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An Institutional Framework for Meeting International Food-Safety Market Standards from a Developing-Country Perspective

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This paper examines problems being faced by agribusiness firms in developing countries in meeting the food-safety standards imposed by importing countries in their respective markets. Based on existing institutional frameworks in developing countries such as India, it is suggested that in order to meet the prescribed standards in international markets there is a need to establish inter-linkages across different institutions not only within developing countries but also with respected international standard-setting organizations for better and smoother implementation of WTO measures related to international food-safety market standards.

The Sanitary and Phytosanitary Measures (SPS) Agreement under the World Trade Organization (WTO) provides flexibility to a country to take precautions to protect human, animal, and plant life or health from pests and diseases that may originate due to the importation of foreign food and agricultural products. The Technical Barriers to Trade (TBT) Agreement is applicable not only to food and agricultural products but to all products. It refers to product specifications such as size, shape, weight, packaging-material requirements, labeling, and safety-related handling issues. SPS and TBT agreements define the international rights and obligations of WTO members with respect to the development or application of standards-related measures that affect international trade. The Codex Alimentarius Commission (CAC), established by the World Health Organization (WHO) and the Food and Agriculture Organization (FAO), provides several guidelines and standards for food and agricultural products which have become virtually mandatory, as WTO also endorses these CAC standards through SPS and TBT agreements. Under these agreements, WTO member countries are encouraged to adopt internationally recognized standards whenever they exist. One of the CAC guidelines for food-processing companies is to follow a food-quality-management system, Hazard Analysis and Critical Control Points (HACCP), which has been made compulsory by the U.S., European Union, and

many other countries. The food-processing companies in other developed or developing countries have to follow this system if they want to export to these countries.

Apart from the various standards set up by international standard-setting organizations, the WTO member countries have the right to adopt and apply more stringent measures as long as they do not restrict international trade more than what is necessary and unavoidable (Saqib 2003). There are some guiding principles for such standards, including fitness of purpose, objective risk assessment based on scientific evidence, avoidance of discrimination or a disguised restriction on trade, efficient inspection and certification systems so as to reduce costs to the concerned party, harmonization of standards across different international standard-setting organizations, transparency, etc. (Codex 2007). However, badly designed and applied technical regulations and SPS measures quite often take the shape of critical non-tariff barriers for agricultural products in many countries. Use of these non-tariff barriers by countries often results in serious disagreements between the imposing country and the affected country because of complexities involved in the process.

Harmonized standards at the international levels are yet to be formulated for many agricultural products. Many countries have come up with their own standards that are more stringent than the existing international standards, which may be quite cumbersome and costly to achieve for exporters, and it is very difficult for WTO member countries to draw consistent meanings from these standards. To make matters worse, countries often change these standards from time to time.

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All these issues lead to a plethora of problems for member countries, especially developing countries, in adoption and implementation of these agreements. The problems lie mainly in varying perceptions and the wide gap in terms of institutional and infrastructural capacities of developing countries compared to those in developed nations. In order to achieve their due share of international trade in agriculture-based products, the developing countries need to establish an effective and efficient institutional mechanism, which should not only be able to monitor and implement various technical regulations and SPS measures, but also be capable of sensing changes in these dynamic Non-Tariff Barriers (NTBs). Several developing countries have established certain agencies to monitor and implement SPS measures, but due to lack of coordination among these agencies and the non-existence of an apex body, these agencies have not been able to achieve their objectives in a holistic manner.

This paper explores the problems faced by food and agribusiness firms in developing countries in meeting the standards imposed by importing countries and suggests a suitable institutional framework for meeting international food-safety market standards for agricultural products in a smooth manner without much adverse impact on the level of exports from developing countries.

Methodology

A literature survey was conducted to explore the various problems being faced by agribusiness firms in India and other developing countries under TBT and SPS frameworks. Case studies were also conducted in India and other developing countries. In-depth interviews were conducted with food and agricultural-products exporters, industry associations, standard-setting organizations, and policy makers to identify a suitable institutional framework for better implementation of SPS- and TBT-related measures in such a way that any adverse effects on the level of export from developing countries may be minimized.

Facilitating and Restricting Roles of SPS and TBT Measures

SPS and TBT standards perform several important functions. They help facilitate international trade

by providing compatibility and information to different stakeholders for smooth functioning of the exchange process. However, government rules and regulations in areas such as safety and technical standards and in marketing requirements have significant impacts (both positive and negative) on trade patterns. Several attempts have been made to measure such effects (Calvin and Krissoff 1998; Henson et al. 1999; James and Anderson 1998; Moenius 1999; OECD 1999; Swann et al. 1996). Based on interviews with food exporters and industry associations, it was found that the stringent SPS and TBT measures frequently used by developed countries adversely affect their exports. Many exporters find it difficult to meet the high standards set by the EU and U.S. not because these exporters are incapable of or unwilling to produce quality products, but quite often due to reasons beyond their control. Several studies have indicated the increasing use of SPS and TBT provisions as NTBs as countries find them easier to apply within the WTO framework (Bhattacharyya 1999; Ching, Wang, and Zhang 2004; Gardal 2000; Henson et al. 1999; Saqib 2003). The number of TBT notifications from 1995 to 2004 is presented in Figure 1, which indicates that almost 600–800 new standards are getting notified by different countries each year.

Contrary to tariff measures, which are normally transparent, the NTBs are often more difficult to detect as they are generally “hidden” in rules and practices that might have a perfectly legitimate objective. They also leave more discretion to administrators in applying them. Researchers have shown that some of the provisions in SPS and TBT are intrinsically against the food and agricultural firms in developing countries (Bhattacharyya 1999; Deodhar 2002; Saqib 2003). Several studies have highlighted how such provisions have been used by developed countries as NTBs against products from developing countries (Baldwin 2001; Deodhar 2002; Jafee and Henson 2004; World Bank 2005).

Food and agricultural firms and other major stakeholders in developing countries have started to realize that provisions of SPS and TBT are likely to play an important role in the export of their products. While some of the food and agricultural-products exporting firms in these countries complain about the frequent changes in standards for food and agricultural products in developed countries, especially when the level is higher than that recommended

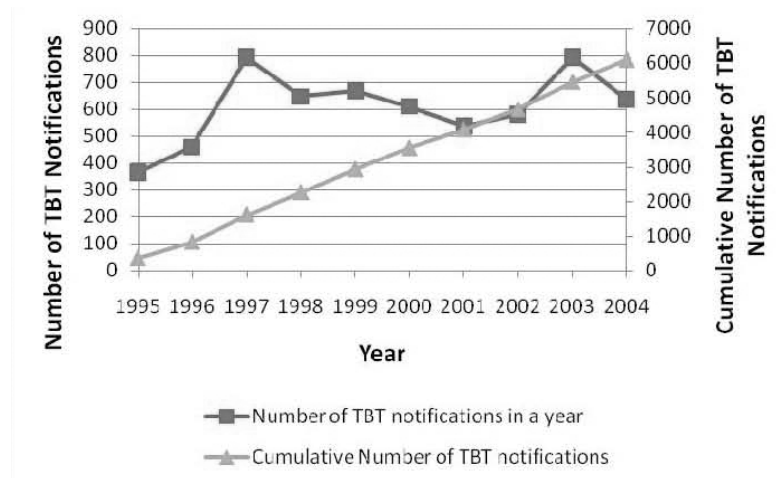


Figure 1. TBT Notifications.

Source: WTO 2005.

by international standard organizations, many have started adopting HACCP and other similar quality-management practices to ensure their continued presence in international markets. They have realized that they will have to regularly upgrade their products if they want to survive and play an active role in international markets in the present era of SPS and TBT under the WTO framework. However, in the prevailing domestic and international environment, they find it extremely difficult to achieve this due to several reasons.

Interviews with small- and medium-sized food and agricultural-products firms have helped identify some of the major problems they face. The important bottlenecks highlighted by these firms are lack of institutional infrastructure at the regional and local levels; lack of information regarding various standards applicable to their products in different countries; frequent changes in packaging, labeling, and other product-quality norms in other countries; lack of availability of efficient and economical technology at the local level for achieving the desired level of quality; and lack of skilled personnel for quality processing. Some of the firms even highlighted the lack of incentive to invest costlier technology when there is a huge domestic market for which the prescribed level of minimum quality is much lower than in international markets. The presence of national standard-setting organizations,

testing and training centers, and other supporting organizations at the local and regional levels—especially near the major clusters of food and agricultural firms—can act as catalysts in increasing the demand for higher quality in developing countries. The institutional framework for setting standards in developing countries, especially in India, has been explored to identify their likely role in upgrading the demand for and supply of quality products in the next section.

Institutional Framework for Standards in Developing Countries

The domestic institutional framework for standard-setting is the backbone for implementing the SPS and TBT agreements. Despite the fact that a company has interest in and the ability to produce products to the standards prescribed by other countries, it may not be able to export unless there is some mechanism and facilities in the exporting country to test and approve the quality of the product locally (Josling 2006). This is even more critical for agricultural products because quality deterioration takes place very fast. Testing of standards by sending such products to international organizations in other countries is either not feasible or very costly for small- and medium-sized firms due to their limited resources. Lack of demand of products of

higher quality (at a higher price) in the local market and the absence of suitable government guidelines for achieving a higher level of quality in such products provide disincentives for such firms to incur huge costs in upgrading the technology and level of skill. Furthermore, the mere presence of a large number of rules and regulations may not ensure a higher level of product quality unless these rules and regulations are suitably implemented. The standards testing and training organizations in a country should be in a position to provide quality service at a reasonable price, and there must be proper coordination among such organizations at the regional and national level.

In India, the Export-Import Policy (EXIM policy) is announced every five years, followed by necessary modifications based on annual reviews each April. The EXIM policy specifies groups of products which are completely banned, restricted (through license), or canalized (through agencies that maintain the interests of producers and consumers). Other items are under Open General List (OGL), meaning they may be imported freely subject to tariffs and other regulations. The Director General of Foreign Trade (DGFT) is the main regulatory agency of export and import in the country. There are several Export Promotion Councils (EPCs) and Commodity Boards, which grant licenses and pass on benefits to the member companies based on EXIM Policy. State governments also provide some incentives and provide guidelines to attract more investments into their respective states. Many states have also created Export Promotion Bureaus (EPBs), which act as facilitators for increasing exports from states.

The Ministry of Food and Consumer Affairs is the main government agency handling issues related to product standards. The Agricultural Produce (Grading and Marking) Act of 1937 as amended in 1986, the Prevention of Food Adulteration Act of 1954, and the Export Inspection and Quality Control Act of 1963 specifically deal with rules and regulations on product standards in India for domestic and export purposes.

There are 24 standards-setting bodies in the country and a large number of regulating agencies at the central government level as well as at the state level. The Bureau of Indian Standards (BIS); the Food and Agriculture Department (FAD); the National Accreditation Board for Testing and Calibra-

tion Laboratories (NABL); the Central Committee for Food Standards (CCFS); the Ministry of Food Processing Industry; Standardization, Testing and Quality Certificate (STQC); and the National Quality Council (NQC) are some of the most important organizations for setting and implementation domestic standards (Saqib 2003).

Standards set by the BIS are voluntary in nature unless they are specifically adopted and made mandatory by the government. The producing companies are free to choose whether or not they want to adopt these voluntary standards. The BIS and the FAD have set about 17,000 and 1,720 standards so far, respectively, but many of these standards have not been harmonized with Codex or the European Union.

The National Accreditation Board for Testing is India's main laboratory accreditation center. It performs the testing and calibration of laboratories. Its accreditation certificate expires after three years. It accredits laboratories, not products. Since multilateral agreements are based on international peer evaluation by an international assessment team of accreditation experts in quality assurance and experts in different technical fields, the current role of the NABL in facilitating international trade is rather non-functional (Saqib 2003). Few countries currently recognize NABL accreditation. In absence of recognition of NABL accreditation in these countries, all goods have to be tested at the port of entry whether or not they have been tested at the port of exit.

The Central Committee for Food Standards has nine sub-committees. Standards generated by the CCFS are mandatory, unlike those of the BIS. The Ministry of Food Processing provides norms, technical regulations, and standards for fruit and vegetable processing. The Ministry standards are not harmonized with even the BIS standard. At present there is no national notification system to make all stakeholders aware of the national standards being approved by different organizations.

The National Quality Council was started in 1992 to increase the quality of demand in India by raising quality awareness and mobilizing resources to ensure that goods and services are designed to provide the best quality at the most competitive prices to meet consumer needs and expectations, but the current experience with the NQC has not been very encouraging.

Conclusion and Future Strategies

Food-product firms have to adopt a strategic food-quality-management system if they want to survive in international markets. Governments should encourage adoption of HACCP by food firms through appropriate policy support not only for export purposes but also for domestic consumption. This will create a competitive environment and increase the quality of demand as well as of supply in these countries. This will reduce many of the problems arising now due to wide differences in the perception of quality in developed and developing countries.

The availability of state-of-the-art training and testing institutes is a precondition for achieving HACCP and a higher level of quality standards in developing countries. The existing laboratories in most of the developing countries do not have skilled manpower and well-equipped laboratories. Since laboratory accreditation is voluntary in some countries, several less-than-reputable laboratories have appeared, sometimes issuing fake certificates, perpetuating the bad reputation in international markets for their test results. Exporting firms therefore have to depend on multinational testing facilities, which are generally more expensive. There is a great need for advanced testing and analysis laboratories within developing countries. To upgrade the quality level, expertise may be needed from developed countries. The WTO agreement has provisions of technical and financial assistance to developing countries for upgrading the testing and training facilities. The shortage of trained manpower to handle different quality-management practices and food-processing activities in the food sector may be targeted in the short term by inviting consultants from developed countries and in the long term by developing a proper training system within the countries.

There exists a lot of overlap in the work of different organizations and departments responsible for quality standards in agricultural products in developing countries, and many times their roles are not clearly defined. There is lack of coordination among different organizations and departments, and an effective link of communication is clearly missing. These organizations and departments should strive to create an information network within their respective countries so that all the major stakeholders are well-informed about developments at other

organization levels. There should be a knowledge base to make them aware of all the measures which might be adversely affecting exports from their countries, and there should be a concentrated effort from all concerned organizations and departments to handle the bottlenecks in a prioritized manner. This will accelerate the whole process of meeting quality standards and could also minimize the duplication of efforts.

Based on discussion with exporters and exporters' associations, it is very obvious that exports from developing countries often face NTBs in the form of prohibitively high standards even without sufficient scientific proof. If there is some genuine issue, decisions for raising the standards (especially raising them higher than international standards) should not be taken unilaterally by any country. These issues must be discussed and debated at a larger level so that developing countries are not unnecessarily penalized. If the issues are not sorted out with discussion, developing countries may join together to raise the issue at the appropriate forum. The dominance of developed industrial countries in Codex committees results in the setting of standards which are typically suited to those countries only. The practices followed in developed countries may be very different from those followed in India and other developing countries. This should be emphasized under the WTO framework, and developing countries should be given proper representation in standards-setting committees in future.

The harmonization of different standards across different countries is a big problem. Standards adopted by one country are not recognized by others, which creates problems for producers and confusion in the minds of consumers. There should be proper linkages and regular interactions among standards-setting organizations within developing countries for mutual learning and for harmonizing standards. Interaction with standards-setting organizations in developed countries should also be encouraged because of their rich experience in this field. This should also help countries arrive at a common level of standards.

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