INTERNATIONAL FOOD INSPECTION

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Summary

Countries find an increasing share of their food supply coming from outside their borders, while the geographical sources of these products diversifies. Countries also find establishing and retaining export markets for their own products have become increasingly important to their food industries. This increasing volume and diversity of trade puts more demands on government food inspection services. Trading partners see the advantage of agreeing on basic approaches to regulation and inspection systems. The SPS Agreement of the WTO provides the main trade discipline that applies to food safety standards. It recognizes that each country has the right to establish the level of

protection it wishes to offer its consumers, with the constraint that the level of protection is chosen based on a scientific risk assessment.

Countries must choose between different classes of regulatory standards in implementing policy. The three most important classes are process, product (performance), and information standards. Process standards specify how the product is produced. Product standards focus on specifying final product characteristics. Information standards specify the types of labeling that must accompany products.

International trade in food products will become more complex in the future because of increased regulation of a more diverse set of product quality attributes. As regulatory stringency and scope increases, there will be an even greater need for trading partners to work together to ensure fair access to markets and to build a consensus on regulatory and inspection practices.

1. Overview of Food Inspection in an Era of Freer International Trade

Governments and companies spend significant resources to assure the quality of foods imported from other countries and exported from their own countries. The importance of this quality assurance, and the related inspection systems, has grown as exports of food products have increased by over 35 percent from 1990 to 1998. These food exports represented about two-thirds of the value of all agricultural exports during the 1990s.

Countries find an increasing share of their food supply coming from outside their borders, while the geographical sources of these products diversifies. At the same time, countries find establishing and retaining export markets for their own products have become increasingly important to the viability of their food industries. For the same reasons, companies are finding international quality assurance increasingly important to their profitability.

This increasing volume and diversity of trade puts more demands on government food inspection services for imports and exports. On the import side, government regulators have to assure quality and safety for more products from more sources. At the same time, quality and labeling standards, particularly for food safety, are generally getting more stringent. This trend is explained by increasing scientific knowledge about food-borne illness, consumer incomes, and consumer knowledge. Deciding on which quality attributes to monitor and control, and at what levels, is ultimately a political decision for governments. This type of control has been getting increased attention in governments around the world. In addition, the range of quality attributes that may need to be monitored is increasing.

2. Food Inspection Systems

Countries have extensive standards for food products that cover differing arrays of quality attributes (see Figure 1). This range of attributes is important to understand because of the complexity it adds. For example, a fishery product may need to meet standards related to food safety (e.g., production under a Hazard Analysis Critical Control Points (HACCP) system), economic value (e.g., verification of species), and

packaging. In addition, it may be a requirement to display information on the label of the product (e.g., nutrition, production practices). Regulatory standards may require action at different points along the supply chain from inputs and production, through processing to final consumption.

Internationally, trading partners have long seen the advantage of agreeing on basic approaches to regulation and inspection systems. Much of the discussion has taken place in committees of the Codex Alimentarius Commission, a joint effort of the World Health Organization and the Food and Agriculture Organization of the United Nations. These discussions have increased in importance in recent years as the World Trade Organization (WTO) has recognized Codex as the authoritative standards setting body for food products. Familiarity with the language used in WTO and Codex discussions will be useful here.

The Agreement on Sanitary and Phytosanitary Standards (SPS Agreement) of the WTO provides the main trade discipline that applies to food safety standards. It recognizes that each country has the right to establish the level of protection it wishes to offer its consumers, with the constraint that the level of protection is chosen based on a scientific risk assessment. Decisions in WTO disputes have also established the idea that regulations and enforcement mechanisms must be clearly related to the control of the identified risk. Thus, the trend is toward expecting a country to be able to clearly link its preferred level of protection to its regulatory goals and, in turn, to its standards and inspection systems.

While in theory, the relationship between a targeted level of protection, regulatory standards, and enforcement mechanisms is straightforward, in practice this relationship is seldom so clear-cut. For example, the regulatory programs of many countries have only recently begun to develop explicit targeted levels of protection for consumers. Many are struggling with defining targets that focus on key risk issues and on acceptable risk as opposed to a simple zero risk standard. Most countries' systems are a mix of old laws and newer regulations that do not apply consistent standards across different products, risks, or countries of origin. While regulatory renovation is on going, the sheer number and complexity of food laws and regulations means that many systems are marginal updates of older, perhaps outdated, systems.

In setting regulatory standards, countries must choose between different classes of standards in implementing policy. The three most important classes are process, product (performance), and information standards. Process standards specify how the product is produced. For example, Good Manufacturing Practices specify in-plant design, sanitation, and operation standards. Product standards focus on specifying final product characteristics. An example is the specification of maximum pesticide residues in fresh fruits and vegetables. Finally, information standards specify the types of labeling that must accompany products.

In practice, countries often use a combination of these standards to address a range of quality issues. The choice of regulatory approach has strong effects on the design of inspection systems intended to enforce the standards for domestic and imported products. For imported products, process standards may require certification of the

production process in foreign countries. Product standards only require testing of the finished products, perhaps upon entry to the importing country, and labeling standards only require inspection of the package. Process standards have gained new prominence worldwide with the adoption of the Hazard Analysis Critical Control Points (HACCP) system as a main construct for safety standards, particularly for meat, poultry, and fishery products. However, product and labeling standards are also very widely used. Thus inspection systems must verify compliance with several different types of regulatory regimes for a variety of quality attributes.

1. Food Safety Attributes
- Foodborne Pathogens
- Heavy Metals and Toxins
- Pesticide or Drug Residues
- Soil and Water Contaminants
- Food Additives, Preservatives
- Physical Hazards
- Spoilage and Botulism
- Irradiation and Fumigation
- Other

2. Nutrition Attributes
- Calories
- Fat and Cholesterol Content
- Sodium and Minerals
- Carbohydrates and Fiber Content
- Protein
- Vitamins
- Other

3. Sensory/Organoleptic Attributes
- Taste and Tenderness
- Color
- Appearance/Blemishes
- Freshness
- Softness
- Smell/Aroma
- Other

4. Value/Function Attributes
- Compositional Integrity
- Size
- Style
- Preparation/Convenience
- Package Materials
- Keepability
- Other

5. Process Attributes
- Animal Welfare
- Authenticity of Process/Place of Origin
- Traceability
- Biotechnology/Biochemistry
- Organic/Environmental Impact
- Worker Safety
- Other

Figure 1. Quality Attributes of Food Products

Setting food standards and inspection systems is a multidimensional process. Every country wishes to set its systems as it sees fit, with no one second-guessing its choices. However, countries also do not want to be subject to what they view as arbitrary regulatory decisions made by other countries. Thus governments have some incentives to 'do unto others as they would have them do unto you.' However, the pressure of national needs and interests may overset this principle from time to time.

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