

WTO Agreements on SPS and TBT: Implications for Food Quality Issues

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ABSTRACT

Trade liberalization, hoped to be achieved through WTO Agreement on Agriculture (AoA) is expected to lead to export promotion and import substitution opportunities for Indian food sector. However, these opportunities cannot be exploited unless serious attention is paid to two important WTO agreements – Agreement on Sanitary and Phytosanitary Measures (SPS) and Agreement on Technical Barriers to Trade (TBT). Due to the ‘experience’ and ‘credence’ nature of food products, trading partners impose import restrictions based on food safety and quality concerns. These concerns are legitimised by SPS and TBT agreements. Hence, to obtain maximum possible benefit from these agreements, India will have to improve its safety and quality norms to match the Codex standards and participate effectively in Codex standard setting meetings. Moreover, it must ask for substantial amendments to some of the articles of these agreements which seem discriminatory in nature. Finally, India will have to strengthen import monitoring mechanisms so that domestic food and phytosanitary laws are effectively applied to imported food items.

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1. Introduction

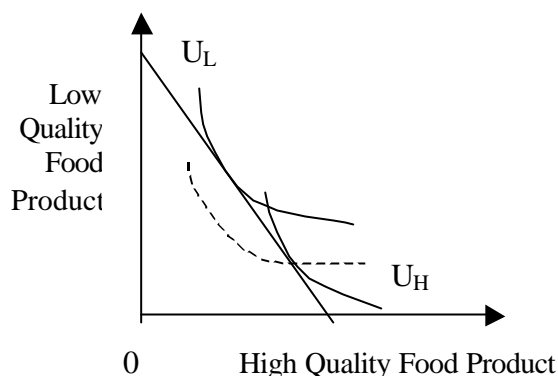
Almost six years have elapsed since various trade agreements were signed under the auspices of World Trade Organization (WTO,1995). One agreement considered most effective in reforming food and agricultural sector was the Agreement on Agriculture (AoA). The essence of AoA liberalization was that markets should be distortion-free, a standard thinking in neoclassical economics. AoA translated this thinking by aiming for improving market access and export competition and reduction in domestic support. This in-turn was to be achieved through tariffication of quantitative restrictions, and time-bound reduction in existing tariffs, export subsidies and domestic support. An important assumption in the neoclassical thinking is that there is complete information in the markets and elimination of tariffs and subsidies will lead to free trade among nations.

However, markets are not characterised by complete information preventing a smooth and distortion-free trade. This aspect is extremely important in the global trade in food products. Traditional economics textbooks cite food and agricultural markets/products as examples of perfectly competitive markets with homogeneous products, however, nothing can be farther from the truth. Individual food products are not homogeneous across countries; different countries and firms adopt different performance standards and safety and quality norms; and, moreover, buyers cannot ascertain quality of food products merely by physical inspection. As a result, AoA by itself cannot guarantee removal of all barriers to trade. Two other WTO agreements address this concern. They are: Agreement on Sanitary and Phytosanitary Measures (SPS) and Agreement on Technical Barriers to Trade (TBT).

This paper is organised as follows: In Section 2 motivation for SPS and TBT agreements is presented as a food quality regulation issue. In Section 3 implications of various articles of SPS and TBT are discussed. Essentially, I drive home the point that although SPS and TBT agreements are meant for promoting smooth flow of trade, some of the articles of these agreements have strong potential for creating unfair barriers to trade for the developing countries. Finally, Section 4 concludes by raising renegotiation issues and the need for domestic reforms.

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Figure 1: Choice of Food Quality under Full Information

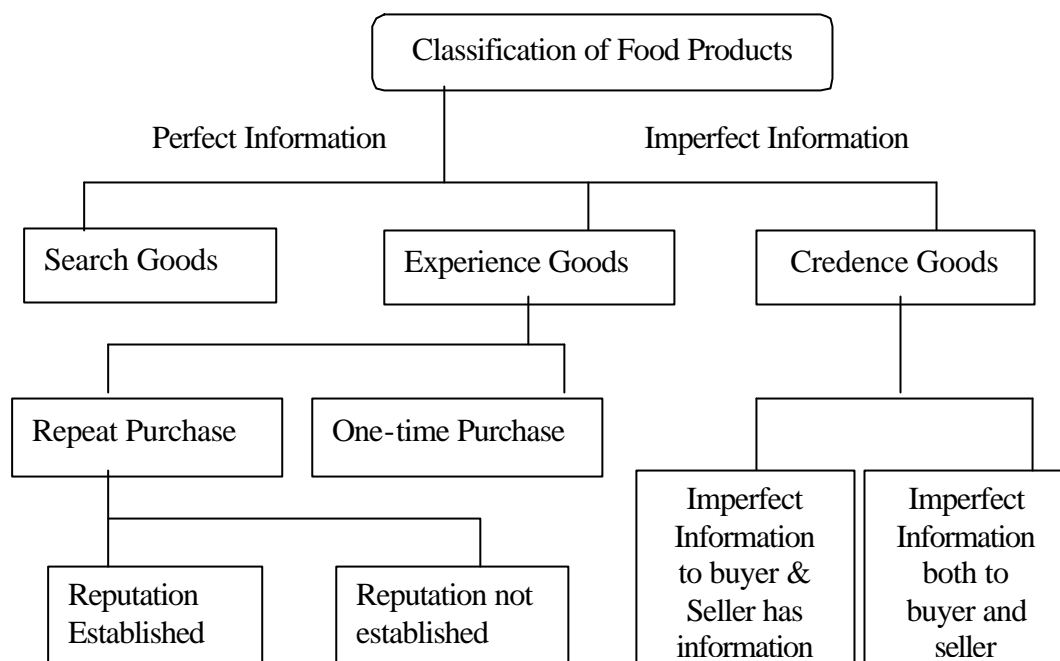


2. Motivation for SPS and TBT Agreements

In a full information environment, producers will produce various kinds of quality foods and consumers will choose the precise quality combinations that maximise their satisfaction. Figure 1 presents this standard neo-classical argument in Economics. Consumer H prefers a high-quality food item and consumer L prefers a lower-quality item as reflected in their respective indifference curves U_H and U_L respectively. Given the prices of the two types of quality foods, consumers make their optimum choices. Forcing either of them to choose the quality combination chosen by the other would lead to lower satisfaction. Moreover, in such case there is no need for any market intervention by government. Henson and Traill (1993) and Viscusi, Vernon and Harrington (1995) give similar arguments in terms of demand and supply for food safety. The limitation of the above analysis can be explained by drawing the distinction between Search goods, Experience goods and Credence goods (Nelson, 1970, 1974; Darbi and Karni, 1973). For search goods, consumers can determine a product's quality before they buy it by examining the product. For example, preshipment physical inspection of bananas by the buyer is good enough to ascertain quality before bananas are exported. The neoclassical analysis can hold good in this case. The distinction between the three types of goods is provided in Figure 2.

For experience goods, buyers cannot determine the quality until they buy and use the products. Here, if goods are of repeat-purchase nature, where choice is based on prior experience with product quality, the market can take care of itself. If consumers buy a product repeatedly, firm, which provides high-quality food product, can charge higher price. Thus, market imperfection can be overcome by a firm's reputation and repeat purchases. Meat products are a typical example of experience goods. Occurrence of food poisoning after eating meat products can be immediately related to the presence of *E.coli* or salmonella in meat products. If firms are unable to establish reputation then markets fail and external regulations are needed. Moreover, there is a moral hazard for producers if they sell experience goods to one-time consumers. Fly-by-night operators exporting meat products to West Asia as a one-time operation may not adhere to strict quality norms as they have no incentive to build reputation.

Figure 2: Quality Information Based Classification of Food Products



Furthermore, food items can also be classified as credence goods where consumer information stays imperfect both before and after the purchase. Many times consumers cannot establish for sure, the cause and effect relationship between contamination and ill-effects on health. A producer may or may not know the quality and safety of a food product but consumers cannot discern quality both before and after the purchase. E.g. adulteration and chronic effects of low-level exposure to pesticide residues and toxins can be dangerous to human health in the long-run. To give specific examples, carcinogenic effects of DDT, lead and aflatoxins may become apparent only in the long-run. Added to this are the issues related to negative effects of production and processing methods on environment and human resources (e.g. child labour).

The analysis provided above shows that free-market economics cannot solve the problem of food quality as there are many imperfections in the market. Certainly, markets can take care of food products which have the search-good characteristic. However, in host of other types, as discussed above, certain external regulatory mechanism is needed in the food sector. Such external regulatory mechanism exist within a country, however, in the framework of global trade in food products, one needs to have a global understanding of food standards relating to safety and quality issues. In the absence of such global mechanism, there is bound to be a proliferation of non-tariff-barriers to food trade. Such non-tariff-barriers can and do nullify the global welfare improvement as envisaged by AoA. Therefore, along with AoA, WTO also engaged the member countries to reach agreements on SPS and TBT which will aim at harmonizing food safety and quality norms of member countries and prevent unjust discrimination of imported food products. I now turn to the discussion of these two important agreements.

3. SPS and TBT Agreements and their Implications

Under the auspices of WTO, SPS and TBT agreements were signed along with many other agreements including AoA. In fact, AoA clearly endorses implementation of SPS agreement through its Article 14:

“Members agree to give effect to the Application of Sanitary and Phytosanitary Measures.”

However, SPS and TBT agreements have not received the kind of attention they should have from industry and researchers alike. There is a lot of confusion regarding understanding the difference between SPS and TBT agreements. The distinction between the two is as follows – The SPS articles refer to food and agricultural sector alone, while TBT measures refer to all products including food products. SPS agreement aims to protect human, animal and plant life or health from pest and diseases arising out of imports of food and agricultural products. On the other hand, TBT agreement deals with product specifications which include size, shape, weight and packaging material requirements including labelling and handling safety. An illustration given in Figure 3 makes this distinction quite clear.

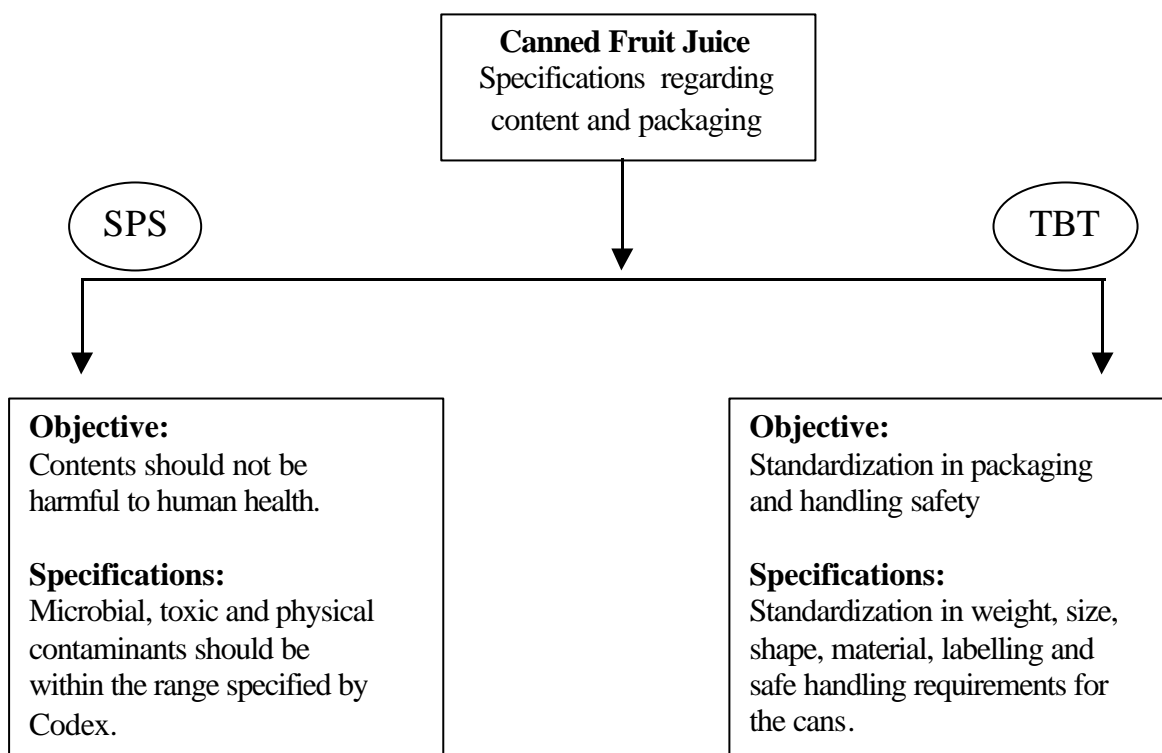
Articles 3.1 and 3.2 of SPS state (paraphrased):

*“Members shall base their sanitary and phytosanitary³ measures on international standards, guidelines and recommendations. The sanitary and phytosanitary measures that confirm to the international standards, guidelines and recommendations will be **deemed necessary** to protect human, animal or plant life or health.”*

For food products, the international standards, guidelines and recommendations refer to the guidelines suggested by the Codex Alimentarius Commission (CAC). CAC is a commission established by World Health Organization and Food and Agricultural Organization (FAO). Although the CAC guidelines have no backing of any international law, the WTO endorsement of these standards through SPS and TBT agreements has made these standards *de facto* mandatory.

An important CAC guideline for food processing companies is to follow a food quality management system called Hazard Analysis and Critical Control Points (HACCP). In fact, United States (US) and European Community (EC) have already made this system mandatory for food processing firms. EC put a ban on imports of fish from companies in Gujarat which did not adopt HACCP system (IE,1999). Moreover, about 100 crores of herbal product exports from India, targeted for 1997-98, were severely affected as US planned to impose ban on imports of these products if they did not confirm to HACCP (EFP, 1997). Indian seafood processors, in their bid to remain competitive in the US market, are taking help from foreign consultants at exorbitant cost to implement HACCP in their production units (CP, 1997). However, one need not focus on export markets alone. The dropsy-death episode in the edible oil market in 1998 is just an indication that Indian domestic industry has a lot of scope for improvement in agro-processing and food quality. Multinational companies like Nestle-India have already planned to implement HACCP for coffee growing and processing (ET, 1997).

Figure 3: Comparison of SPS and TBT coverage for a food product



However, things are not as simple as they appear. No doubt, if India does not comply with the SPS articles, it may face non-tariff-barriers to trade. But one must remember that many of the SPS articles favour the western nations. For example, in continuation of Articles 3.1 and 3.2, Article 3.3 states:

"Members may introduce or maintain sanitary or phytosanitary measures which result in a higher level of sanitary or phytosanitary protection than would be achieved by measures based on the relevant international standards, guidelines or recommendations, if there is a scientific justification ... "

This article was introduced at the behest of some of the western countries including US. But this clearly amounts to undermining the importance of CAC standards and the harmonization principle of SPS agreement. CAC standards are based on scientific justification, and, once WTO endorses the international standards set by CAC, there is no need to allow countries to set standards stricter than the CAC standards.

There are numerous examples of non-tariff-barriers to trade encountered by the developing countries. Here are a few examples that affect India in particular:

- The requirement for aflatoxin content in groundnut is decided at 15 parts per billion (ppb) by CAC. Indian laws permit 30 ppb. Thus, there is room for improvement in the Indian standard. However, despite the CAC guideline of 15 ppb, EC has a stricter aflatoxin standard of only 4 ppb. Thus, even if Indian standards are improved to match the CAC standards, EC standards

prevent any import of groundnut from countries like India. This is gross violation of CAC guidelines.

- Similarly, in India, 0.2 ppm lead content in milk is considered safe. However, international requirements are 0.02 ppm.
- In one of the CAC meeting rounds, standard for sulphur in sugar was set at a maximum of 20 ppm. However, Indian scientists established at a later date that sulphur content of 75 ppm in Indian sugar is also quite safe.
- Spain is known to ban imports of squid and other marine products on the grounds of heavy metal contamination due to the presence of mercury. However, this ban is imposed mostly when there are excessive landings of these products by the Spanish fishermen. The ban is removed when their landings are quite low.

Then there are other articles which refer to infrastructure development in the developing countries and their participation in the CAC standards setting meetings. Article 9 of SPS agreement and a similar article for the TBT agreement (Article 11) mention that member countries agree to give assistance to developing countries, either bilaterally or through international organisations, in the areas of processing technology, infrastructure and research. As per the clauses, this assistance may take the form of advice, credit, donations, grants and/or technical expertise. However, no time-bound and concrete commitments are expressed in these articles. Finally, Articles 3.4 of SPS agreement and Article 2.6 of the TBT agreement express the wish that developing countries should fully participate in the standard setting meetings in relevant international organisations such as CAC. However, this remains only a wishful thinking as many developing countries do not have the requisite qualified personnel to actively participate in such meetings. India is an exception to this, but nonetheless, our participation in such meetings is poor.

4. Summary and Policy Suggestions

To conclude, AoA alone cannot guarantee freer trade in the food sector. The reason is that due to experience-good and credence-good nature of food products, countries impose many restrictions on imports of food and agricultural commodities. The concerns of importing countries are valid as they would like to prevent any harm to their citizens, plant & animal life/health due to pest and diseases carried-in through imports of food and agricultural products. However, imposition of these restrictions can and are also used to create unfair barriers to imports. Taking this experience in account, SPS and TBT agreements guarantee the importing countries to adopt SPS measures, but, at the same time aim at preventing unjust discrimination faced by imported products.

Having discussed the important articles of SPS and TBT, it becomes obvious that India will have to improve its quality norms by quantum leaps. However, at the same time, one must realise that the SPS and TBT guidelines are decided by the member countries in the CAC meetings. India must have a strategy for negotiating and arriving at just and fair food standards for its strategically important food

products. Hence, policy prescriptions for India are two-fold. One for the domestic reforms and other for strategic re-negotiation of SPS and TBT clauses. Let's consider these policy prescriptions.

Domestic Reform:

- Post-WTO experience abundantly indicates that Indian food industry will have to adopt HACCP as a strategic food quality management system. HACCP is a logical system which emphasizes hygiene and prevention of contamination in the production process (Deodhar, 1999). While big companies are incurring high costs to implement HACCP, the essence of HACCP can be effectively employed by small firms as well. For this purpose, government may give subsidy for the initial fixed costs associated with its implementation, and the recurring costs can be (and should be) borne by the respective enterprises.
- Indian food industry does not have a trained manpower to handle post-harvest quality management practices and food processing activities. There is an urgent need to train labourers engaged in post-harvest practices and shop-floor workers engaged in food processing activities. Setting-up of farm schools on the lines of Industrial Technical Institutes (ITI's) should be given priority, where essentials of hygiene, food handling practices and processing are taught in certificate courses. Such training be made mandatory to hire workers on farm or in processed food sector.
- Many of the food products imported into India contain weights measured in ounces and pounds. Labels are many times written in a foreign language, and the products contain additives that are not allowed by the Prevention of Food Adulteration Act (PFA) applicable to domestic products. Thus, our laws need to be applied with equal force on imported products, and wherever science permits, domestic food companies be allowed to use recently developed food additives and preservatives so that they can effectively compete with the imported products. For example, decolourant for buffalo milk is permitted elsewhere but not in India. Nisin, an important preservative essential for tropical climates, is not permitted in India. These things need to be changed.
- We need many more state-of-the-art testing and analysis laboratories for examining the imported food products. Investment in such laboratories is absolutely essential, otherwise we will not be able to use the SPS and TBT clauses to guard ourselves against the harmful effects of contaminants in imported products. The memories of the menace of parthenium species of grass that came along with the PL-480 imports of wheat from US are still fresh in our minds. We do not want to repeat such happenings.

Strategies for Re-negotiations:

- The Article 3.3 of SPS as discussed earlier is quite discriminatory. It allows countries to impose standards stricter than the ones suggested by CAC. The examples provided in the earlier section are clear indications of unfair trade barriers. In the coming round of renegotiations, India must oppose this article which undermines the importance of CAC guidelines and the principle of harmonization of food standards

among member countries. In this regard, view of Dr. H. Nakajima, the Director General of WHO (in 1996) is very much supportive of what has been said above. He states:

Stricter Standards (other than Codex) do not necessarily offer better health protection and may be used as non-tariff trade barriers (Dawson, 1996).

- In fact, SPS agreement endorses guidelines of CAC. However, more often than not, we never have a representation in the CAC meetings when the standards on various food products are set. Due to lack of participation, standards get set which are unfavourable to developing countries. Articles 3.4 and 2.6 of SPS and TBT respectively, encourage developing countries to participate in standard setting meetings of CAC. India must take advantage of this provision. We must request FAO and WTO to facilitate such participation through subsidizing trips for the meetings and ask for organizing these meetings in developing countries.
- For effective participation in the CAC meetings India must be represented by a team consisting of food scientists, legal experts and economists in addition to the civil servants. Currently, Ministry of Health is the nodal agency for CAC related issues. However, ministries such as Ministry of Commerce and Ministry of Agriculture which are involved in administration of various food laws must also get involved in the CAC matters as they can better represent the industry and farmers' perspective on SPS and TBT.
- Articles 9 and 11 of SPS and TBT respectively allow for assistance to developing countries for upgrading their infrastructure, food technology and research. However, no concrete time-bound commitments are expressed in these articles. Thus, the articles remain only a wishful thinking. If India has to improve its food quality standards sooner if not overnight to the CAC levels, then in the re-negotiations we must insist on concrete, time-bound assistance commitments from WTO and/or FAO.

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