

The Impact of Food Safety and Agricultural Health Standards on Developing Country Exports

Summary of findings from the World Bank's research program on sanitary and phytosanitary (SPS) standards, conducted by the Poverty Reduction & Economic Management Trade Unit and the Agriculture and Rural Development Department, World Bank.¹

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Increasingly stringent food safety and agricultural health standards in industrialized countries pose major challenges for continued developing country success in international markets for high-value food products, such as fruit, vegetables, fish, meat, nuts and spices. Yet, in many cases, such standards have played a positive role, providing the catalyst and incentives for the modernization of export supply and regulatory systems and the adoption of safer and more sustainable production and processing practices.

Much of the policy discussion pertaining to developing country trade and standards centers on finding ways to increase the participation of developing countries in international standard-setting bodies, or otherwise influencing the level and nature of the standards themselves. But, new findings from the World Bank's research program on sanitary and phytosanitary (SPS) standards (appendix 1) suggest that this represents a partial solution, at best, and that the challenges and opportunities posed by standards can be better addressed through strengthening public and private capacities to effectively manage food safety and agricultural health risks.

According to the findings, developing countries faced with rising SPS standards in their export markets can maintain and improve market access, position industries for long-term competitiveness, mitigate potential adverse effects on vulnerable groups, and improve domestic food safety and agricultural productivity *by adopting a strategic approach to food safety, agricultural health, and trade. For those countries and suppliers who are well prepared, rising standards represent an opportunity; for those who are poorly prepared, they pose safety and market access risks. High-income countries should increase development flows to help developing countries build the capacity to plan and execute the necessary strategies.*

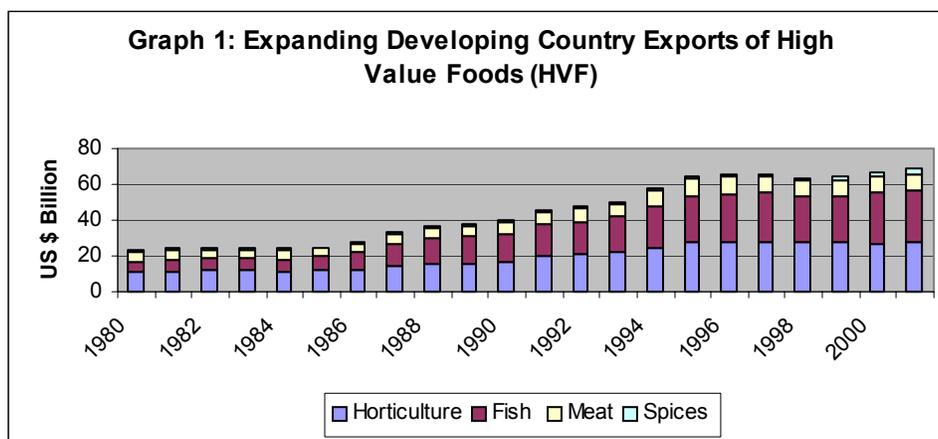
Growing trade in high-value food products

International trade in high-value food products has expanded enormously over the last decades, fueled by changing consumer tastes and advances in production, transport, and other supply-chain technologies. Developing countries have successfully participated in this growing

¹ *This summary is based on the report "Food Safety and Agricultural Health Standards: Challenges and Opportunities for Developing Country Exports" released on February 2, 2005*

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trade (Graph 1). Fresh and processed fruits and vegetables, fish, meat, nuts, and spices now account for more than 50 percent of the total agro-food exports of developing countries, while the share of traditional commodities—such as coffee, tea, cocoa, sugar, cotton, and tobacco—continues to decline. Growing demand for differentiated products from increasingly sophisticated consumers, along with the growth of integrated international supply chains, will provide continuing opportunities for competitive suppliers of high-value foods by allowing them to target a market segment that suits their competitive profile.



Source: Data from FAOSTAT

Overall, demand for food will increase dramatically in the next 20–30 years, as the world’s population grows by two billion people—mostly in developing countries. Growing populations, other demographic changes, and increased wealth will drive worldwide demand for safe, high-quality food and create opportunities for rapid expansion in trade in high-value products among developing countries—so-called South-South trade. The potential dismantling of traditional trade barriers, although far from complete in agriculture, promises further worldwide growth in food trade.

The application of SPS standards is an important dimension in the expansion of world trade in high-value perishable products (such as horticultural and fish products), to the extent that such standards enable the effective management of risks associated with the spread of plant and animal pests and diseases and the incidence of microbial pathogens or contaminants in food. Yet, in recent years many such standards have been tightened or extended into new areas, in the wake of a spate of food scares in industrialized countries (Table 1) and in the face of increased scientific knowledge, official concerns over bio-terrorism, and public concerns about the environment. The private sector has also reacted to consumer concerns and official requirements by developing its own sets of standards or ‘codes of practice’ and by altering its product sourcing to comprise a limited set of ‘preferred’ or company-affiliated suppliers. While some efforts have been made to harmonize standards—at industry, regional, or international levels—the overall trend is toward a proliferation of standards and an increasingly complex commercial and regulatory environment.

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Table 1 Recent food safety “events” in industrialized countries

Year	Event	Country
1987/88	Beef hormone scare	Italy/European Union
1988	Poultry salmonella outbreak/scandal	United Kingdom
1989	Growth regulator scare for apples	United States
1993	E.Coli outbreak in fast-food hamburgers	United States
1996	Brain-wasting disease linked to BSE (mad cow disease)	United Kingdom
1996/97	Microbiological contamination—berries	United States, Canada
1995–97	Avian flu spreads to humans	Hong Kong, Taiwan
1999	Dioxin in animal feed	Belgium
2000	Large-scale food poisoning—dairy	Japan
2001	Contaminated olive oil	Spain
2002–04	Isolated but repeated incidents of BSE	United States, Canada

In this rapidly changing context, developing countries must strive to keep up. Yet, is this a game they can win?

Rethinking the impact of stringent SPS standards—costs and benefits, winners and losers

The cost of complying with food safety and agricultural health standards has been a major source of concern in the international development community and among developing countries. Many worry that SPS standards will work increasingly to the disadvantage of developing countries that lack the administrative, technical, and other capacities to comply with new or more stringent requirements. *However, the available evidence indicates that, in many instances, these challenges are manageable and the compliance costs are a worthwhile investment, especially relative to the value of exports and associated benefits.*

Developing country suppliers rarely face all-or-nothing choices when determining the changes and investments needed to conform to emerging standards. Only occasionally do SPS standards pose an absolute barrier to international market access—and then usually in relation to animal diseases and plant pests. Barriers created by food safety standards are usually relative—that is, they favor suppliers that can comply easily with the standards and tax those that cannot. Suppliers need to weigh the costs and advantages associated with participating in different market segments. In some cases, there may be large and profitable opportunities to service the domestic market, the regional market, or market segments in industrialized countries that impose less stringent standards or allow more time to implement certain measures.

Even when targeting markets with relatively stringent standards, the level and relative significance of compliance costs varies greatly from industry to industry, between different countries, and among different firms and farms within the same industry. Several factors contribute to this variability:

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- Typically there are several ways to meet a standard. Countries and firms that have chosen to be proactive—that is, to prepare in advance to meet anticipated standards—are better able to weigh and compare various options and to adopt those that are more cost-effective. Entities that elect to delay compliance until after a crisis has occurred are likely to have less flexibility and may need to adopt costly measures simply to restore market access.
- Firms, industries, and countries are operating from different starting points and with varying assets obtained from past investments. For a relatively modern and mature industry, a change in standards may only result in incremental changes by producers or exporters and perhaps some modest adjustment in public sector oversight. However, for an underdeveloped supply chain, or where there is a lack of clarity on institutional roles, the new standard may require major investments in infrastructure and significant legal and/or organizational change.
- Market factors often affect the level and distribution of certain benefits. In some industries, price premiums are paid for products labeled as “safe” or “sustainable,” or bearing other evidence of desirable attributes. In other industries, competitive pressures have made such attributes the minimal norm or driven down the value of such price premiums.

Many of the potential benefits of complying with stringent SPS standards and of improved SPS management by producers are long-term, intangible, or accrue to stakeholders that do not incur the associated costs (appendix 2). Benefits such as productivity gains, reduced wastage, worker safety, environmental benefits, and even the value of continued market access may be underestimated or even go unnoticed altogether. This is unfortunate, because the perception that SPS compliance costs exceed the related benefits discourages needed investments and deters proactive approaches, thus increasing the likelihood of severe trade-related problems arising from adverse food safety or agricultural health events.

Many aspects of standards compliance do not require large investments or sophisticated technical or administrative capacities. The most significant challenge often is building broad awareness about the need for proper SPS measures and facilitating the broad adoption of good agricultural and manufacturing practices. A coherent regulatory framework and a system to assess compliance and conformity are also needed. Even in very poor countries, these systems and capacities can be developed if a proactive approach is adopted. Compared with the present and future volume of trade and other benefits, the costs of compliance usually are relatively low.

Although the overall trade of developing countries as a group has not been adversely affected by the tightening of SPS standards, the different approaches to this challenge and differences in underlying technical and administrative capacities have resulted in some relative winners and losers. Larger, incumbent suppliers tend to have an incremental advantage, because they can realize economies of scale, have better access to information, and benefit from well-established reputations (for example with overseas inspectors). Small and poorer countries and industries would tend to be disadvantaged. Still, effective action can make a difference. There are examples of well-organized industries and well-managed firms and supply chains in low-income

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countries (such as Kenya) that have maintained or even enhanced their competitiveness and market share during this period of more stringent standards.

Although compliance (and noncompliance) can bring about changes that have a negative impact on the poor, those who are able to participate in evolving supply chains may benefit. This can certainly apply to small farmers operating in suitable locations with adequate infrastructure, including effective producer organizations and long-term relationships with buyers. Also, the tightening of standards has sometimes increased off-farm employment opportunities, especially in product cleaning, handling, processing, and packing, and in a broad array of process controls. The terms and conditions of this employment in the formal supply chains, although not optimal, are almost certainly better than in the informal sector, in part because many foreign buyers are imposing labor standards.

Presently, among low- and (to a lesser extent) middle-income countries, weaknesses in food safety and agricultural health management, both in the private and public sectors, constrain productivity and competitiveness. Such constraints will almost certainly take on greater importance in the coming years, given trends in consumer attitudes and preferences, changes in supply-chain governance and market structures, and continued advances in science and technology. Interventions to strengthen SPS management capacities can contribute to growth and poverty reduction by removing those constraints.

Using one's room for maneuver—toward a proactive approach to SPS management

As the demand for high-value food products grows rapidly over the coming decades, countries and individual producers that approach standards compliance as part of an overall competitive strategy are likely to thrive. Several of the industries covered in the report, such as Kenya's horticulture sector (box 1), have succeeded in meeting standards by adopting a *proactive* approach to compliance—staying abreast of shifting technical and commercial requirements in their chosen markets and anticipating future changes. These firms have pursued and used higher standards to reposition themselves in more remunerative market segments, sometimes by adding value to commodities.

Box 1 Kenyan horticulture: high costs and high gains at the top of the market

Kenya's experience with fresh vegetable exports demonstrates that a well-organized industry in a low-income country can use standards for competitive gain. The leading firms in Kenya's fresh produce industry chose in the early 1990s to "ride the tail" of British supermarkets, investing in products, internal systems, and supply chains to service the premium-quality end of the market, including the growing demand for salads and other semi-prepared vegetable products. These firms, and their farmer suppliers, bore most of the costs of compliance—and reaped most of the benefits.

The costs of the "riding the tail" strategy have included the construction of high-care processing facilities, investment in private laboratories, and development of full supply-chain traceability. Leading companies have upgraded and expanded their facilities, putting in improved lighting and water sanitation systems, advanced cold treatment and storage systems, facilities for worker hygiene and HACCP, and advanced quality management systems.

Yet the benefits from these investments and of general compliance with the requirements of upscale

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supermarkets also seem to have been significant. The net profit margins of large Kenyan exporters can be as high as 14 percent for “high-care” packaged goods, compared to 2 percent for bulk vegetables packed loose in cartons. Other benefits perceived by the exporters include regularity of demand, advance information from supermarket clients on market trends, certainty with respect to quality and hygiene specifications, and enhanced reputation.

The payoff on Kenya’s proactive investment has been great. Over the past decade, as EU imports from nonmember countries were flat, Kenya was able to increase the value of its fresh vegetable exports significantly, in large part by shifting the product composition of its trade, meeting the highest standards in EU markets, and achieving a shift upward in the unit value of its exports. From 1991 to 2003, the value and volume of Kenya’s exports of fresh vegetables increased five fold.

More generally, a forward looking approach requires certain national and industry capacities, including those for channeling information and interpreting international regulatory and commercial trends, conducting risk analysis, undertaking hazard surveillance and monitoring, and applying contingency planning in SPS management (appendix 3). A successful proactive campaign also requires that policymakers, firms, and industry organizations adopt the perspective that effective SPS management is a core element of overall competitiveness strategies. Failure to address SPS problems or concerns may undermine an industry’s access to remunerative international markets. Yet, it should be noted that where other fundamental supply-side problems persist, the resolution of SPS constraints will not yield sustained export success, as Jamaica’s exporters have discovered (box 2).

Box 2 Jamaica—improving compliance with SPS standards is complicated by underlying problems of competitiveness

In recent years, exports of Jamaica’s major traditional agricultural products (sugar cane, bananas) have declined with the phasing out of preferential-access agreements. That decline has been partially offset by growing trade in an array of fruit, vegetables, and tubers, as well as fish and a range of processed food products. Many of these nontraditional exports are based on raw materials and commodities produced by smallholder farmers or caught by artisanal fishers. The annual value of exports of such products now exceeds that of Jamaica’s sugar exports.

Suppliers of many of these nontraditional exports are encountering more stringent official food safety and plant health regulations and more rigorous private-sector sourcing requirements that threaten their access to North American and European markets. The Jamaican government has implemented various programs and negotiated various technical or administrative solutions with key trading partners, yet these efforts have yielded limited results, due to a wider set of structural and supply-side constraints.

Despite persistent and periodic problems with pesticide residues and plant pests and diseases, Jamaica’s nontraditional fruit and vegetable exporters have made few changes in their product procurement arrangements. Most operate on a small scale, with limited staff and financial resources, and have been unable to make certain investments or adopt different management practices. The products they export are also staples in the domestic market so farmers themselves perceive little need to make changes. And, the demand for change is not coming from the downstream buyers or consumers. Most of this trade is channeled to small companies abroad who are providing traditional foods to Caribbean and other immigrant communities. Their interest lies in product taste and quality, not in phytosanitary measures or the presence of residues from pesticides which have been withdrawn from ‘approved’ use.

Jamaica’s SPS-related market-access problems have reinforced a broad range of other competitiveness constraints, including inconsistent raw material production, high post-harvest losses, expensive and scarce labor, and macroeconomic factors. Future export development will require private investment in export-dedicated production for which rising quality, food safety, and plant health standards are factored into production, post-harvest and overall management systems. It is not known, however, whether this activity

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will be sufficiently profitable to attract the needed investment. Further, Jamaica has a number of notable disadvantages compared with competing supply sites in Central America, Africa, and elsewhere.

Future export development may involve efforts to expand sales in sauces, seasonings, and other value-added food products, both increasing market shares among immigrant communities and extending sales to penetrate the mainstream market. Phytosanitary issues would become less important, yet challenges would center upon issues of packaging, labeling, and product additives.

This implies that developing countries could profit by viewing strict standards as a stimulus for investments in supply-chain modernization, providing incentives for the adoption of better safety and quality control practices in agriculture and food manufacturing and clarifying the appropriate and necessary roles of government in food safety and agricultural health management. Rather than degrading the comparative advantage of developing countries, the compliance process can result in new forms of competitive advantage and contribute to more sustainable and profitable trade over the long term, as shown by the case studies of Thai and Kenyan horticulture, Thai and Nicaraguan shrimp, and Indian spices (box 3).

Box 3 India's spice trade—investing in value-added markets

India is the world's largest producer and consumer of spices and one of its leading spice exporters. Its exporters have faced increased scrutiny by buyers and regulators for product quality and microbiological or chemical contamination. In response, both the industry and the Government of India are raising their investments in standards compliance. That spending (which totaled some US\$14.5 million between 1995/96 and 2002/03) represents a down payment on the development of exports of value-added spice products.

The largest investments have been in various types of product cleaning and sterilization equipment and in associated quality assurance management systems. In conjunction with these investments, most of the medium-sized and larger companies developed and implemented one or more certified quality-management systems. With the emergence in the 1990s of concerns about pesticide residues and aflatoxin in chilies and other spices, the leading Indian spice companies established and expanded their laboratory facilities, while the Spices Board expanded its own laboratory testing capacities to serve smaller exporters and carry out surveillance activities. Some modifications have been made in the sourcing of spices from farmers and there have been varied efforts to promote safer and more sustainable production practices.

The benefits of private and public investments in quality assurance and food safety are not yet fully reflected in the level of India's spice exports, but those investments provide an excellent platform for the future development of the industry, as leading firms move away from bulk spice sales and toward custom-made, value-added, semi-processed products.

Moving ahead: a SPS capacity-building agenda for developing countries

Improved capacity is the key to a successful proactive approach to compliance.

The proactive approach to standards compliance is most likely to succeed when underpinned with the necessary capacity in food safety and agricultural health control, and when policymakers have the confidence to speak out when they are concerned about the standards imposed by their trading partners and buyers. Every new SPS standard, public or private, favors those market players that are able to anticipate it. Private producers must have the capacity to target the right markets and to be ready to comply or make other adjustments *before* standards are

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imposed and trade is disrupted. Policymakers must draft sensible regulations; and regulators must have the capacity to enforce those measures. Standards can represent both an opportunity and a catalyst; yet for those poorly prepared or disinclined to take active steps, rising standards will almost certainly prove a 'barrier to trade'. To make further progress in this domain::

- Rich countries and pertinent technical agencies should increase and re-orient their assistance flows to developing countries for SPS capacity-building. Developing countries have sought such assistance, yet many past interventions have been triggered by 'emergency' situations, such as trade disruptions or disputes, rather than by the prospect of forging a strategic approach to SPS management and investment. Future capacity-building efforts should be geared toward maximizing the strategic options available to both government and the private sector in developing countries when faced with new or more stringent standards.
- Industrial country governments should harmonize SPS product and process requirements with those of other countries (and with established international norms), where there is an identified benefit of doing so. Through memoranda of understanding, twinning arrangements, and other programs, they should work closely with developing country trading partners to achieve mutual recognition of SPS management systems and to ensure that the impact on developing countries of proposed SPS measures is understood in advance.
- In order to reduce costs and ensure its own sources of supply, the private sector in industrial countries should harmonize or mutually benchmark the growing array of overlapping and competing private protocols on good agricultural and manufacturing practices, and other process standards. It should consult developing country suppliers when developing or revising standards so as to make their implementation more user-friendly and cost-effective. Supply chain leaders should consider joining with governments and donor agencies to provide technical assistance to suppliers to enable them to meet emerging requirements.
- Developing country governments should move beyond control functions to emphasize awareness-building on quality/SPS management and facilitating individual or collective actions which can be taken by private companies, farmers, and others. Adopting a long term and strategic approach to managing SPS standards and international market access obliges policymakers and technical administrators to work closely with the private sector to identify emerging challenges and opportunities, make appropriate regulatory changes, and choose suitable strategies and needed investments. Clear distinctions should be made between food safety and agricultural health challenges. Many of the former can be addressed by individual company actions, while many of the latter require more systemic approaches or controls that extend beyond the sphere of individual firms or supply chains.
- The private sector in developing countries should incorporate current and expected requirements related to SPS and other standards into business plans, including considerations of product-market combinations, customer and supply relationships, production technology, logistics, and investments in processing and marketing facilities. It should work through industry organizations to advocate for effective public sector support and to implement

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programs to build awareness, encourage adoption of good practices and codes of practice, and otherwise strengthen food quality and SPS management within the their industries.

- The World Bank should include policy advice and investment lending pertaining to SPS management and market access in the Bank's wider operational program, especially in relation to the promotion of agricultural competitiveness, smallholder commercialization, civil service reform, and trade and regional integration. It also should strive to integrate the SPS-related work of technical agencies (Food and Agriculture Organization, World Health Organization, World Organization for Animal Health, United Nations Industrial Development Organization, International Standards Organization) and bilateral donors, and closely cooperate with these agencies to pursue common mandates and to apply complementary expertise and resources.

Appendix 1 The World Bank’s research program on sanitary and phytosanitary (SPS) measures

The World Bank’s research program on sanitary and phytosanitary (SPS) measures was designed to improve understanding of an emerging set of policy and commercial issues in the area of food safety and agricultural health. (It does not cover other standards, such as labor, environmental or animal welfare requirements.) The program has involved a series of case studies covering selected commodity supply chains in nine low- and middle-income countries—Ethiopia, India, Jamaica, Kenya, Morocco, Nicaragua, Senegal, Thailand, and the countries of Latin America’s Southern Cone. The commodity chains are those related to fish, horticulture, livestock products, nuts, and spices. They were chosen because the products involved have posed SPS compliance challenges for a significant number of developing countries and have been the subject of many recent food safety events or crises in industrialized countries. Countries were selected to capture regional diversity, varied market orientations, and a range of experiences, from emerging to long-standing industries. Complementary “buyer studies” were also carried out, involving representative importers and retailers of shrimp and selected fruits and vegetables in the United States, European Union, and Japan.

The major themes and questions addressed in this research program have been:

- *Overall context and prominence.* How difficult are the challenges posed by rising private and public SPS standards for developing country suppliers? What is the relative significance of these challenges, compared with other factors affecting competitiveness?

Country and commodity case studies in the research program

Fish, shrimp, and fish products	India, Jamaica, Kenya, Nicaragua, Senegal, Thailand
Fruits and vegetables	Jamaica, Kenya, Morocco, Thailand
Animals/animal products	Ethiopia (live animals), Latin America’s Southern Cone (beef and FMD control)
Nuts and spices	India (spices), Senegal (groundnuts)

- *Dynamics and differences in standards.* What are the similarities and distinctive features of the evolving standards for different product groups and in relation to different industrial country destination markets? What are the main driving forces behind the newer standards? What can be expected in the future?
- *Strategies to comply with or influence standards.* What strategies have been used and have worked to meet the emerging requirements or influence their application? What are some key factors influencing the viability and sustainability of different approaches?
- *Costs and benefits of compliance.* What is the nature, magnitude, and overall significance of costs and benefits associated with supplier (and country) compliance with external market standards?

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- *Structural and distributional implications.* What are the implications of standards-related barriers and compliance for market structures and for the participation of small-scale farmers and firms in export-oriented supply chains?
- *Lessons from donor-supported programs.* What have been the patterns of capacity-building assistance in this field in recent years? What lessons can be drawn about the timing, institutional features, effectiveness, and sustainability of capacity-building programs?

Emphasis given to different types of standards in the World Bank research program

Greatest emphasis	Medium emphasis	Least emphasis
Food safety	Plant/animal health	Product quality
Limits on pesticide use and residues	Surveillance requirements	Product composition standards
Limits on veterinary pharmaceutical use and residues	Quarantine requirements	Product cleanliness specifications
Limits on microbiological pathogens	Pest risk assessment requirements	Grading schemes
Controls on food additives	Sanitation requirements	Controls on nutritional and other claims
Pack house/factory hygiene requirements	Fumigation requirements	General labeling requirements
Traceability requirements	Vaccination and disease prevalence requirements	
	Restrictions on uses of certain livestock feeds and pharmaceuticals	
	Traceability requirements	
		Environmental
		Controls on water contamination
		Controls on endangered species
		Environmental protection requirements
		Protection of biodiversity
		Organic production standards
		Social
		Labor standards
		“Fair trade” standards
		Animal welfare standards

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Appendix 2 Costs and benefits of complying with SPS standards

Costs—Initially, 0.5–5 percent of the multiyear value of trade; then 1–3 percent of annual sales

- ◀ Upgrade of laboratory infrastructure
- ◀ Upgrade of processing facilities
- ◀ Investments in farm-level facilities to comply with GAP requirements
- ◀ Reduced investment in new product development
- ◀ Reduced investment in domestic food safety controls
- ◀ Collection and analysis of laboratory tests
- ◀ Additional costs for ‘certified’ raw materials
- ◀ Additional overhead costs for implementing HACCP
- ◀ Reduced flexibility in production processes
- ◀ Reduced enforcement of domestic food safety controls

Benefits—Harder to compute

- ▶ Crisis containment, as when traceability system prevents an alert from becoming a crisis
- ▶ Increased attention to overall efficacy of controls
- ▶ Access to more remunerative markets and supply chains
- ▶ Greater efficiency, thus lower costs
- ▶ Less waste in production processes
- ▶ Reduced incidence of product inspection and detention abroad
- ▶ Enhancement of product quality
- ▶ Higher morale of inspection and production staffs
- ▶ Improved reputation of firm and/or country
- ▶ Improved worker safety and reduced environmental degradation

Appendix 3 Common food safety and agricultural health management deficiencies in selected sectors

Fish products	Horticultural products	Animal health
<ul style="list-style-type: none"> • Inadequate legislation relating to hygiene controls in fish processing • Poorly defined administrative responsibilities for approval and inspection of processing facilities and certification of exports • Weak inspection systems for processing facilities, including lack of documented procedures, insufficient inspection staff, limited skills and weak reporting • Weak laboratory testing capacity for microbiological and chemical contaminants and for residues of antibiotics • HACCP systems not widely implemented in fish-processing plants and not extending to fishery capture and production 	<ul style="list-style-type: none"> • Weak regulatory systems relating to the import, production, and sale of pesticides. • Lack of capacity to undertake pest-risk analyses • Weak controls relating to plant pests and diseases at borders • Low capacity to implement quarantine measures and enforce pest-free areas • Limited farmer knowledge of alternative pest-management approaches and appropriate use of pesticides • Limited application of HACCP principles by fresh vegetable packers/exporters (especially SMEs) • Limited systems for fresh-produce traceability 	<ul style="list-style-type: none"> • Weak systems to monitor emerging regulatory changes related to animal disease controls on imports in existing or potential export markets • Inadequate legislation and undocumented procedures relating to animal health controls • Weak controls relating to animal diseases at borders • Weak capacity to implement quarantine or control/eradication measures in the event of a disease outbreak • Weak capacity to undertake disease surveillance and risk assessments • Weak laboratory testing capacity related to the diagnosis of animal diseases and monitoring programs • No incentive to divulge or publicize outbreaks of animal diseases