ENVIRONMENTAL REQUIREMENTS IN THE WTO: DEVELOPMENTAL CHALLENGES OF THE LEAST DEVELOPED COUNTRIES WITH A PARTICULAR REFERENCE TO BANGLADESH

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Environmental standards such as labelling, packaging and sanitary standards (often characterised as non-trade barriers or NTBs) are becoming an increasing concern amongst the international trading community. Historically such standards have burdened producers and exporters for developing economies where a drop in net exports may infringe on their ability to access markets of developed nations. Conversely, developed economies demand compliance with minimum environmental standards, often resulting in criticisms of ‘eco-imperialism’. The purpose of this paper is to examine the complex relationship between trade and the environment, with a particular emphasis upon the impact that international laws which regulate production methods has upon developing economies. This paper shall also canvass the developing economy of Bangladesh as a case study for this analysis.

I INTRODUCTION

The relationship between trade and the environment is multifaceted and faces an array of many competing interests. On the one hand, it is evident that trade has a negative impact upon the environment; increasing the scale of production and thus exposes the global ecology to a larger volume of pollution, degradation and resource exploitation.¹ Conversely it is also argued that trade, when interacting with capital per labour, also reduces energy consumption.²

Regardless, since the GATT 1947,³ the international community has recognised the impact that trade has upon shifting environmental costs. Albeit primarily addressing trade regulations espousing non-discrimination to market access, the latest GATT Article XX provided exceptions to non-discrimination through the form of protecting human, animal and plant life and health, subject that it would not be applied in a manner that constitutes ‘a means of

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arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.\textsuperscript{4}

As the international trading community secured access to markets through a reduction of trade tariffs, attention subsequently shifted to restriction of trade as a result of non-tariff barriers. In 1967, GATT members commenced a comprehensive study of existing non-trade barriers, including an analysis of over 800 notifications from members, to categorise non-trade barriers under five distinct categories: product standards and testing rules for health, security and other reasons, packaging, labelling and marketing rules.\textsuperscript{5}

Thus, the impetus to address non-tariff barriers gained increasing prominence in the late 1960s, with Tracy recognising a correlated awareness of environmental and health safety regulations across the Western world.\textsuperscript{6} By 1972, in recognition of the diverging trading rules governing environmental conservation and health safety,\textsuperscript{7} the Organization for Economic Cooperation and Development (OECD) produced guiding principles to balance environmental protection and trade access through the series of International Economic Aspects of Environmental Policies.

In addition, the 1973-79 Tokyo Round presented a serious attempt to also address the impact of non-trade barriers. Specifically, the negotiations focused on addressing existing technical regulations in which imports required compliance in order to protect citizen health and safety and the importing countries’ local environment. In 1979, the Agreement on Technical Barriers to Trade (also known as the ‘Standard Code’) was adopted in this Round, applying to ‘all products, including industrial and agricultural products’.\textsuperscript{8} Critically this Agreement attempted to standardise the array of technical regulations which aimed to conserve the environment and protect the health of citizens.

Nevertheless, by the time of the Uruguay Round in 1986-94, the Standard Code failed to adequately address the balance required in safeguarding human health and local ecologies, and the need for producers to access important markets. Indeed this was typified in the seminal case of \textit{US v EC},\textsuperscript{9} which failed to achieve a solution under the then current GATT legal infrastructure.

As a result of failed negotiations and arbitrations such as the \textit{Hormone case}, the United States pushed to re-harmonise national health and safety standards, resulting in the SPS Agreement. As a result of the emphasis upon the agricultural sector in the Uruguay Round, the subsequent Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) has a particular emphasis upon safeguarding human health and ecology and market access for the agricultural sector.\textsuperscript{10}

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\textsuperscript{4} Ibid, GATT 1994, Article XX.
\textsuperscript{6} Ibid.
\textsuperscript{8} \textit{Agreement on Technical Barriers to Trade}, GATT Doc T.I.A.S 9616 (12 April 1979) Article 1.3 (the ‘Standard Code’).
\textsuperscript{10} \textit{Agreement on the Application of Sanitary and Phytosanitary Measures}, 1867 U.N.T.S 493 (15 April 1994).
\end{flushleft}
During negotiations at the Uruguay Round, the competing interests between safeguarding ecological values and market access concerns were embodied through the positions held between the US and European Communities on one side, and the Cairns Group of agricultural exporting nations on the other. Interestingly the Cairns Group advocated reduced flexibility in a nations’ ability to set environmental and health standards in order to create harmonised standards concerning market access to the agricultural sector. The deadlock was subsequently resolved by allowing nations to establish more stringent national environmental regulations than that advocated by international organisations and stakeholders, although the issue of ‘other economic considerations and genuine consumer concerns’ as a legitimate factor in the risk assessment of SPS standards was to remain ambiguous and has since remained a source of contention.

Other WTO agreements addressing environmental non-tariff barriers (with special impact upon Least Developed Countries (LDCs)) also include the Agreement on Technical Barriers to Trade (TBT Agreement). The implications of these requirements will now be analysed in light with the LDCs market access in general and then with subsequent emphasis on Bangladesh.

II  UNDERSTANDING THE PROBLEMS OF ENVIRONMENTAL REQUIREMENTS: CONFRONTING LEAST DEVELOPED COUNTRIES ECONOMIC REALITIES

The instruments of environmental requirements are generally imposed in the form of standards, packaging, labelling, eco-labelling and production and process methods by an importing economy. There are divergent views held between developed and developing economies in regards to the compliance of these requirements. This necessitates their critical examination in order to understand an individual countries’ economic reality.

A  Standards

Standards are published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform the way they were intended to. According to the Annex 1 of the WTO’s TBT Agreement, a standard is defined as:

A document approved by a recognised body, that provides for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method.

13 Agreement on Technical Barriers to Trade, 1868 U.N.T.S 120, (15 April 1994) (TBT Agreement).
The TBT Agreement encourages WTO members to base their national technical regulations and standards with international standards, while at the same time allowing individual members to impose their own standard ‘where appropriate’.15

However the standard that is set by developed economies, and the instances when such economies deem it appropriate, cause serious market concerns for developing nations and LDCs. To illustrate, in 1997 Bangladesh experienced a ban on exports to the EU of shrimp which directly resulted in a US$65.1 million loss.16 As a result of non-compliance of necessary health, quality control, infrastructure and hygiene standards during production, LDCs such as Bangladesh are locked out of such markets however do not possess the capacity to upgrade infrastructure to ensure future compliance.

B Packaging, Labelling, Eco-Labelling and Process and Production Methods

Packaging is the process or outcome which aims to perform three key functions of product protection, containment or identification.17 It may also incorporate the rise of eco-labeling, where certification for some eco-labeling schemes may undergo what Valentini identifies as either a process of self-declaration, third party certification or attainment of quantifiable standards.18

Generally, developed economies have advocated for packaging rules. However the implications this may have on compliance by developing, export based economies is not fully recognised. To illustrate, Bangladeshi exporters faced numerous barriers in entering the fast-growing Indian market given the higher requirements stipulated under India’s Standards of Weights and Measures Rules 1977.19 Whilst Bangladesh has enacted its own Packaged Commodities Rules 2007,20 numerous hurdles are still being experienced by Bangladeshi exporters in meeting foreign packaging standards.

In terms of eco-labeling, the Doha Ministerial Declaration instructed the Committee of Trade and Environment Ministers to address labeling benchmarks for environmental purposes.21 Developing and LDC economies are concerned that an increasing use of eco-labeling schemes will restrict their products from the markets of developed countries.22 Thus eco-labeling too involves many complex issues, such as process and production methods (PPMs) and the formation of harmonised international standards of applicable products under the TBT and SPS Agreements.23

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15 Ibid.
16 Mustafizur Rahman et al, WTO and Bangladesh Trade Policy (Centre For Policy Dialogue, 1st ed, 2008).
19 Standards of Weights and Measures Rules 1977 (India).
20 The Packaged Commodities Rules 2007 (Bangladesh).
23 Ibid.
According to Valentini,24 there are no current standards for eco-labelling with each economy and industry sector adopting their own. Technically the adoption of an eco-labelling scheme does not constitute discrimination against foreign firms, as long as a country applies these standards to all goods, domestically produced or imported from abroad.25 However, an equal application of the eco-labelling scheme may have disproportionate impacts on domestic and foreign goods.26 Firstly, the environmental problems that developed countries face are different in scope and nature than those usually experienced by developing countries. Second, the costs associated with applying an eco-labelling scheme may be too high for LDCs. Finally, but most importantly, developing countries and LDCs fear that they will not have a voice in determining the standards according to which the eco-label is granted.

Environmentalists are concerned not only with the product but also with the method by which it is produced, used and disposed of.27 Process and Production Methods (PPMs) based labels may effectively provide consumers with information regarding whether a product is environmentally friendly.28 The environmental issue remains however, that for developing and LDC economies are not receiving adequate infrastructure to conform to requirements much like aforementioned packaging rules and standards.

III Market Access Challenges due to Environmental Requirements

A Implications of GATT Article I and III on the Environment

As a prerequisite for parties to qualify for equal treatment under Article I and III, parties must demonstrate that contested products are ‘like products’.29 The definition of like product’ is contentious and is interpreted on a case-by-case basis. Whilst the WTO considers a ‘like product’ as a product which is alike in all respects to the product under consideration,30 indicia such as the end use of the product, consumer tasting habits and the properties, nature and quality of the product are illustrations that products may indeed be ‘like products’.

Since 1971 a GATT industrial pollution study concluded that the low price of goods produced in state that lacks the environmental regulations is simply part of the countries competitive advantage and may not be viewed as unfair when determining preferential treatment of like products.31 This interpretation remains popular for developing economies whose lower environmental standards facilitate stronger market access. According to Alam, ‘Developing countries, including LDCs, fear that the transfer away of the definition of like products on the basis of PPMs is likely to be used as a protectionist measures by the developed countries.’32

24 Valentini, above n 18.
25 Ibid.
26 Ibid.
27 Alam, above n 22, 16.
28 Ibid.
29 GATT 1994, above n 3, Article I, III.
31 Alam, above n 22, 66.
32 Ibid.
However when considering the impact of shifting to a PPM methodology in determining an economies preferential treatment of domestic products, the seminal Tuna-Dolphin case illustrates the narrow scope to which the term ‘like products’ has been interpreted.

In the Tuna-Dolphin dispute, the US placed restrictions on the import of tuna from Mexico upon the basis that the tuna was acquired using methods that may likely harm dolphins. Mexico challenged the US restrictions on the grounds that Mexican and US tuna were like products, with the US regulations placing preferential treatment for US caught tuna rather than imported Mexican tuna. The GATT Panel ruled that the physical characteristics of each product made them ‘like products’, with the impact that the proposed US regulations restricting the sale of Mexican tuna due to the likely harm to dolphins were inconsistent with the US’ GATT obligations. Thus, the non-discrimination principle, with its narrow scope does not permit parties to impose import restrictions.

B General Elimination of Quantitative Restrictions, Article XI

According to this obligation,

*No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation of any product destined for the territory of any other contracting party.*

Under Article XI, countries are allowed to trade restrictions if they experience shortages of essential products or where it is necessary for trade in commodities or agriculture or fisheries products.

Measures taken by countries for the attainment of environmental objectives may violate the GATT article XI. For example, in *Canada–Measures Affecting Exports of Unprocessed Herring and Salmon* case, the US alleged that Canada’s prohibition on the export of unprocessed pink salmon and sockeye herring contravened Article XI and was intended to protect domestic fish processors by preventing foreign competitors from gaining access to Canadian fish. Canada claimed that such restrictions were justified under Article XI para.2(b) and Article XX(g). The Panel determined that, since the prohibition applied to all unprocessed salmon and herring, the Canadian argument that the prohibition was necessary to prevent the export of unprocessed salmon and the herring not meeting its quality standards failed. Thus, it is clear that export prohibitions could not be considered ‘necessary to the application of standards’ within the meaning of Article XI 2 (b), nor could they considered to consist of ‘regulations for the marketing’ of the goods in the international trade within the meaning of Article XI 2 (b).

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34 Ibid.
35 GATT 1994, above n 3, Article XI
36 Ibid.
38 Alam, above n 22, 65.
Countries which impose export restrictions while tackling the uncontrolled exportation of natural resources may violate their GATT obligations under Article XI. Developing countries, while taking measures to protect their natural resources, may come under GATT scrutiny for violation of their obligations under Article XI.

C WTO Agreements dealing with the Environmental Requirements and the Market Access Implications

The provisions within the WTO dealing with environmental issues include the GATT Article XX (b) and (g); Agreement on Technical Barriers to Trade and the Agreement (TBT) on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

1 GATT Article XX

GATT Article XX permits a party to restrict or prohibit imports through employing trade measures in a manner that departs from a party’s GATT obligations under certain conditions. To qualify as exempt pursuant to Article XX, trade measures must be necessary to protect human, animal or plant life or health (Article XX [b]) or related to the conservation of excusable natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption (Article XX [g]).

The two main agreements that expand the obligations held under GATT Article XX include both the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and the Agreement on Technical Barriers to Trade (TBT).

2 The SPS Agreement

The preamble of the SPS Agreement reaffirmed that no Member should be prevented from adopting measures necessary to protect human, animal or plant life or health but these measures would not constitute a means of arbitrary or unjustifiable discrimination between Members or a disguised restriction on international trade. Article 2.2 of the SPS Agreement stipulates that the members shall ensure that any sanitary or phytosanitary measure is applied only to the extent necessary to protect human, animal, or plant life or health, is based on scientific principles and is not maintained without sufficient scientific evidence.

The SPS Agreement contains detailed requirements relating to scientific justification with Article 5.1 stipulating that the Member must ensure that their SPS measures are ‘based on an assessment, as appropriate to the circumstances, of the risks to human, animal or plant life or health’. Article 5.2 states that the risk assessment must be taking into account, inter alia, ‘available scientific evidence’. Article 4 requires Members to accept the SPS measures of other Members as equivalent. For this purpose the Members are required to give, upon request, reasonable access to the importing Member for inspection, testing, and other relevant procedures. Article 4 also encourages members to enter into bilateral or multilateral agreements on the recognition of the equivalence of specified SPS measures.

39 GATT 1994, above n 3, Article XX.
40 SPS Agreement, above n 10.
41 Ibid, Article 2.2.
42 Ibid, Article 5.1.
43 Ibid, Article 5.2.
44 Ibid, Article 4.
45 Ibid.
The protection of human health designed by the SPS measures focuses on the health of populations to prevent the spread of communicable disease, the food and sanitation requirements and the pollution controls mentioned in the environmental laws. The animal health also refers to physical diseases and the measures to protect animal health may apply in different categories of animals-livestock, aquatic animals, wild animals (fauna) and domestic animals (pets). Animal health measures are critical to human health in regards to food safety and transmission of zoonotic infections from animals to humans and the global economic interest of livestock and or fisheries related industries by regulating diseases, vaccines, feed additives, and the conditions under which animals are reared and processed. Plant health regulation is focused on commercial crops, aiming to prevent or minimise the spread and establishment of plant pests in new areas or eradicate their existence which generally takes the form of SPS measures.

Article 12 of the SPS Agreement establishes the WTO Committee on SPS Measures and mandates it with providing a regular forum for consultations. In 1996, the Committee agreed that Members would be encouraged to raise the issues in the meetings before initiating a formal dispute settlement procedure.

All challenges to the SPS Agreement go before the WTO which is tasked with the responsibility to determine whether a member’s standards conform to the agreement. To fulfil this role, the SPS Agreement invests the WTO the power to draw on independent experts in the area of dispute. The WTO uses the experts not only to judge the trade effects of standard, but also the proper risk assessments and the scientific evidence that support the standard. Alternatively the WTO handles disputes on sanitary and phytosanitary standards in the same way it handles other disputes.

In EC-Asbestos both the Panel and the Appellate Body rejected Canada’s challenge toward a French import ban on asbestos and asbestos products. This reinforced that the WTO supports a members’ ability to protect human health and safety at a level they deem appropriate. In EC-Biotech, the Panel found that the European Communities applied a general de facto moratorium on the approval of biotech products between June 1999 and August 2003 which was inconsistent with its obligations under Annex C(1)(a) and Article 8 of the SPS agreement. In Brazil Retreaded Tyres, the Panel also concluded that Brazil’s import prohibition on retreaded tyres was inconsistent with Article XI.1 of GATT 1994 as it prohibited the issuance of import licenses for retreaded tyres and also was not justified under Article XX as it constituted a means of unjustifiable discrimination within the meaning of the chapeau.

46 Ibid
48 Ibid
49 Ibid
50 Ibid, Article 12.
51 Committee on Sanitary and Phytosanitary Measures, WTO Doc G/SPS/R/5 (29 May 1996) (Summary of Meeting).
54 Ibid, 68.
55 Ibid, 69.
Nevertheless the reliance of the SPS Agreement on scientific evidence has drawn much criticism from commentators and scholars.\(^{56}\) A major criticism that is levelled against the SPS Agreement is the use of a scientific benchmark to determine trade access and liberalisation.\(^{57}\) Conversely, it is also argued that the use of a scientific threshold to determine the adequacy of trade access imposes too much restriction for domestic governments and prevents decision makers from considering social, cultural or ethical concerns.\(^{58}\) It has also been criticised as science is often vulnerable to manipulation, even from protectionist interests.\(^{59}\) Thus it comes of no surprise that LDCs argue that SPS measures often act as border protection instruments which inhibit their market access capacity.\(^{60}\)

3 Sanitary and Phytosanitary Measures in Bangladesh

In Bangladesh, the principal regulatory body charged with the responsibility of ensuring food safety and quality and establishing national food standards, certification and measurement is the Bangladesh Standards and Testing Institution (BSTI). In order for Bangladeshi exporters to access foreign markets, BSTI has framed a packaging and labelling policy under the Packaged Commodities Rules, 2007. Under these Rules, a producer must state their name, address, date of production, expiry, ingredient list, additives and net weight eligibly on the packaging.\(^{61}\)

In terms of sanitary and phytosanitary measures, the following regulations are used within the Bangladeshi economy:


The rules implement a testing authority’s ability to conduct microbiological investigations, determination of maximum residue limits and its control, evidence of food additives, metal contamination (especially mycotoxin contaminants) and compliance with packaging and labelling requirements.

\(^{56}\)Tracy, above n 5, 298.


\(^{59}\) Tracy, above n 5, 299.

\(^{60}\) Ralf Van de Beek Pranav Kumar (ed), *Market Access Implications of SPS and TBT: Bangladesh Perspective* (Centre for Internat. Trade, Economics & Environment, 2002).

\(^{61}\) *Packaged Commodities Rules 2007* (Bangladesh).
To protect the integrity of human, animal and plant life from contaminants and other introduced organisms, the Bangladeshi Government has implemented the following series of laws under guidance from the WTO SPS Agreement: The Destructive Insects and Pests Act 1914, the Forest Act 1927; the Private Forest Ordinance 1959; the Bangladesh Animal and Animal product Quarantine Act 2005, The Bangladesh Wildlife (Preservation) Order 1973 and the Livestock Research Institute Ordinance 1984 (Bangladesh).

Under the above laws and regulations, the Plant Protection Wing of the Department of Agriculture Extension is actively involved in regulating quarantine measures for plant and plant products; the Department of Livestock’s regulates quarantine activities of animal and animal products intended for export and imports and livestock research activities and the Department of Forestry regulates conservation activities in forest and wildlife conservation activities.62

Although Bangladesh has sufficient substantive laws that articulate commitments from the SPS Agreement, a major hindrance to its development is the lack of continual reform so that the legislative schemes reflect current international obligations.

In this regard additional effort is also required to increase LDC participation in establishing SPS Agreement obligations and a mechanism for the SPS Committee to ensure the national standards institutions have a substantive set of standards to ensure harmonisation of packaging and other PPM processes.

Additionally it may be argued that Article 4.1 of the SPS Agreement is depriving common but differentiated responsibilities that may benefit by LDCs, and that certain countries must display a certain measure of flexibility in establishing SPS protections. Moreover, considering the lack of recognition of the developing countries’ conformity assessment certificates, establishing a regional or sub-regional laboratory with accreditation capabilities should be included in the Article under the supervision of the Codex Allimentarius Commission and collective resourcing.

Additionally since technical assistance is essential for the fulfilment of the obligation of SPS obligations, technical cooperation should be extended to this end. As a result, Article 9 of the SPS Agreement should make reference to the strengthening of scientific capacity of LDC and developing economies in order to fulfil their commitments. Furthermore, Article 9.2 should also be strengthened by making technical cooperation mandatory when new SPS measures are introduced by importing countries, as well as more substantive S&D commitments under Article 10.

4 The TBT Agreement

The preamble of TBT Agreement reaffirmed that: ‘to ensure that technical regulations and standards, including packaging, marking and labelling requirements, and procedures for assessment of conformity with technical regulations and standards do not create unnecessary obstacles to international trade.”63

63 TBT Agreement, above n 13.
Its preamble recognises the right to adopt regulations concerning its national product standards, such as auto emission standards, which are designed to protect ‘human health or safety, animal or plant life or health, or the environment’. Members may take into account information such as ‘available scientific and technical information, related processing technology or intended end use of the products’ to protect environmental degradation to the extent ‘necessary to fulfil a legitimate objective’. The TBT Agreement encourages WTO members to base their national technical regulations and standards in international standards, while at the same time allowing individual members to impose their own standard where appropriate.

Several regulations in developed countries apply stringent rules on food quality, packaging and labelling. Exports of poultry products, for example, have been particularly affected by sanitary regulations, which encompass rules pertaining to equipment and methods used in the processing and packaging of the product. Obtaining approvals is a lengthy process that involves substantial documentation and considerable bureaucratic procedures. Technical standards and sanitary and phytosanitary standards aimed at ensuring food safety are also a substantial obstacle to expanding, for example, export of fish and fish products.

Over the last ten years, there has been a sevenfold increase in publically mandated testing and certification requirements. Although it is difficult to give a precise estimate of the impact on international trade for the need to comply with different foreign technical regulations and standards, at a minimum there is a significant increase in cost for producers and exporters which may discourage manufacturers from entering foreign markets.

A growing body of GATT and WTO jurisprudence has served to provide guidance on the interpretation of this provision. Critically cases such as the US Restriction on Import of Shrimp, which concerned an obligation to use turtle excluder devices (TEDs) during the harvesting of shrimp, demonstrate a unilateral environmental measure adopted by a domestic country is not per se inconsistent with the WTO obligations.

Article 12.4 of the TBT Agreement has made special provisions for developing countries in relation to international standards and regulations. It recognises that while international standards may exist, developing country members are permitted to adopt ‘certain technical regulations, standards or conformity assessment procedures aimed at preserving indigenous technology and production methods’. As a result, developing country members are not required to use ‘international standards as a basis for their technical regulations…. which are not appropriate to their development, financial and trade needs.

Despite these principles, in practice, the legitimate objectives exception is often exercised to introduce more stringent regulations, even against international standards. As a result of

64 Ibid.
65 Ibid, Article 2.2.
66 Ibid
68 Henson Spencer and John Wilson (eds), The WTO and Technical Barriers to Trade: Critical Perspectives on the Global Trading System and the WTO (Edward Elgar Publishing Limited, 2005) XVII.
69 TBT Agreement, above n 13, Article 12.4.
70 Ibid.
71 Alam, above n 22, 78.
stronger conditions, such standards impose significant non-market environmental costs to the producer which would add to the cost of production and create a market access constraint.

As mentioned in the SPS agreement, the TBT agreement also needs to provide emphasis on technical assistance issues in Article 11 and differentiated treatment in Article 12. Moreover there are major challenges for LDCs to enforce these standards given a lack of domestic capacity, hence reform is required which recognises the limitations that LDCs possess in articulating TBT obligations.

Additionally eco-labelling requires further standardisation. To this degree the International Organization for Standardization (ISO) has taken initiatives to develop international standards within the ISO 14000 series for eco-labelling. Eco-labelling is seen as an important tool in gaining access to green markets. Although it is voluntary in nature but its introduction to shrimp exports is necessary since most of the developed countries have adopted eco-labelling schemes. The inability and unwillingness to do this may lead to erosion of market share. But it involves costly process and technology modification to make the product environment friendly.

However, there are challenges in implementing these measures, capacity to obtain certification and internalise the social cost associated with the WTO rules. Bangladesh should negotiate carefully so that it can ensure greater market access for her fish and fish products get by overriding the challenges due to WTO’s environmental requirements.

(a) TBT Measures in Bangladesh

The Ministry of Commerce acts as a National Notification Authority for the TBT notifications concerning standards, technical regulations and conformity assessment procedures. In conjunction, the Bangladesh Standards and Testing Institute (BSTI) operate as a national standard body. The laws governing its activities include the Bangladesh Standards, and Testing Institution Ordinance, 1985; the Standards Weights and Measures Ordinance, 1982; the Bangladesh Standards and Testing Institution (Amendment) Ordinance, 1988; the Standards of Weights and Measures (Amendment) Act, 2001; the Bangladesh Standards and Testing Institution (Amendment) Act, 2003; Packaged Commodities Rules, 2007.

(i) Development of Standards

Bangladeshi standards must consider a range of issues including national perspective, manufacturing needs, promotion of export volume, industrial development, health and public welfare. National standards are based upon international standards to include product specification, test methods, system standards, guidelines and code of practices. Since December 2012, the BSTI developed 3553 standards which included 361 food and agricultural standards; 490 chemical standards; 370 textile standards; 233 electrical standards, 366 civil engineering standards and 1733 other adopted international standards. The development of national standard is essential both for national and international consumers which improve overall market access, however given capacity and technology constraints the progression of further standards has been minimal.

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72 International Organization for Standardization, ISO 14000 Series, Environmental management.
(ii) **Product Certification**

As a leading national certification body, BSTI issued around 14500 licenses covering more than 170 products. The product certification scheme is developed in light with the ISO 65.\(^{74}\)

(iii) **Management System Certification**

BSTI has adopted the responsibility of management system certification which includes Quality Management System, Environmental Management System, and Food Safety Management System.\(^{75}\)

(iv) **Testing Laboratories**

Measurement and testing always plays an important role in standardisation and quality assurance activities. For quality assurance, there is a need to assess the conformity of products to stipulated standards in which BSTI has established some laboratory infrastructure to fulfill this need. However Bangladesh needs additional technological support in setting up further testing and compliance laboratories with additional training facilities for operational staff.

Bangladesh exporters have experienced various forms of TBT related barriers. For the most part, testing requirements and compliance for Indian standards are considered to be the most formidable non-tariff barriers. Indian testing laboratories are located in remote areas of West Bengal and North-Eastern India in which result turnaround times are approximately 15-20 days.\(^{76}\) Moreover, India’s packaging requirements pursuant to the *Standards of Weights and Measures Rules 1977* requires jute products to pass non-halogenated hydrocarbon certification and further exhaustive testing requirements for soap products from Bangladesh exporters.\(^{77}\)

### IV A WAY FORWARD FOR BANGLADESH

Bangladesh has been facing market access challenges in the form of non-tariff measures as derived from compliance with TBT and SPS obligations. However although market access barriers are undoubtedly obstacles for Bangladesh’s economic development, the main obstacles are home-grown. Notwithstanding the immense opportunities offered by Bangladesh, including its abundant labour and liberal FDI regimes, Bangladeshi investment continues to be discouraged by a number of domestic issues.\(^{78}\)

Most notably frequent strikes, inadequate basic infrastructure (notably power, telecommunications and transportation facilities), a slow pace of privatisation, an inefficient financial system, bureaucratic corruption, a lack of the rule of law are specific Bangladeshi issues which impact on potential investment and enhancing the nations’ ability for TBT and SPS compliance. Clearly, there is a pressing need to create the broad political consensus necessary to address these problems through structural reforms. Such reforms might usefully include further trade liberalisation, although Bangladesh appears to be reluctant to undertake such reforms because of what it views as the slower pace of liberalisation by some of its main trading partners.

\(^{74}\) Ibid
\(^{75}\) Ibid
\(^{76}\) Ibid
\(^{77}\) Ibid
\(^{78}\) Rahman et al., above n 16, 49.
While Bangladesh has escaped the worst effects of the Asian financial crisis, the depreciation of Asian exchange rates has increased Bangladeshi’s competition against other ready-made garment (RMG) economies (particularly China). With textiles and clothing dominating exports, there is a need for Bangladesh to diversify both its export base and export markets. At the same time, the phasing out of preferential access to these markets and the full integration of all textile and clothing products has pushed Bangladeshi RMG exporters to increase efficiency, improve product quality, and ensure that their products are competitively priced.

As such, Bangladesh needs to provide much attention in the following issues in order to secure greater market access.

A Coordinated Approach

The process and production of exportable products (both primary and manufactured) undergoes a series of activities which requires a whole-of-government approach across different Ministries, as well as non-public engagement with the private sector, NGOs and research institutes. Hence, Bangladesh needs to adopt a comprehensive and coordinated strategy for advancing the market access of Bangladesh products particularly vulnerable to environment. A complete assessment of the sector has to be made to have a full overview of the production, yield, capacity utilisation, production method, effort level and economic contribution.

Additionally there is considerable room for independent policy advice for decision makers in regards to the developmental needs of its national demand, export potential and comparative advantage in line with existing international trade rules and regulations. Furthermore the Bangladeshi Government should further enhance the public sector’s knowledge to deal with the adapting nature of trade issues.

To achieve this goal, a coordinated comprehensive action should be taken by the Government. In particular action should focus on the institutional skills and efficiency of the Export Promotion Bureau (EPB), providing assistance to port authorities, increase the infrastructure supplied to the BSTI and enhancing the governance of trade bodies to include more individual stakeholders. Additionally there is a marked need for improvement to strengthen economic diplomacy by reconceptualising the role of Bangladeshi Foreign Boards, expanding the “Product-based Business Promotion Council” activities via joint initiatives through public-private partnerships (PPPs) in order to encourage the production and export of potential goods.

Given today’s technological age, it is also necessary to take steps to move toward a more automated Government (or electronic governance) to enhance public sector efficiency and ensuring transparency and accountability. Additionally disseminating the latest information to exporters markets and efforts to facilitate a diversification of exports, as well as promoting opportunities for sector-specific training institutes for workers, staff and management personnel to increase productivity are positive measures. Encouraging promotion of export through product design centers for improvement of product designs; and providing various financial and tax incentives such low-interest loans to exporters and innovators are also measures to address Bangladeshi’s comparative advantage in an age of TBT and SPS compliance.
B Proactive Engagement in the Negotiations

Bangladesh, as an LDC, can make stronger efforts to pursue more favourable conditions such as S& D provisions, enabling clauses, technology transfer, and capacity building in order to improve market competitiveness. The assistance should come under the auspices of ensuring SPS and TBT compliance and improving market access for its exporters.

V Conclusion

International trade liberalisation and environmental protection are inseparably linked and mutually supportive. The current scheme operates under a rhetoric trade maximisation and removal of protectionism, albeit with certain exceptions. This paper urges for the need for WTO’s to reform and often unclear area of standards compliance and its implications for market access which has devastating impacts for LDCs such as Bangladesh. The Revision of Article XX of GATT would be a better option centered on achieving the environmental goals, keeping in mind the developmental needs of developing countries. Moreover, this paper emphasises the need for reform of specific articles such as the SPS and TBT Agreements relating to environment derived under Article XX of GATT.

Market access for the products of LDCs deserves top priority in the agenda of any global trade talks. However these concerns must further consider measures to protect the environment and human, animal and plant health. LDCs cannot expect to derive meaningful benefit from global trade liberalisation until the architectures of the existing Agreements are changed to make them more LDC friendly, especially in terms of compliance and capacity.
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