



*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

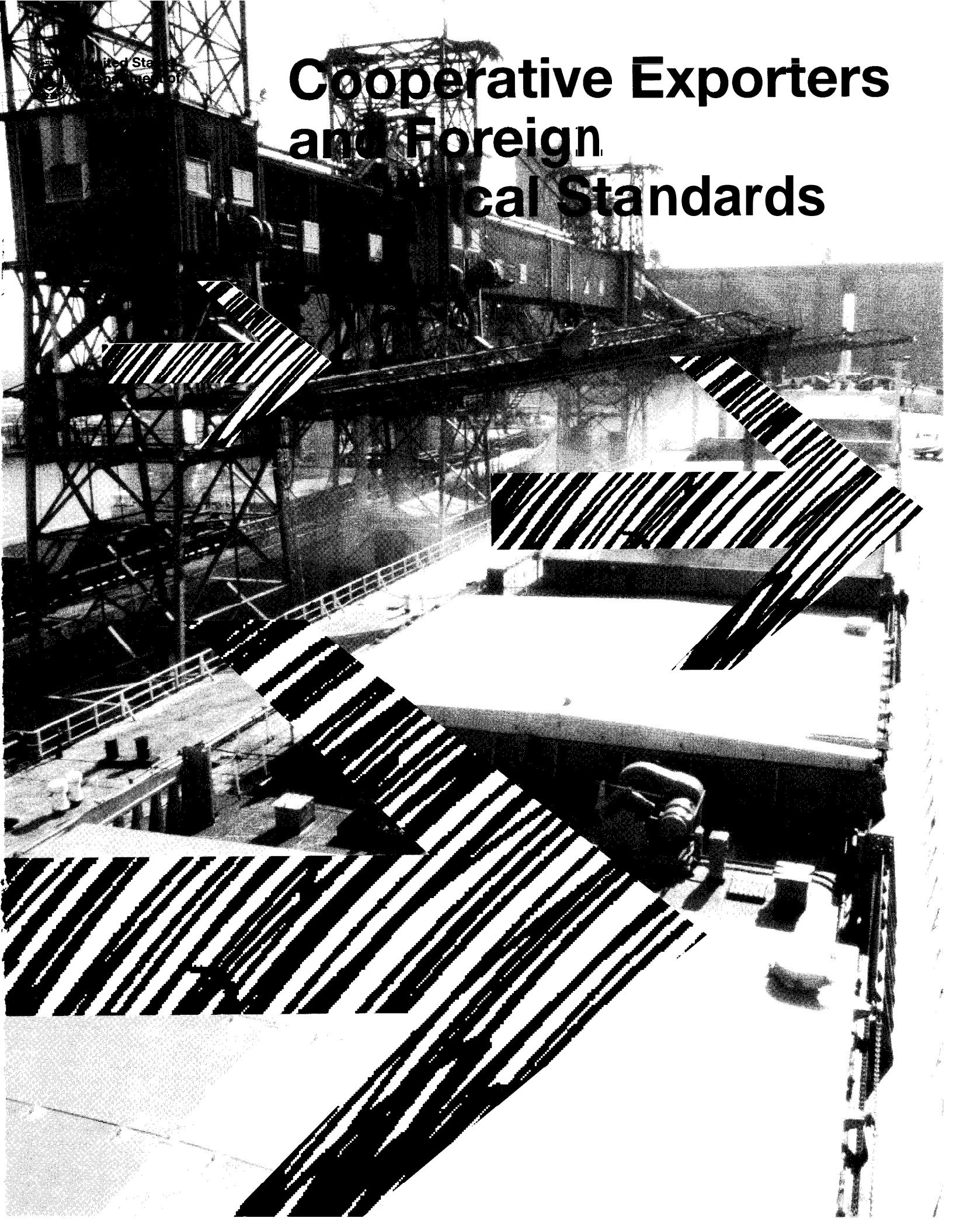
**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*



# Cooperative Exporters and Foreign Technical Standards

United States  
of America

## Abstract

### Cooperative Exporters and Foreign Technical Standards

Alan D. Borst and  
Bruce J. Reynolds

All cooperative exporters must monitor and either comply with or seek to modify or repeal the technical standards of the foreign markets to which they export or plan to export.

This report outlines the different types of foreign technical standards (FTS) and considers the nature of FTS and their impact on cooperatives. Next, the roles of Federal and State Government and international government organizations with respect to FTS are described. Finally, strategic approaches which cooperatives may adopt for dealing with FTS are considered, including organizational options for joining with other exporters with a common interest.

**Keywords:** cooperatives, agricultural exports, technical trade barriers, standards.

ACS Research Report 113  
March 1993

## Preface

The objective of this research report is to help agricultural cooperative exporters manage more effectively the costs of dealing with the technical standards and regulations of foreign countries to which they export.

Mention of a private firm or product does not constitute USDA endorsement.

The authors acknowledge the contribution of all cooperative managers and other professionals who gave their time to be interviewed.

# Contents

Highlights .....	iv
Classification of FTS .....	1
Food Safety.. .....	1
Plant Health .....	2
Animal Health.. .....	2
Quality .....	2
Packaging .....	3
Labeling and Consumer Information.....	3
Protectionist Objectives in Establishing Technical Standards .....	3
Variety of Trade Restrictions.. .....	3
Appraising Protectionist Objectives .....	4
Impact of FTS on Exporting .....	5
Higher Costs .....	5
Cooperatives' Response to FTS .....	5
Roles of Public and Private Sectors .....	6
Monitoring Foreign Governments' Standards Activities.....	6
Conferring With Foreign Government Officials.....	6
Product Evaluation.....	6
Product Certification.....	7
FTS Trade Dispute Resolution .....	7
Technical Assistance for FTS Compliance .....	7
Federal Government Role .....	7
U.S. Department of Agriculture .....	7
Office of the U.S. Trade Representative (USTR) .....	8
Technical Standard Services of State Departments of Agriculture.....	9
Oregon Department of Agriculture-Export Service Center.....	9
Washington State-IMPACT Center.....	9
International Government Organizations and FTS .....	9
Codex Alimentarius Commission (CODEX) .....	9
International Plant Protection Convention (IPPC) .....	10
International Office of Epizootics (OIE) .....	10
Organization for Economic Cooperation and Development (OECD) .....	10
General Agreement on Tariffs and Trade (GATT). .....	10
Private Sector Approaches to FTS .....	10
Compliance/Acceptance .....	11
Informal Consultation .....	11
Formal Challenge.....	12

## Contents

Organizational Options for Coordinating Exporters .....	
Dealing With FTS Issues .....	13
Trade Association .....	14
Export Trading Company.. .....	15
Federated Cooperative.....	16
Strategic Considerations Related to FTS .....	17
Cooperative Experiences With Foreign Sourcing and FTS Compliance .....	18
Future of FTS for Agricultural Products .....	19
References .....	20

## Highlights

Cooperative exporters must adapt their products to comply with the tastes and preferences of consumers in a targeted foreign market. Complying with the technical standards of the importing country is an equally necessary part of an export marketing program. Foreign technical standards (FTS) are a cost which must be managed, like any other exporting cost.

FTS are implemented to protect the health of citizens, animals, and plants or to provide some significant economic benefit to the consumers or marketers of the importing country. Standards also may be used, however, to protect domestic producers from import competition or to discourage imports to help a country improve its balance of payments. FTS are less transparent than quantitative trade restrictions-i.e., they are less distinct and visible than tariffs and quotas.

Cooperatives have a unique interest in working to comply with an FTS or, if appropriate, to challenge it. Unlike investor-owned exporters of agricultural products, cooperatives are dedicated to expanding the markets for their members' products.

Because standards relate to characteristics of products for which commercial firms are responsible and because their status as trade barriers is not as transparent, dealing with FTS is more the responsibility of the affected exporters than is the case with quantitative trade restrictions such as tariffs and quotas.

The public sector plays more of a supporting role with FTS disputes. The U.S. Department of Agriculture (USDA) has central responsibility for handling issues related to FTS. The Office of the U.S. Trade Representative gets involved when a U.S. exporter formally challenges a foreign standard.

Several approaches a cooperative exporter can take in dealing with an FTS range from accepting the legitimacy of the standard and investing resources to comply with it to rejecting the legitimacy of the standard and investing resources to challenge it. The political and economic consequences of the latter approach should be carefully considered.

A cooperative exporter may find significant benefits from uniting with competing exporters, cooperative or investor-owned, to deal with an FTS. Cooperative exporters with a common interest may establish an export trading company or federated cooperative to conduct their export marketing operations (including FTS-related functions) with limited antitrust protection. Further, exporters may join trade associations, which can serve their members by consulting with both U.S. and foreign government officials on FTS related matters.

An FTS may help a cooperative exporter to increase its market share in a foreign country if it can comply with an FTS more effectively than competing suppliers.

# Cooperative Exporters and Foreign Technical Standards

Alan D. Borst  
Bruce J. Reynolds

The adaptation of an exporter's product to match the tastes and preferences of a targeted foreign market is a standard part of export marketing strategy. All exporters must ensure that the quality, preparation, packaging, labels, ingredients, and promotion of their products are appropriate to the customs and laws of the importing country. The same is true of foreign suppliers of agricultural products trying to export to the United States.

This is a regular cost of exporting which must be planned for in a cooperative's export marketing plan and budget. Part of this process includes confirming that export shipments comply with all relevant technical standards of the targeted foreign country. From the standpoint of exporting, complying with foreign technical standards (FTS) may significantly add to costs, in some cases prohibitively.

On the other hand, an FTS may stimulate producers and handlers to improve the quality or configuration of their products. Indeed, as will be discussed in later sections, FTS may actually provide competitive advantages to a cooperative exporter.

The purpose of this report is not to evaluate the relative merits and demerits of FTS, but to view them as a cost of exporting that, like any other cost, can be reduced with effective management. FTS require that exporters work closely with Federal and State Government officials (and perhaps each other), and that they develop strategies to deal with the different kinds of FTS and their variable impacts on exporting.

## CLASSIFICATION OF FTS

Since the establishment of the General Agreement on Tariffs and Trade (GATT) in 1948, protectionism has often been classified as either tariff or nontariff barriers (NTB). The NTB designation includes a wide range of methods for restricting trade including quotas and FTS. FTS are distinctive in being product quality restrictions, as opposed to other methods of restricting trade which can be regarded as quantitative in nature.

**The Multilateral Trade Negotiations**  
"Agreement on Technical Barriers to Trade" (GATT Standards Code), completed at the GATT Tokyo Round in 1979, defines a standard as a written technical specification that establishes characteristics of a product, such as levels of quality, performance, safety, or dimensions. It may include, or deal exclusively with, terminology, symbols, testing and test methods, packaging, marking, or labeling requirements as they apply to a product.

Technical standards for agricultural products may be classified within the following six categories: food safety, plant health, animal health, quality, packaging, and labeling and consumer information. A brief discussion and example of each type of standard follows.

### Food Safety

Food safety standards are those related to human health concerns. Typical food safety standards will require imported agricultural products

to be certified as free of specified contaminants or prohibited substances.

An example of a food safety standard is Indonesia's salmonella restrictions for poultry imports. In November 1991 the Government of Indonesia implemented a regulation requiring "zero tolerance" levels of salmonella bacteria in imported poultry products. This severely reduced U.S. poultry exports to Indonesia. USDA officials have since persuaded the Government of Indonesia to repeal the zero tolerance regulation.

Another example are the bans that several countries have implemented since 1989, including the United States and France, on apples found to contain Alar, an apple growth stimulant which has been suspected as being a potential threat to human health.

Food safety standards and regulations can result from food scares when consumers are informed, legitimately or otherwise, about a potential or existing risk related to an agricultural product. The ban on apples with Alar is a good example of this. Both U.S. and foreign consumer concern over Alar was heightened when the news media publicized its risks in the late 1980's.

## **Plant Health**

Plant health, or phytosanitary, standards are those which require plants or plant products to be free from pests or diseases that could threaten crops or plants in the importing country. Such standards will sometimes only be applied to imports from a specified region of the exporting country, while other regions may be recognized as disease- or pest-free.

The Government of Japan prohibits the imports of many fresh fruits for fear of infestation from the codling moth, blight, and other plant pests. Many countries prohibit the importation of grains from areas where smut contaminations are a problem. The various types of smut are fungal diseases which produce black powdery masses of spores on affected grains. U.S. grain growers have lost some export markets because of smut infestation.

## **Animal Health**

Animal health technical standards require animals or animal products to be free from diseases or pests that could threaten the health of the importing country's livestock or other animals. As with phytosanitary standards, animal health standards are frequently applied to specified regions of an exporting country where the disease or pest in question is determined to be present.

Many countries, including the United States, prohibit the import of animals and animal products from regions not certified as free of foot-and-mouth disease. Another example is that the European Community (EC) limits unrestricted imports of U.S. bull semen to a specified part of the year because of their determination that imports in other periods could spread blue tongue and other diseases. This standard makes exporting to the EC prohibitively expensive for U.S. exporters during the restricted periods.

## **Quality**

Quality standards fall within two different categories—marketplace facilitators serving the needs of the buyers and sellers of agricultural products or regulations intended to prevent the marketing of agricultural products that are somehow judged to be inferior or otherwise undesirable. Quality standards, and grading classifications based upon those standards, facilitate marketing by:

(1) providing a limited number of homogeneous categories under which an individual container of agricultural products may be classified, thus allowing containers to be substitutable at an equal price;

(2) allowing communication in the market system about subjects such as preferences, practices, values, and costs; and

(3) creating price-value relationships among various containers and qualities of product.

Imported agricultural products may be classified into grades or required to meet some minimum criteria for size, color, the measured level of some ingredient, or some other measure of condi-

tion. Some U.S. fruit and vegetable marketing orders establish standards for size, color, or other attributes with which both U.S. and imported products must comply.

Some quality standards may prohibit the importation of agricultural products viewed as inferior. The EC prohibits the use of soy protein in meats, and the Japanese require testing of apple juice shipments to ensure their "authenticity." In both cases, the regulations seek to prevent the importation of "adulterated" or "impure" products.

## Packaging

Several countries regulate the packaging materials of products to be sold in their markets—including export shipments crossing their borders. One of the major purposes of such standards is the public concern about reducing solid waste.

As an example, Germany has extensive new packaging laws requiring all manufacturers (including exporters), distributors, and retailers to recycle their shipments' packaging materials. With environmental awareness rising among consumers in many foreign markets, especially in the EC, more packaging restrictions may yet be seen.

## Labeling and Consumer Information

Many of our major trading partners regulate the content of labels on imported products. Canada requires bilingual English-French labels. The EC recently adopted a directive requiring, among other things, that food products display "use by" dates and directions for proper storage. Japan currently requires country of origin information on the labels of many food products. Significant increases in labeling costs can arise from such regulations.

## PROTECTIONIST OBJECTIVES IN ESTABLISHING TECHNICAL STANDARDS

The ostensible purpose of technical standards is to safeguard the welfare of the importing country. Standards may also be used, however, to pro-

tect domestic producers. In some cases FTS have distinct advantages over other forms of trade restrictions for accomplishing trade protection. Quantitative methods of trade protection are more transparent and are more readily subject to GATT challenges or bilateral negotiations, while more complicated FTS may provide some cover for protectionist motives.

## Variety of Trade Restrictions

Protectionism need not always support a particular contingent of domestic producers. Many governments try to achieve trade surpluses in order to accomplish such goals as changing their balance of payments or to engender a more production- and less consumer-oriented society. For this reason, FTS are often used for products that are not locally produced and have limited substitution effects on local products. Foods that are either not used by the local processing industry or are not indigenous to an importing country are often targeted for FTS.

In general, there are strategic advantages to using a variety of protectionist methods rather than relying on one system. For example, a government may not want to use tariffs or quotas for products having relatively small import volumes or insignificant local production. In such cases tariff revenue would be small and internal political support would be weak. Yet, the cumulative impact on a country's balance of trade of numerous products, each having small import volume, can be significant. For products that compete with those of powerful interest groups in their countries, it may be more politically and diplomatically expedient for governments to use more overt quantitative methods of protection.

It is often difficult to use FTS for protectionist purposes without having a double standard when there is a large contingent of local producers. Double standards may exist, however, by means of selective enforcement. This situation has been alleged with regard to the EC ban on growth hormones in meat products.

In terms of a protectionist objective, the ideal circumstance is the existence of some kind of mea-

surable quality or substance, such as a bacteria or antibody, in the exporter's products that do not appear, or appear significantly less, in the domestic production of the importing country. In these cases; a technical standard may selectively target imports without impeding the sale of local products.

EC restrictions on bull semen imports are an example. Western Europe has effectively eradicated both infectious bovine rhinotracheitis (IBR) and blue tongue disease, which are much more prevalent in U.S. cattle. Many bulls have been exposed to these diseases, and such exposure is identifiable by antibodies from a blood test. There is no evidence that these diseases are transmittable from the semen of a healthy bull. The EC is operating under the assumption, however, that such transmission is possible. Furthermore, bulls that have not been exposed must be kept in isolation from those who have in order to meet the EC technical standard for imports.

The ways in which standards are implemented and enforced may also be the complicating factor. A standard may not be objectionable as written, yet in practice it may be a trade barrier. This may be the case if paperwork requirements are unreasonably burdensome, enforcement is inconsistent or discriminatory, the standard is implemented without appropriate notice to importers, the standard is ambiguous, or products are limited to specified ports of entry that will reduce the competitiveness of the exporter.

A Washington State apple cooperative manager reported encountering the latter with Mexico in 1991 when export shipments of U.S. apples were restricted to entry across the Mexico-Texas border. The problem with this port of entry restriction is that Texas is the furthest section of border from the Northwest, from which most apples are exported. This increased the cooperative's cost of shipping apples to Mexico.

Food products exported to countries that do not have local production are often subjected to FTS that are much different from U.S. standards. In some cases unfamiliarity with the product might lead to FTS that seem unreasonable to U.S. exporters.

## Appraising Protectionist Objectives

In developing a response to a trade-restricting FTS, exporters should make a general appraisal of potential protectionist objectives, in addition to addressing the alleged problems for the welfare of the importing country related to their product. Such an appraisal may indicate the "durability" of an FTS—that is the likelihood of being able to repeal or modify the standard in a way favorable to the U.S. exporter—which in turn will help guide producers in pursuing the best response between compliance and confrontation.

One example of an FTS designed to prevent the introduction of a substance that causes no apparent harm, but that has no evident protectionist objective, is China's rejection of soft wheat from the Pacific Northwest when it is found to contain traces of a fungus called TCK smut. Growers and their associations have documented scientific studies that show no harmful effects to human health from consumption of this fungus.

Although China is a substantial wheat producer, a protectionist objective is not evident because they have made substitute purchases of other U.S. wheat varieties which they desire less. In addition, China probably has fewer reservations about using quantitative methods for restricting trade than many other countries. While China's political system is not immune to interest-group policies, its producers do not have sophisticated networks of trade associations.

The implication for U.S. growers of soft wheat is that there is potential to achieve more access to the Chinese market from overcoming this restraint. Growers can respond to this barrier either by working on methods of complying or by attempting to convince the Chinese that TCK smut is harmless, with reasonable confidence that such actions would not be followed by new restrictions.

Appraisal of protectionist objectives of an FTS is important to the process of determining how to respond and to understanding the respective roles of government and the private sector. Although exporters have an incentive to involve their government as much as possible by emphasizing foreign protectionist objectives, it is also strategically

necessary to deal with foreign public officials with an open mind about their concerns.

## IMPACT OF FTS ON EXPORTING

### Higher Costs

The most significant FTS cost on exporters is a reduction in trade volume. When FTS do not block exports, the cost of compliance usually results in higher prices for importing countries. Even exporters with food products that comply must monitor FTS.

The more diversity there is in FTS for different markets, the higher is the expense of monitoring. Although substantial progress has been made in establishing international standards, much variation among countries persists. Given an elastic demand for many imported high value-added food products, compliance costs can substantially reduce quantity demanded.

In some cases the cost of compliance is prohibitive, which effectively excludes the product from certain markets. When unexpected bans are imposed, however, as recently occurred with grapefruit in the South Korean market, supply is fixed in the short run, and the market adjustment can only be made by downward pressure on prices in the markets that remain open.

Some exporters seek to avoid making changes in their products by providing scientific information to foreign officials in an attempt to have a standard modified or repealed. Whether attempting to convince an importing country to repeal a standard or accepting it by making special product modifications, both courses of action are an attempt to reduce a larger cost—the impact of FTS in reducing export volume.

### Cooperatives' Response to FTS

The decision to challenge FTS or to find cost-effective methods of adapting to them depends on how committed exporters or producers are to expanding the market for their products. Market expansion is critical from the standpoint of most farmers. The export operations in their control, pri-

marily cooperative, have an active role in trying to either challenge the legitimacy of, or to adapt their products to meet, FTS.

Large investor-owned companies marketing a diversity of food products and procuring them from multiple points of origin can often minimize or spread the burden of compliance with FTS in ways that are often less readily available to cooperative exporters. In foreign markets such companies also have more flexible strategic options to develop substitute products and ingredients or to switch to products grown in the importing country rather than concentrating their efforts on the export of U.S. food products.

Such strategies would conflict with the objective of cooperatives to increase market access for members' products. Several cooperatives with large market shares of particular U.S.-produced foods have active foreign market development programs. In many instances they have been at the forefront of efforts to reduce the negative effects of FTS for particular commodities.

Export potential to a foreign market determines the incentives to either challenge the legitimacy of FTS or develop low-cost methods of compliance. Assessment of export potential can be complex because many high-value food products do not have a long enough sales history from which to identify a trend, particularly in the fast economic growth markets in the Asian Pacific region. When FTS are applied to products that are not well established in the foreign markets, the extent of lost sales opportunities is uncertain, and thus it is more difficult to initiate a significant industry and government response.

There are opportunities to use cooperative methods of coordinated marketing for developing strategies to confront FTS. For example, an FTS in one market may require special adjustments by a select group of producers. In such cases, a cooperative could coordinate such an effort by operating a special pooling program.

Standards that promote product improvement and consumer acceptance are welcomed by cooperatives and other businesses that are committed to long-term market development. When quality standards exist for imported products, they are fre-

quently established by commercial interests, importers and food processors, and are not regulated by government authorities. Such standards can limit or block the entry of suppliers of inferior quality agricultural products.

## **ROLES OF PUBLIC AND PRIVATE SECTORS**

Dealing with FTS requires public and private sectors to work together in ways that differ from their roles when confronting a quantitative trade restriction. Removal of quantitative trade barriers is a goal of free trade, explicit in the GATT, while qualitative restrictions are accepted as legitimate policy so long as they address scientifically verifiable safety concerns or significant economic welfare benefits for consumers. Quantitative policy tools that discriminate against imports will always be opposed by exporting nations, but such discrimination by FTS is in certain cases accepted as justifiable intervention in trade.

Technical standards relate to characteristics of products for which commercial firms are responsible. For this reason, response to such qualitative restrictions is directly, and predominantly, the domain of the affected commercial firms. They are responsible for identifying and helping to verify FTS that fail to meet scientific standards. In addition, producers and exporters are largely responsible for determining whether the costs of compliance are significant in comparison to the combined cost of government and private sector efforts to affect a change in an FTS.

The roles of public and private sectors are affected by whether an FTS is regarded as protectionist or not. In most cases of dealing with FTS, producers and exporters must carry out an effective program of response, with Federal and State Governments providing supporting services.

The public sector role in dealing with FTS, however, is not limited to government-to-government negotiation over protectionist issues. Government programs facilitate exporter compliance in several ways. Various Federal and State Government bodies perform the following six tasks associated with FTS for agricultural products (pri-

vate sector firms are also active in the provision of these services in various ways).

## **Monitoring of Foreign Governments' Standards Activities**

Both current and prospective U.S. exporters have to be able to identify proposed and existing foreign standards related to their products. To fulfill this need, USDA has established a centralized source of such information, with materials translated into English and organized by country and product. USDA's Foreign Agricultural Service (FAS) / Office of Food Safety and Technical Services (OFSTS) is the official agency where signatories of the GATT Standards Agreement and other cooperating foreign countries send their notifications of proposed new standards or modifications of existing standards.

The Oregon Department of Agriculture Export Service Center also monitors and maintains records on the standards of a number of countries, with a focus on Japan, Taiwan, and other Asian Pacific nations.

## **Conferring With Foreign Government Officials**

U.S. exporters of agricultural products need to be able to convey comments related to proposed standards or changes in existing standards to the appropriate foreign officials. OFSTS and FAS overseas staff serve as the official channel for conveying such comments. Such initial communication with foreign officials responsible for the creation or implementation of FTS can prevent more expensive and complicated challenges to the standards in the future.

## **Product Evaluation**

U.S. exporters need to determine that their products meet the technical standards of targeted foreign markets. Product acceptability can be confirmed through three services: (1) a review of product ingredients, (2) chemical analysis of product to

verify compliance with foreign standards, and (3) a review of label format and content.

This evaluation can help cooperative exporters to narrow their list of targeted foreign markets. Some countries may seem like promising markets, yet severely restrict or prohibit imports of certain agricultural products. In addition, having a product evaluated for a given foreign market can help prevent U.S. agricultural exporters from having a customs complication at the border of the importing country, where the cost of resolving the situation may be prohibitive.

## **Product Certification**

Beyond the confirmation of general product acceptability, individual export shipments may need to be certified as being in compliance with the importing country's standards for additives, preservatives, pesticide residues, and heavy metals to meet the requirements of the importing country.

Agreements have been reached with some foreign governments to allow inspection and certification to be done in the United States instead of re-inspection and customs testing at the importing country's border. This may involve either direct certification of export shipments of agricultural products by U.S. inspectors or hiring foreign inspectors to certify shipments at a specified U.S. location.

An example of the former is the agreement completed between the Governments of Japan and Taiwan and the Oregon Department of Agriculture Export Service Center which authorizes the center to act as a customs laboratory for the two governments. An example of the latter is the arrangement between the Government of Japan and a U.S. export trading company, Northwest Fruit Exporters (NFE), handling the export of Northwest cherries to Japan. NFE pays the salaries, travel, and business expenses of Japanese inspectors who come to the United States during the cherry marketing season to clear cherry export shipments bound for Japan.

When cooperatives can get their export shipments cleared in the United States for entry into a foreign market, this can prevent expensive rejec-

tions at the importing country's border. For example, one agricultural marketing cooperative had a shipment of cooked poultry products rejected at a Japanese port when officials refused to inspect the products by container lot, as the cooperative had requested. Since it was not economical for the cooperative to transport the \$15,000 shipment back to the United States, the shipment was destroyed.

## **FTS Trade Dispute Resolution**

Channels of communication are available in the event that an FTS trade dispute arises between U.S. exporters and a foreign government. Disputes frequently arise over standards that are judged to be unfair nontariff trade barriers. The Office of the U.S. Trade Representative and USDA's FAS are the Federal agencies that serve as official channels for bilateral consultations with foreign governments on FTS disputes or formal challenges to a foreign government's standard.

## **Technical Assistance for FTS Compliance**

To facilitate compliance with foreign standards and minimize trade disputes, U.S. agricultural exporters need assistance with making the necessary adjustments in their export programs or with developing alternative means of compliance to suggest to a foreign government. The USDA Agricultural Research Service, several university-based research centers, and private consulting firms are all involved in performing such research.

## **FEDERAL GOVERNMENT ROLE**

### **U.S. Department of Agriculture (USDA)**

Responsibility for issues related to FTS for agricultural products is centered within USDA. A description of various USDA agencies that perform some of the functions described earlier for one or more categories of agricultural products follows:

Foreign Agricultural Service (FAS) FAS agricultural counselors and attaches stationed overseas may help to settle trade disputes related to FTS for

agricultural products through informal meetings with the appropriate authorities in the importing country.

In November 1990, FAS established the Office of Food Safety and Technical Services (OFSTS) to coordinate activities and respond to issues related to food safety regulations and barriers that affect the international trade of U.S. agricultural products. The Office serves as a primary contact for U.S. companies' inquiries related to food product labeling and food standards, sanitary and phytosanitary regulations, pesticide residues, and other technical requirements for U.S. agricultural products exported to foreign countries.

OFSTS is the official US. agricultural inquiry point for the GATT Standards Code. In this capacity, OFSTS receives and makes available notifications of proposed new foreign mandatory agricultural standards or modifications of existing standards notified to the GATT by the 40 signatory countries. U.S. agricultural exporters may review these proposed standards and submit comments where concerns exist about the potential impact on U.S. exports. OFSTS will forward any such comments received to the appropriate foreign regulatory agency.

**Animal and Plant Health Inspection Service (APHIS)** APHIS is responsible for the inspection and certification of animals, plants, and unprocessed agricultural products to meet health or sanitation requirements for export. Agency veterinarians inspect animals, poultry, and animal products to assure conformance with health and sanitation requirements for export as prescribed by the country of destination. At the request of exporters, plant inspectors certify the sanitation of plants and plant products in accordance with the requirements of the receiving nation(s). In addition, APHIS offices may provide U.S. exporters with import requirements of foreign nations for such products.

**Agricultural Marketing Service (AMS)** Exporters or the foreign buyers of their products may arrange, for a user fee, to have the AMS food certification service certify that an export shipment meets contract specifications. Specifications must be submitted to AMS in advance and must be writ-

ten so as to be certifiable. Specifications must meet, and may be based upon, the standards of the importing country.

AMS also offers services to exporters related to FTS through its Transportation and Marketing Division. Economists, traffic management specialists, engineers, and agricultural marketing specialists can assist cooperative exporters with technical information on international shipping standards and shipping practices that will help maintain product quality in transit.

#### **Federal Grain Inspection Service (FGIS)**

FGIS inspects and weighs all U.S. grain exports and certifies compliance with U.S. standards. The FGIS International Monitoring Staff addresses complaints from foreign buyers about either the quality or weight of U.S. grain exports. Several additional tests for grain exports are offered for such things as atlatoxin levels in corn or protein levels in wheat.

#### **Food Safety and Inspection Service (FSIS)**

FSIS certifies that export shipments of meat and poultry products, at the time of certification, are sound, properly labeled, and in compliance with the standards of both the United States and the importing country.

**Agricultural Research Service (ARS)** A primary mission of ARS is to assist each of the USDA action and regulatory agencies-e.g., AMS, APHIS, FGIS, and FSIS-by developing the information and technologies they need to establish and implement activities under their jurisdiction. ARS research programs also provide information on commodity and product quality, storability, safety, and procedures to meet quarantine protocols through technology transfer to exporters and other marketing associations.

#### **Office of the U.S. Trade Representative (USTR)**

The first step in an FTS trade dispute is for USDA/FAS counselors and attaches to meet informally with the appropriate officials of the importing nation. If these informal consultations do not resolve the dispute, then the USTR may open up

bilateral consultations with the importing country. There is an Assistant U.S. Trade Representative for Agriculture. USTR officials work with both Washington, DC, and overseas FAS staff and any other affected U.S. agencies in attempting to resolve trade disputes related to FTS for agricultural products.

If the importing country is a signatory of the Multilateral Trade Negotiations "Agreement on Technical Barriers to Trade" and no resolution is found through the bilateral consultations, then allegations of agreement violations may be resolved by an international forum of technical or trade policy experts.

### **TECHNICAL STANDARD SERVICES OF STATE DEPARTMENTS OF AGRICULTURE**

Most State Departments of Agriculture do not offer direct assistance related to FTS for agricultural products. Two of the more notable State centers working with FTS issues—the Export Service Center (ESC) and the International Marketing Program for Agricultural Commodities and Trade (IMPACT) Center—are located in the States of Oregon and Washington, respectively.

#### **Oregon Department of Agriculture-ESC**

The ESC was opened on September 4, 1990, as part of the Oregon Department of Agriculture's Laboratory Services Division. Services offered by ESC to agricultural exporters include product evaluation-ingredient review, product analysis, and review of label format and content-and product certification. ESC is approved as an official customs food laboratory for Japan and Taiwan. In addition, ESC will consult with exporters to help them comply with FTS, provide product tariff information, and carry out technically related export projects.

The ESC handles more than 100 products per month, has served more than 450 clients, and has worked with the following agricultural cooperatives or associations with cooperative membership: Agripac, Agway, Cabot Farmers Cooperative Creamery, Cascadian Farms, Cherry Marketing

Institute, Diamond Fruit Growers, Land O'Lakes, Norpac Foods, Nulaid Foods, Oregon Cherry Growers, Sunkist Growers, and Tree Top.

#### **Washington State-IMPACT Center**

The IMPACT Center has been open since 1985 on the campus of Washington State University. One of the center's three major objectives is to solve technical impediments to the export of Washington state agricultural products. IMPACT scientists have assisted exporters with work on packaging, pest and disease control, quality control, and other areas related to FTS. For example, they were able to increase dairy product exports by getting western Washington State declared free of blue tongue disease. The IMPACT Center staff have also helped to harmonize wood standards with Japan.

### **INTERNATIONAL GOVERNMENT ORGANIZATIONS AND FTS**

#### **Codex Alimentarius Commission (Codex)**

The Codex is responsible for issues such as food additives, pesticide residues, animal drugs, contaminants, labeling, packaging, and food quality standards. It was established in 1962 as a subsidiary of two United Nations bodies, the Food and Agricultural Organization and the World Health Organization and currently has 135 member countries. Standards are created through consensus within individual Codex committees. Government regulators, scientists, technical experts, and industry and consumer representatives serve Codex in both official and advisory capacities.

The mission of the Codex is to:

- protect the health of consumers and to ensure fair trade practices in the food trade;
- promote coordination of all food standards work undertaken by international and nongovernmental organizations;
- determine priorities and initiate and guide the preparation of draft standards through and with the aid of appropriate organizations; and

- finalize standards and (after acceptance by governments) publish them as either regional or global standards.

### **International Plant Protection Convention (IPPC)**

The IPPC develops plant quarantine requirements and other measures to prevent the international spread of plant pests and diseases. The IPPC was held in 1951 and currently has 88 signatory countries. The IPPC is affiliated with the Food and Agricultural Organization.

The IPPC works mainly through regional plant protection organizations (PPO's), such as the North American PPO and the European and Mediterranean PPO. Such regional groups develop guidelines for the certification of plants for export, fumigation standards, and the testing of pesticides.

The mission of the IPPC and regional PPOs is to promote international cooperation in preventing the introduction and spread of pests and diseases of plants and plant products, including rodent pests of crops, and to coordinate plant research.

### **International Office of Epizootics (OIE)**

The OIE is concerned with health and sanitary requirements for the international trade of animals and animal products. The OIE was established in 1924 and has 114 member countries. It maintains a worldwide reporting system for livestock diseases.

The OIE develops norms, standards, and diagnostic procedures for detecting, controlling, and eradicating animal diseases that pose a threat to animals or humans. The International Animal Health Code, established by OIE code and norms commissions, standardizes veterinary export and import requirements. The Code also includes information on preparation of veterinary regulations for international trade and certification of animal and animal product shipments for foreign trade.

### **Organization for Economic Cooperation and Development (OECD)**

The OECD develops guidelines for the certification of seed and the grading of fresh fruits and vegetables in international trade. Members include the United States, Canada, most countries of Western Europe, Japan, Australia, and New Zealand.

### **General Agreement on Tariffs and Trade (GATT)**

The GATT is not directly involved in preparing standards. Rather, the GATT Agreement on Technical Barriers to Trade (Standards Code) provides the international framework for the 100 signatory governments to exchange information on technical standard activities and to resolve FTS trade disputes. The GATT Standards Code was concluded at the Tokyo Round of the Multilateral Trade Negotiations and went into effect in 1980.

In the latest series of GATT negotiations, the Uruguay Round, a proposed agreement on food safety and plant and animal health standards is being considered. The sanitary and phytosanitary agreement, as proposed, would specify guidelines and dispute settlement procedures and would require GATT signatories to recognize the concept of disease- and pest-free zones.

The proposed agreement would also require that GATT signatories accept agricultural imports from other signatories with different technical standards if it can be shown that each country's standards provide an equivalent level of protection. The Codex, OIE, and IPPC are recognized within the proposed agreement as the international scientific organizations that will assist in the resolution of standard trade conflicts within their respective areas of expertise.

### **PRIVATE SECTOR APPROACHES TO FTS**

A cooperative may take a number of approaches when confronted with an FTS. The variety of approaches ranges from total acceptance

of the legitimacy of the FTS and an investment of resources to try to meet the standard's requirements on the one extreme, to a complete rejection of the standard's legitimacy and an effort to formally challenge it on the other. In the middle would be a strategy based on informal consultation with the appropriate foreign government officials.

A more detailed discussion of various approaches, from the least to the most confrontational, follows.

### Compliance/Acceptance

Working with foreign regulatory officials to bring the cooperative's export program into compliance with the standard.-An example of a cooperative that has strengthened its export program and significantly increased its foreign sales by working to comply with strict FTS is Tree Top, Inc., an apple and pear processing cooperative in Selah, Washington. The cooperative has dedicated considerable resources to meeting the requirements of foreign importers.

Tree Top has hired technical services staff and implemented Quality Assurance programs at both the plant and corporate level. New, state-of-the-art equipment was purchased to allow the cooperative to meet Japanese standards. Two product lines that Tree Top has aggressively marketed to Japanese buyers are pure apple juice, in glass bottles, and fruit juice drinks (10 percent juice), which are sold in 11.5-ounce aluminum cans. In order to export the latter, Tree Top set up a high-speed 11.5-ounce aluminum can production line in 1988.

The Government of Japan has strict quality standards for fruit juice products. It requires that apple juice be tested for amino nitrogen and ash content to ensure product authenticity and purity. Tree Top management believes that there are better methods for testing juice purity that would be less costly, but concluded that working to comply with existing standards would be the best strategy.

To promote its sales of pure apple juice, the cooperative sought and received certification by the Government of Japan as a Japan Agricultural Standards (JAS)-approved facility, thus allowing it to display the JAS label on its apple juice bottles.

Tree Top worked closely with its Japanese business partners, who provided technical information and advice. With such assistance, Tree Top successfully met Japanese standards and significantly increased exports to Japan.

Working to meet these technical standards has added to Tree Top's production costs, but it has also heightened the cooperative's quality awareness. In the few years since Tree Top has met Japanese import requirements it has more than doubled its export volume and has now positioned itself as a major supplier of apple juice to Japan.

### Informal Consultation

Recognizing the legitimacy of the foreign government's **concerns, but contending that there are other, better ways for the foreign government to achieve its objective(s) than the standard in question**.-Prior to 1978, the Government of Japan prohibited the importation of fresh cherries from the Pacific Northwest fearing infestation by codling moths. Several Northwest shippers believed that cherries could be rendered free of codling moth through methyl bromide fumigation. They established a Webb-Pomerene association, Northwest Fruit Exporters (NFE), which in 1982 was converted to an export trading company (under the Export Trading Company Act of 1982). Cooperative NFE members include Oregon Cherry Growers, Snokist Growers, Skookum, Diamond Fruit Growers, and Chief Wenatchee.

NFE met with Japanese Government officials and demonstrated the effectiveness of their methyl bromide fumigation technique. Exports of fresh Northwest cherries to Japan were permitted under certain conditions. The export trading company has continued to negotiate with the Government of Japan over these conditions and other FTS-related issues.

NFE is currently active from May to July when a manager and part-time staff are hired. Its purpose is to coordinate the handling and inspection of Northwest Cherries bound for Japan. NFE arranges travel and pays the salaries and expenses of Japanese Government inspectors who come to

the Northwest to clear the cherries for export to Japan.

In 1992 the Japanese Government began to allow U.S. shippers to export fresh cherries over their entire season. NFE is concerned, however, that exports may slow in the future as fears in Japan are beginning to develop about the safety of methyl bromide fumigation.

Maintaining that a standard is not applicable to the cooperative's export shipment.-Land O'Lakes (LOL), a dairy processing cooperative in Minneapolis, Minnesota, encountered an FTS while exploring the potential for exporting powdered milk to countries in Eastern Europe. In the aftermath of the Chernobyl nuclear accident in the former Soviet Union, some Eastern European countries began to require that imports of powdered milk be certified as not being contaminated with radiation.

LOL has argued that this food safety standard should not apply to shipments of its dairy products, since radiation exposure has not been a problem in the United States. In fact, it is not even clear how such a test would be conducted. To date this FTS issue has not been resolved.

Emphasizing positive consequences for the foreign government if it repeals, modifies, or decides not to apply the standard (or negative consequences if implemented).-In the late 1980's, LOL was involved in a development project with the goal of developing Indonesia's dairy industry. As part of the project, LOL planned to export dairy cows to Indonesia. The Government of Indonesia, however, had animal health standards that would interfere with these planned exports.

With the help of LOL's Indonesian investor partners and U.S. and Indonesian Government veterinarians, the FTS dispute was resolved through informal negotiations with Indonesian trade officials. LOL made the case that allowing the importation of the cattle was in the best interest of Indonesia as it was crucial to the successful outcome of the development project.

Eventually, LOL exported 12,500 dairy cows to Indonesia in conjunction with the project. By establishing the Indonesian dairy industry in this manner, LOL set up potential export markets for sever-

al dairy industry inputs that it markets, including calf milk replacer, forage varieties, feed concentrates and grains, genetic materials, and animal pharmaceuticals.

Another example of this approach was the involvement of the Northwest Horticultural Council (NHC), a trade association representing Washington and Oregon producers of apples, pears, and cherries, in a successful campaign to open the Venezuelan market for these products. In 1982 Venezuela banned the importation of these fruits because of restrictions on foreign exchange and national self-sufficiency goals. The NHC had not been able to resolve the issue in consultations with Venezuelan officials.

In 1989, the NHC urged the USTR to make opening of Venezuela's markets for these fruits a condition for U.S. acceptance of Venezuela's petition to join the GATT. In 1990 Venezuela joined the GATT and removed its restrictions on the importation of these tree fruits:

## Formal Challenge

Formally challenging an **FTS** as an unfair trade barrier.-If informal meetings with foreign government officials fail to resolve an FTS dispute, the next step is formal bilateral standards consultations between the United States and the foreign government. Failing resolution at this stage, if the foreign country is one of the 40 GATT Standards Code signatories, an international panel of technical and trade policy experts may be convened to settle the issue.

Also, any U.S. exporter can seek relief from an unfair trade barrier under Section 301 of the U.S. Trade Act of 1974 by filing a complaint with the USTR Office of the General Counsel. Section 301 of the U.S. Trade Act of 1974 empowers the President to take all appropriate action, including retaliation, to obtain the removal of any act, policy, or practice of a foreign government which violates an international agreement or is unjustified, unreasonable, or discriminatory, and which burdens or restricts U.S. commerce.

While no U.S. cooperatives have yet formally challenged an FTS, the following examples illus-

trate a cooperative initiation of a challenge to a nontariff trade barrier and a trade association's challenge to an FTS.

*Blue Diamond Growers and almond exports to India.*—While not involving standards, this is an example of a U.S. agricultural cooperative that had some success in challenging an unfair foreign trade barrier. In the mid-1980's, India severely limited the importation of almonds through restrictive licensing practices and prohibitively high tariffs.

Blue Diamond Growers, an almond marketing cooperative in Sacramento, California, had been trying to develop a market in India for its almonds since 1977. Frustrated by the trade barriers, Blue Diamond filed a Section 301 trade complaint against the Government of India. The U.S. Government accepted the case on behalf of the cooperative in February 1987. Blue Diamond maintained that if India did not open its markets to U.S. almonds, the U.S. Government should set up retaliatory trade barriers to Indian cashews.

In response to this action, the Indian Government sought to negotiate a settlement with the U.S. Government. It initially offered to increase import access in the dried fruit and nut category as a whole. Eventually the Government of India agreed to create a separate import category for almonds and to increase allotted sales to \$20 million. Blue Diamond had sought open licenses that would have allowed unrestricted market access, but was satisfied with the settlement and withdrew its complaint.

One of the lessons to be drawn from this action was that trade disputes can threaten parties that are not directly involved. U.S. handlers of cashew nuts were disturbed that Blue Diamond sought to cut off their imports as a retaliatory measure. Any cooperative challenging an FTS would be well advised to consider the consequences to itself and other parties, intended or otherwise, that could result from such an action.

Another lesson to be drawn from this experience is the critical role of political support in the event of such a legal challenge. Blue Diamond actively sought and received the support of its Senators, Congressional Representatives, and other

politically significant allies. This support was decisive in pressing the case against the Government of India.

*Restrictive Building Codes and Testing Standards for U.S. Forest Product Exports to Japan.*—While not involving cooperatives, this is an example of a successful challenge to an FTS. Exporters of U.S. forestry products attempting to sell to Japan had encountered several serious trade barriers, including restrictive building codes and testing standards that precluded the use of modern wood applications in construction on the grounds of fire safety.

The National Forest Products Association, a federated trade association representing the wood products industry, worked closely with the U.S. Departments of Commerce and Agriculture in studying these trade barriers. Information emerging from this work won broad congressional support for challenging these various trade barriers.

On May 26, 1989, the USTR listed Japan's unfair trade barriers to U.S. forest products as a high priority for "Super 301" negotiations, as authorized by the 1988 Omnibus Trade and Competitiveness Act. This Act requires USTR to annually designate a few specific unfair trade practices of targeted foreign countries as U.S. trade liberalization priorities.

Japanese officials entered into a series of bilateral market access talks with the United States. The result of these talks was an announcement by Japan of a package of measures to improve market access for U.S. exporters. Part of this agreement was that the Government of Japan would ease its restrictive building codes and testing standards. U.S. forestry industry sources have estimated that when the complete agreement is implemented it could increase annual U.S. forest product exports by \$1 billion.

## **ORGANIZATIONAL OPTIONS FOR COORDINATING EXPORTERS DEALING WITH FTS ISSUES**

An agricultural cooperative exporter may find it advantageous to unite with competing exporters that have a common interest in resolving a given

FTS issue-whether they be U.S. or foreign, cooperative or investor-owned. A potential advantage of organizing such a consortium is the possibility of realizing significant economies of scale resulting from the ability to:

- share fixed costs and eliminate redundant costs;
- employ and more fully utilize specialized technical staff and equipment than could a single cooperative;
- generate more capital;
- lower procurement costs through volume discounts and greater buying power; and
- obtain better control over pricing through greater coordination of supply and marketing.

Depending on the functions, there are three major organizational alternatives under which such consortiums could be organized-trade associations, export trading companies, and federated cooperatives. Each one has distinct purposes and characteristics.

## Trade Association

An agricultural trade association is a non-profit organization of competing agricultural businesses with the mission of assisting its members and their industry in dealing with common business issues-including those related to FTS trade complications. Trade associations working with FTS issues are likely to be commodity (e.g., apple, corn) or industry (e.g., fresh produce, grain) specific in membership. There are dozens of agricultural trade associations ranging in size from State or regional up to national or international. Most significant cooperative exporters are likely to be affiliated with one or more associations.

Northwest Horticultural Council and Northwest Tree Fruit Cooperatives.-One of the trade associations most active in dealing with FTS issues is the Northwest Horticultural Council (NHC). Based in Yakima, Washington, NHC represents the Washington and Oregon tree fruit industry on federal and international policy issues. Founded in 1947, the NHC addresses issues common to its members, including technical export problems and

trade agreement negotiations, and also consults with both U.S. and foreign governments at different levels on standards and regulations affecting the tree fruit industry.

The NHC has seven member trade associations including the Washington State Apple Commission and the Washington State Fruit Commission. Several tree fruit marketing cooperatives belong to these member associations and are actively involved in the NHC, including Skookum, Diamond Fruit Growers, Trout, Snokist Growers, Wenoka Sales, and Chief Wenatchee.

The NHC has worked to eliminate unfair foreign trade barriers, open new markets, and maintain access to existing markets for Northwest apples, pears, and cherries. The Council has dedicated considerable resources to resolving FTS trade disputes. In 1989 the NHC hired a vice president for scientific affairs to strengthen their expertise in the standards area, and in 1990 they expanded their export manual to include more information on foreign standards.

The NHC is experienced in dealing with FTS complications. For example, in 1987 Swedish National Food Administration officials found that pears imported from Washington and Oregon exceeded the allowable residue levels for mancozeb. NHC staff flew to Sweden, met with the officials, and were able to isolate the pears that were in violation of the standard. In this case, the majority of the shipment was cleared for import and losses were minimized.

**Dissension Among Trade Association Members Over FTS Issues .**-While the larger national associations are usually the most active in the standards area, in some cases, regional and relatively local organizations are also involved. FTS often affect producers differently, particularly when there are varietal differences or a wide geographic dispersion of production. Such variations in the impact of FTS lead to differences of opinion as to appropriate courses of action that industry trade groups should follow.

The problem of developing a unified position toward FTS has reinforced a pattern of regional associations, with membership in national federa-

tions, having to assume responsibility for specific cases. These responsibilities include contact with foreign and U.S. Government officials and support for testing and research.

For example, the TCK smut problem for Northwestern soft white wheat, while involving U.S. Wheat Associates, has been an issue in which the wheat commissions and grower organizations of the Northwestern States have assumed the lead role in coordinating an industry response.

In some cases, one group of U.S. producers may benefit from an FTS that is creating a trade barrier to another group in the same industry. For example, the EC will only accept kiln-dried lumber because such treatment effectively exterminates the pine wood nematode. Kiln drying is not done in most timber areas of the Western United States, which gives the EC market to eastern producers.

Due to the special significance of this issue to western lumber producers, the Western Wood Products Association, a regional member of the National Forest Products Association, has assumed responsibility. In this case, a federated structure allows for both national coordination and local focus for handling issues that might otherwise bring geographically dispersed members into conflict.

Another point of contention has been differences of opinion over whether or not to accept a foreign government's terms in a standards negotiation. Some exporters are concerned that acceptance of a standard that is not based on scientific evidence could establish unfavorable precedents, while others are more concerned with entering the market, with less concern about the standard terms.

An example of this situation is the ongoing negotiations over the conditions under which U.S. apples may enter the Japanese market. Currently, U.S. apples may not enter Japan because of phytosanitary concerns. Japanese officials have offered terms which some U.S. apple industry figures reject as being scientifically unjustified while other interested U.S. parties argue for their acceptance.

## Export Trading Company (ETC)

An ETC is an organization designed to facilitate the export of U.S. goods and services. It can be either a trade intermediary, providing export-related services to producers, or an organization set up by producers themselves. Cooperative exporters have used both arrangements effectively.

Through either organizational option, cooperative and non-cooperative exporters with common interests can share the costs of export marketing, including costs associated with FTS. ETC's can allow competing U.S. exporters to take advantage of economies of scale for many functions related to FTS including labeling, packaging, inspection, fumigation, and dealing with foreign regulatory officials.

One major advantage of an ETC is that it can reduce the uncertainty over the application of U.S. antitrust law to export operations. Under the Export Trading Company Act of 1982, if an ETC's export trade activities and methods of operation are found not to substantially lessen domestic competition or restrain trade, the ETC may receive a Certificate of Review from the U.S. Department of Commerce (with concurrence from the Department of Justice). This certificate will grant the ETC significant protections from antitrust litigation.

The following are two examples of ETC's which work with cooperative exporters. The first case is an intermediary doing the international marketing for a group of cooperatives, and the second is an organization set up by both cooperative and investor-owned exporters.

**World-Wide Sires and artificial insemination (AI) cooperatives**-World-Wide Sires of Hanford, California is an ETC exclusively handling the export sales of frozen bull semen for several U.S. artificial insemination cooperatives-Federated Genetics, KABSU, NOBA, Select Sires, Sire Power, Tri-State Breeders Cooperative, and 21st Century Genetics. The firm is a trade intermediary which acts as an agent for its cooperative clients. World-Wide Sires handles all of these cooperatives' export sales except those to countries in North and South America, which are handled by the individual

cooperatives. It has received a Certificate of Review to cover its export operations.

The artificial insemination (AI) industry has encountered a substantial number of FTS, including those mentioned earlier that the EC has imposed which selectively affect U.S. exporters but not its own industry. Unlike some agricultural industries, FTS for AI have generally imposed the same cost burden on all U.S. firms. As a result, this industry is unified in supporting the National Association of Animal Breeders (NAAB) in responding to FTS. World-Wide Sires has worked closely with NAAB and USDA/APHIS staff in dealing with FTS issues related to bull semen.

Twenty AI cooperatives have about a 70-percent share of the market. Industry participants believe that FTS have significantly increased in recent years and may accelerate in the future. This and other changing conditions in the AI market have led AI cooperatives to establish common marketing associations, such as World-Wide Sires. These associations serve as an organizational means for planning and managing specialized responses to new marketing demands, including those related to FTS. As more restrictions become imposed, federated associations can provide coordinated planning so that AI cooperative exporters will not create needless duplication in making adjustments for FTS compliance.

For example, the impending EC requirement that bulls without exposure to certain diseases must be isolated from other animals to be certified, will impose substantial costs for each cooperative to build separate barns. Much duplication, however, could be eliminated by means of coordinated planning and cost sharing.

**Northwest Fruit Exporters and Northwest Tree Fruit Cooperatives**—NFE, as previously described, is an ETC with both cooperative and investor-owned members that manages export sales of cherries to Japan. In this case, the joint investment by these exporters in an ETC had three benefits.

1. The establishment of the ETC allowed the members to present a single, united front to the Japanese Government. Japanese officials prefer this situation to one where many smaller competitors

try to negotiate separate arrangements. The Government of Japan has recognized NFE as the exclusive exporter for the Northwest cherry industry, and NFE has continued to consult with Japanese officials on the standards and conditions under which cherries may be exported to Japan.

2. It alleviated the free rider problem inherent in the financing of any venture to modify an FTS that adversely affects more than one exporter. Since all Northwest cherry exporters may potentially benefit from the opening of the Japanese market, the costs must be spread among them. Otherwise, exporters would be hesitant to invest in opening the market for fear of competitors reaping the benefits of increased exports to Japan without having shared in the costs of such a venture. Given their exclusive marketing relationship with Japan and the equitable sharing of costs among NFE members, the free rider problem has been largely eliminated.

3. The joint investment by NFE members resulted in gains from a realization of economies of scale. The costs of NFE facilities and equipment, the funding of the Japanese inspectors, and other expenses are all equitably split among members. Assuming that individual exporters could have negotiated deals with Japanese officials, they would still have faced greater costs individually and could not have used the resources with the same efficiency as NFE.

## Federated Cooperative

This type of cooperative is owned and controlled by its members, which are themselves grower-owned cooperatives. A variation on this organizational form is a “mixed” cooperative, whose membership is composed of both grower-owned cooperatives and individual agricultural producers.

**Advantage Over ETC**—The major advantage of a federated cooperative over an ETC for performing export marketing functions is that the limited protection from the application of U.S. antitrust laws applies to a wider range of jointly undertaken marketing activities, including those that affect domes-

tic competition. Unlike an ETC, however, which allows both cooperative and investor-owned firm membership, only cooperatives (or individual growers) can be members in a federated agricultural cooperative.

An example of a federated cooperative organized to coordinate and streamline the international marketing operations of its cooperative members is AMCOT. This federated cooperative is jointly held by four large grower-owned cotton merchandising cooperatives—CALCOT Ltd., Plains Cotton Cooperative Association, Southwestern Irrigated Cotton Growers Association, and STAPLCOTN. AMCOT has reduced selling costs for its members through centralized utilization of sales personnel, facilities, and equipment.

AMCOT staff have established a global network of textile mill contacts and regularly track world cotton markets. The federated cooperative has both U.S. and foreign sales offices which keep in continual contact with the member cooperatives to stay current on available supplies, pricing, and sales policies. AMCOT serves its members as a consolidated international extension of their individual marketing operations.

Reflecting the size and diversity of production among its members, AMCOT provides buyers, i.e., textile mills, with access to large volumes of cotton in all varieties and in all different quality standard classifications. Moreover, AMCOT works to educate textile mill personnel on cotton quality standard classification through seminars.

This option could be adopted by any group of competing cooperative exporters facing a mutual FTS problem. As with an ETC, such an arrangement could potentially reduce the costs of complying with an FTS by leading to more efficient use of staff, facilities, and equipment necessary for compliance. As an example already discussed, NFE could have been organized as a federated cooperative and had a wider degree of antitrust protection if all of its members were grower-owned cooperatives.

**Limitation**—This last point, however, is the major limitation with such an approach. In many international marketing situations, including those related

to FTS, it is more important to work with competing investor-owned exporters than to obtain broader antitrust protection. This is one reason why there are so few federated cooperatives primarily or exclusively organized for international marketing.

## STRATEGIC CONSIDERATIONS RELATED TO FTS

### *How an FTS Can Help an Exporter Increase Market Share*

1. When an input that is restricted or banned by a foreign government is not used by all competing exporters of an agricultural product.

Two examples of this situation are EC restrictions on wax sealants for apples, and meat products produced with hormones. Some EC countries regulate the wax sealants that may be used on imported apples. Packers of conventionally grown apples frequently apply waxes while packers of organically grown apples do not. Apple cooperatives handling significant volumes of organic or wax-free conventional apples are thus free to export these apples without the complications of these regulations. Indeed, the subsidiary of one cooperative is exporting substantial volumes of organic, wax-free apples to the EC.

In January 1989 the EC banned the import of meat products produced with hormones. As a result, U.S. meat product exporters lost about \$100 million in annual sales to the EC. This ban had a much more drastic effect on U.S. producers, whose grain-fed cattle are almost all raised with hormones, than on producers in countries such as Argentina, Australia, and New Zealand, whose range-fed cattle are mostly raised without hormones. Hormone treatments are more cost-effective with grain-fed cattle than they are with range-fed cattle.

Also, U.S. producers of hormone-free beef have been able to expand their exports to the EC. In fact, EC buyers have offered significant premiums for their product. Some cooperatives producing hormone-free beef products could potentially benefit from this situation.

2. When a cooperative can better adjust to an FTS than rival suppliers.

Cooperative marketing requires a commitment to long-term development and expansion of markets for member products. Through vertical integration, cooperatives establish product testing and sorting to meet special customer demands and to provide feedback to members on market valuations for different qualities. On the basis of this operational experience, cooperatives are positioned to effectively adjust to many types of FTS, and, in some cases, may derive competitive advantages.

Blue Diamond Growers is an example of how commitment to product quality and development can lead to competitive advantages when confronted with commercial standards and FTS. Its distinctive ability to provide a large and uniform size of almonds has positioned the cooperative to be the predominant supplier to many European confectionery producers. Situations have arisen where Spanish almond packers have had to buy almonds from Blue Diamond in order to fulfill contracts that required the special qualities that the cooperative has promoted in the market.

A potential FTS for almonds that would be linked to a quota is being put up for consideration to EC trade policy authorities. Several California almond exporters have been able to supply Western European markets with a grade of almonds and packing method that competes directly with the type of product that Spanish producers make.

Spanish producers have proposed an EC quota that would be applied to this particular quality and type of almond shipment. Such regulation would not reduce Blue Diamond's sales because they have developed a market segment that does not directly compete with Spanish producers. Yet, such a regulation could be costly to its California competitors.

3. When a cooperative teams up with an especially influential and supportive foreign trading partner.

Cooperatives may be able to strengthen their market positions by allying themselves with powerful and supportive importers. Several cooperative export managers interviewed for this research stated that their trading partners had frequently taken the lead in dealing with FTS complications

and had been a critical source of information on FTS. Tree Top, for example, has secured a solid position in the Japanese apple juice market with extensive help from its Japanese business partners.

### **Cooperative Experiences With Foreign Sourcing and FTS Compliance**

Large investor-owned exporters of fresh fruits, vegetables, and specialty products are typically able to procure fresh product from all over the globe and thus offer large volumes of supply all year at competitive prices. In contrast, many cooperatives have not been able to obtain a large enough volume from their current membership to keep pace with global market opportunities. Having to forego certain markets, either seasonally or because of insufficient supplies, has enabled competing exporters to fill these gaps.

Many cooperatives have developed extensive expertise in the handling and marketing of specific agricultural products. These cooperatives have been able to capitalize on this expertise by establishing strong trademarks and a reputation for being suppliers of consistently high-quality product. These marketing resources, however, can become underutilized when a cooperative is confined to domestic member business.

As competitors improve their marketing capabilities, an issue of long-term economic survival may become a justification for admitting foreign grower members or increasing nonmember business. The best method of resolving these issues from the standpoint of maintaining consistency in applying cooperative business practices is to expand foreign membership.

One potential problem for cooperatives that procure from foreign producers is maintaining the quality and consistency of their product. Foreign producers may not be able to meet the quality standards of the cooperative, or, for that matter, the technical standards of an importing country. Experience shows, however, that cooperatives have been able to overcome such quality problems.

Blue Anchor, a fresh fruit marketing cooperative in Sacramento, California, has several members in Mexico and has succeeded in transferring

production and packing techniques that meet the standards that it has developed with its customers. Calavo Growers of California, a fresh fruit marketing cooperative in Santa Ana, California, has also marketed fresh product from Mexico. Calavo's experience with Mexican avocado producers, however, has proven to be challenging both in maintaining the cooperative's quality image and with member acceptance.

Although there are phytosanitary restrictions on the importation of fresh Mexican avocados into the United States, Calavo has used Mexico as a source for supplying its Japanese and European customers. Calavo has a stake in maintaining its quality image for avocados. Some of the cooperative's members were concerned that lower cost Mexican avocado producers could increase their share in foreign markets with the assistance of Calavo's marketing expertise. Calavo provided technical assistance, however, to help the Mexican avocado packers to overcome these problems, and has successfully maintained its quality image while ensuring that its Mexican fruit has met the required FTS of importing countries.

## **FUTURE OF FTS FOR AGRICULTURAL PRODUCTS**

Both cooperative and investor-owned U.S. exporters of agricultural products will increasingly encounter technical standards in the foreign markets to which they sell. These standards will increase their export marketing costs, in some cases prohibitively. This increasing prevalence of standards will result from several trends.

First, in many foreign countries food safety, environmental, and food quality issues are getting more public exposure and becoming potent political issues. Grower groups in several foreign countries have conducted promotion campaigns to discredit the safety and quality of U.S. food products. Regulations such as Germany's restrictions on non-recyclable packaging materials are the result of increased environmental awareness on the part of many foreign governments and their constituents.

These issues are just as powerful within the United States, as is demonstrated by the 1989

media attention given to Alar, the March 1989 discovery of cyanide in Chilean grapes being exported to the United States, and the U.S. ban on the importation of tuna caught with technology that killed too many dolphins.

The second important trend is the increasing substitution of tariffs, quotas, and other more transparent trade barriers with far more complicated and less regulated technical standards that are more difficult to challenge. Establishing that a standard is an unfair trade barrier is difficult. That is why the sanitary and phytosanitary section of the Uruguay Round agriculture agreement will be so important, as well as the revised GATT Agreement on Technical Barriers to Trade.

Another important trend is the increasingly technical nature of agricultural production and food manufacturing systems. Advances in biotechnology, animal and plant sciences, and other relevant fields have resulted in the introduction of many new chemical production inputs, postharvest treatments and handling methods, and food ingredients.

The technical ability of food inspectors and certifiers has also advanced. Indeed, some contaminants of food can now be detected for the first time, while other contaminants that could only be measured in the parts per thousand can now be measured in parts per billion. Certifiers of food quality and safety now have both more elements and qualities of food products to search for and better tools and methods for which to conduct the search.

On the other hand, the U.S. Government is seeking to reduce the adverse impact of technical standards on international agricultural trade through both multilateral and bilateral trade negotiations. Among these objectives are U.S. Government efforts to:

- establish more uniformity between the standards of different countries,
- out better international guidelines for establishing standards,
- establish reciprocity of inspection procedures,
- obtain acceptance of different techniques for complying with a given standard that are demonstrated to have equivalent results, and

- strengthen the international framework for challenging a standard.

These and other issues have been discussed during the Uruguay Round of GATT multilateral trade negotiations, the North American Free Trade Agreement negotiations with Mexico and Canada, and within the three major international food standard organizations-the Codex, the IPPC, and the OIE.

## REFERENCES

Bernhardt, Katrin. "Germany's New Packaging Laws: The Green Dot Arrives." *Business America*. Washington, D.C.: U.S. Department of Commerce. February 24, 1992. pp. 36-7.

Campbell, Dan. "Unlocking India." *Almond Facts*. Sacramento, CA.: Blue Diamond Growers. v. 53, Sept./Oct. 1988. pp.10-12.

Forsythe, Ken and Lynch, Lori. Effects of a Free Trade Agreement on U.S. and Mexican Sanitary and Phytosanitary Regulations. Washington, D.C.: U.S. Department of Agriculture/Economic Research Service. Agricultural Information Bulletin No. 649.

Nichols, John P., et. al. "Food and Agricultural Commodity Grading." *Federal Marketing Programs in Agriculture*. Danville, IL.: The Interstate Printers & Publishers, Inc. 1983. pp. 59-90.

U.S. Department of Agriculture. "Market Updates" and "Trade Policy Updates." *Agricultural Trade Highlights*. Foreign Agricultural Service, Washington, DC., selected monthly issues.

Food and Agricultural Export Directory 1991. Foreign Agricultural Service, Washington, DC., Miscellaneous Publication Number 1497.

**U.S. Department of Agriculture**  
**Agricultural Cooperative Service**  
P.O. Box 96576  
Washington, D.C. 20090-6576

Agricultural Cooperative Service (ACS) provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The agency (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

ACS publishes research and educational materials and issues *Farmer Cooperatives* magazine. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, age, marital status, handicap, or national origin.