization, because public capacity is insufficient to meet SPS requirements in export markets.

In many developing countries a multitude of government ministries, departments, and agencies are involved in food safety matters. Furthermore, the responsibilities of these various parts of government are often not clearly defined or they overlap in responsibilities. Poor communication and coordination are other problems. As a consequence, administrative response to changing food safety requirements in export markets can be slow and bureaucratic. Therefore, while changes in food safety requirements may be communicated well ahead of time, there are numerous examples of developing countries struggling to comply at the last minute.

In certain circumstances the structure and modus operandi of production systems and supply channels for agricultural and food products in developing countries may be incompatible with food safety requirements in industrialized country markets or they may impose greater costs of compliance. For example, supply chains with large numbers of small-scale producers or intermediaries can be difficult to coordinate and control. Furthermore, traditional methods of production may conflict with highly developed food safety requirements and, in the most extreme cases, are prohibitively expensive. In turn, compliance with SPS requirements in export markets can induce changes in production systems and supply channels.

CONCLUSIONS

Food safety regulations and standards are increasingly influencing the ability of developing countries to access markets for agricultural and food products, particularly in industrialized countries. The rudimentary and outdated food safety controls of many developing countries may provide adequate protection to the domestic population, but they are ill-equipped to meet export market requirements. Further, developing nations are unable to participate effectively in the international institutions that have evolved to establish global food standards and provide rules for the implementation of national measures. However, countries or private suppliers that invest in the required capacity to meet changing food safety standards may enjoy a strategic advantage.

A number of intergovernmental agencies (such as the Food and Agriculture Organization of the United Nations, the World Health Organization, and the World Bank) and national donors have provided technical assistance to enhance food safety capacity in developing countries. The WTO's SPS Committee attempts to monitor these efforts and to provide a mechanism through which developing countries can channel their requests for assistance. It has also tried to address developing countries' concerns about the provisions of the SPS Agreement and how they are being applied by WTO member countries. The international standard-setting organizations have also explored ways to increase participation of developing countries in their activities. In many countries, however, capacity for food safety remains far below international standards, and food safety requirements continue to act as a significant barrier to markets of industrialized countries. ■

For further reading see S. J. Henson and J. Wilson, *Understanding the Nature of Sanitary and Phytosanitary Capacity*, (Washington, D.C.: World Bank, 2002); S. J. Henson, R. J. Loader, A. Swinbank, M. Bedahl, and N. Lux, *Impact of Sanitary and Phytosanitary Measures on Developing Countries*, (Reading, UK: Centre for Food Economics Research, University of Reading, 2000); IICA (Inter-American Institute for Co-operation in Agriculture), *Food Safety in International Agricultural Trade* (Costa Rica, 1999).

Spencer Henson (shenson@uoguelph.ca) is an associate professor in the Department of Agricultural Economics and Business, University of Guelph, Canada.



International Food Policy Research Institute

2033 K Street, N.W. • Washington, D.C. 20006-1002 • U.S.A.

Phone: +1-202-862-5600 • Fax: +1-202-467-4439 • Email: ifpri@cgiar.org

www.ifpri.org