

# **Environmental Requirements in International Trade under the World Trade Organization: Market Access Implications for Bangladesh**

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*Dedicated to my wife Mrs Sadia Jahan Shimee and my daughter Maliha Royhan Sneha for  
their boundless support and encouragement*

## **ABSTRACT**

The interpretation of the World Trade Organization's (WTO) regulations on environmental requirements (ERs) and the belief of whether they are beneficial or a barrier to market access have created controversy between developed and developing countries. This research aims to examine the evolution of these environmental requirements and identify how they are creating opportunities or challenges for Bangladesh market access as a least developed country (LDC). Bangladesh is currently facing challenges in specific sectors, which is evident in empirical research and statistics. The objective of this research is to contribute to policy formulation through analysis of the implications of these requirements for Bangladesh market access and its economic development.

This thesis critically analyses the regulatory framework in the context of trade and environment with an emphasis on the WTO's environmental requirements and market access, their interdependence and the implications for developing countries' economic growth (including LDCs). In doing so, it examines the relevant provisions of the General Agreement on Tariffs and Trade and WTO agreements in light of the developmental needs of Bangladesh as an LDC. The thesis examines the market access implications and opportunities of Bangladesh agricultural products, fish and fish products, pharmaceutical products and textile, clothing, leather and leather products under the current regulatory framework of Bangladesh with a view to identify gaps between the domestic and international rules of environmental requirements.

This thesis demonstrates that Bangladesh has market access barriers under WTO's environmental requirements mainly in two areas: first- environmental concerns in terms of standard; eco-labelling; PPMs; packaging; and environmental pollution and second- regulatory concerns in terms of lack of updated legislations; lack of proper coordination and implementation; lack of adequate financial, institutional and technological support; and finally lack of capacity of respective stakeholders to undertake appropriate measures that are discussed in all the sector specific chapters ( agricultural products, fish & fisheries products, pharmaceuticals products, textile & clothing and leather and leather products).

This research is the first to examine the implications of environmental requirements on LDCs in general and Bangladesh in particular and provides recommendations for reform, both in WTO rules and Bangladesh domestic regulations. The findings of this comprehensive study will provide information for researchers and policy makers of Bangladesh to undertake a comprehensive strategy with a holistic approach to meet the compliance challenges and opportunities for market access in international trade.

## **DECLARATION**

I certify that the work in this thesis, entitled *Environmental Requirements in International Trade under the World Trade Organisation: Market Access Implications for Bangladesh*, has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institution other than Macquarie University.

I also certify that the thesis is an original piece of research and it has been written by me. Any help and assistance that I have received in my research work and in the preparation of this thesis have been appropriately acknowledged.

In addition, I certify that all information sources and literature used are acknowledged in the thesis.

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Date: 25-10-2013

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## **PUBLICATIONS/ACCEPTED FOR PUBLICATION AND CONFERENCE PRESENTATIONS**

### *Chapter One*

Pradip Royhan, 'Environmentalism in the WTO: The Developmental Challenges for Developing Countries' (Paper presented at the 19<sup>th</sup> Annual Australia New Zealand Society for International Law (ANZSIL) Conference, ANU, Canberra, Australia, 23–25 June 2011).

### *Chapter Two*

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### *Chapter Three*

Pradip Royhan, 'Environmental Requirements in the WTO: Developmental Challenges of the Least Developed Countries with a Particular Reference to Bangladesh' (2013) 9(1) *Macquarie Journal of International and Comparative Environmental Law* 78 (annexure 2).

Pradip Royhan, 'Environmental Requirements in the WTO: Developmental Challenges of Bangladesh as a LDC' (Paper presented at the NZCIEL Conference, Victoria University, Wellington, New Zealand, 7–8 July 2011).

#### *Chapter Four*

Pradip Royhan, 'WTO's Environmental Requirements: Agricultural Market Access Challenges of Bangladesh as an LDC' (Paper presented at the seminar presentation of Legal Research 903, Macquarie University, Sydney, 9 November 2011).

#### *Chapter Five*

Pradip Royhan, 'Environment Related Health Concerns: Market Access Challenges for Bangladesh Fish and Fish Products' (Paper presented at the Environmental Health 2013 Conference, Boston, 3–6 March 2013).

#### *Chapter Six*

Pradip Royhan, 'Market Access Challenges and Opportunities for Bangladesh Pharmaceutical Products under TRIPS' (December 2013) 8(12) *Journal of Intellectual Property Law and Practice* 932 (annexure 2)

#### *Chapter Seven*

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### **CONFERENCES ATTENDED AS PARTICIPANT**

1. WTO Public Forum, WTO Headquarters, Geneva, Switzerland, 24 –26 September 2012
2. ANZSIL Conference, UNSW, Sydney, 25–26 October 2012.

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*National Agriculture Policy, 1999*  
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*The Pure Food Ordinance, 1959 as amended in 2005*  
*The Sale of Goods Act, 1930*  
*The Standards of Weights and Measures Ordinance, 1982*  
*The Trade Marks Act, 2009*  
*The Seed Ordinance, 1977*

## **LIST OF REGIONAL AGREEMENTS**

South Asian Preferential Trade Agreement (SAPTA)

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic  
Cooperation (BIMST-EC)

Asia Pacific Trade Agreement (APTA)

SAARC Framework Agreement on Trade in Services (SAFAS)

Organisation of Islamic Cooperation (OIC)

The Preferential Trade Agreement among D-8 Countries

Indian Ocean Rim Association for Regional Cooperation (IOR-ARC)

## **LIST OF STATUTES AND REGULATIONS**

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## LIST OF ABBREVIATIONS

AB Appellate	Body
ACP	African, Caribbean and the Pacific
ACWL	Advisory Centre on WTO Law
AFP Asia	Forest Partnership
AGOA	African Growth and Opportunity Act
AMS Aggregate	Measure of Support
Annex MNP	Annex on Movement of Natural Persons
API	Active Pharmaceutical Ingredients
AOA	Agreement on Agriculture
APEC	Asia Pacific Economic Cooperation (Forum)
ASEAN	Association of Southeast Asian Nations
AQIS	Australian Quarantine and Inspection Service
AU Af	frican Union
BITs Bilateral	Investment Treaties
BOT Build-operate-transfer	
BSTI	Bangladesh Standards and Testing Institution
BTA Border	Tax Adjustment
CACM	Central American Common Market
CAF	Andean Development Corporation
CAN Comm	unity of Andean Nations
CAP	Common Agricultural Program (of the European Union)
CAPs	Conformity Assessment Procedures
CARICOM Caribbean	Community
CBD	Convention on Biological Diversity
CBDR	Common but Differentiated Responsibility
CBFP	Congo Basin Forest Partnership
CCAMLR	Convention on the Conservation of Antarctic Marine Living Resources

CCICED China	Council for International Cooperation on Environment and Development
CDM	Clean Development Mechanism
CFC	Chlorofluorocarbon
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
Code	Code of Good Practice
Codex	Codex Alimentarius Commission
CPD	Centre for Policy Dialogue
CSD	United Nations Commission on Sustainable Development
CTD	Committee on Trade and Development
CTDSS	Committee on Trade and Development Special Session
CTE	Committee on Trade and Environment
CTE-SS	Committee on Trade and Environment Special Session
CTS-SS	Council for Trade in Services-Special Session
CUTS	Consumer Unity and Trust Society
DDA	Doha Development Agenda
DFQF	Duty-free and Quota-free
DGFT	Director General of Foreign Trade
DPGs	Domestically Prohibited Goods
DSB	Dispute Settlement Body
DSM	Dispute Settlement Mechanism
DSU	Dispute Settlement Understanding
EBA	Everything But Arms
EC	European Communities
EEZ	Exclusive Economic Zone
EFTA	European Free Trade Association
EGS	Environmental Goods and Services
ERs	Environmental Requirements
EMIT Group	Environmental Measures and International Trade Group
ENT	Economic Needs Test



EPA	Economic Partnership Agreements
EPB	Export Promotion Bureau
EPPs	Environmentally Preferable Products
ERs	Environmental Requirements
EST	Environmentally Sound Technology
ETP	Effluent Treatment Plant
EU	European Union
EUREP	Euro-Retailer Produce Working Group
Eurostat	Statistical Office of the European Union
EVI	Economic Vulnerability Index
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FLEG	Forest Law Enforcement and Governance
FLEGT	Forest Law Enforcement, Governance and Trade (Initiative)
FPA	Fisheries Partnership Agreement
FTA	Free Trade Agreement
FTAA	Free Trade Agreement of the Americas
G8	Group of Eight
G90	Group of Ninety
G10	Group of Ten
G33	Group of Thirty-Three
G20	Group of Twenty
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GEN	Global Eco-labelling Network
GHG	Green House Gas
GIs	Geographical Indications
GMOs	Genetically Modified Organisms
GNP	Gross National Product
GNI	Gross National Income

GSP	Generalized System of Preferences
HACCP	Hazard Analysis Critical Control Point
HAI	Human Asset Index
HOPE-II	Haitian Hemisphere Opportunity through Partnership Encouragement Act
HS	Harmonised System
ICAs	International Commodity Agreements
ICAC	International Cotton Advisory Committee
ICC	International Chamber of Commerce
ICFTU	International Confederation of Free Trade Unions
ICJ	International Court of Justice
ICSF	International Collective in Support of Fish Workers
ICSID	International Centre for Settlement of Investment Disputes
ICT	Information and Communication Technology
ICTSD	International Centre for Trade and Sustainable Development
IDB	Inter-American Development Bank
IEA	International Energy Agency
IEC	International Electrotechnical Commission
IF	Integrated Framework
IFC	International Finance Corporation
IFOAM International	Federation of Organic Agriculture Movements
IFPRI	International Food Policy Research Institute
IGC Intergov	ernmental Committee (on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore at WIPO)
IISD	International Institute for Sustainable Development
ILEAP	International Lawyers and Economists Against Poverty
ILA	International Law Association
ILO	International Labour Organization
IMF	International Monetary Fund
IPOA-IUU	International Plan of Action to Prevent, D eter and E liminate Ill egal, Unreported, Unregulated Fishing
IPPC	International Plant Protection Convention

IP	Intellectual Property
ISBs	International Standards Bodies
ISEAL International	Social and Environmental Accreditation and Labelling Alliance
ISO	International Organization for Standardisation
ITO	International Trade Organisation
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
ITTA	International Tropical Timber Agreement
ITU	International Telecommunication Union
IUU	Illegal, Unreported and Unregulated (Fishing)
IUCN	International Union for Conservation of Nature and Natural Resources (The World Conservation Union)
JITAP	Joint Integrated Technical Assistance Program
JPOI	Johannesburg Plan of Implementation
LDCs	Least Developed Countries
LMOs	Living Modified Organisms
MAI	Multilateral Agreement on Investment
MAST	Multi-Agency Support Team
MDGs	Millennium Development Goals
MEAs	Multilateral Environmental agreements
MFA	Multi-Fibre Agreement
MFN	Most Favoured Nation
MNC	Multinational Corporation
MT Metric	Tonnes
MTN Multilateral	Trade Negotiation
NAFTA	North America Free Trade Agreement
NAMA	Non-Agricultural Market Access
NFIDs	Net Food Importing Developing Countries
NGMA	Negotiating Group on Market Access
NGOs	Non-governmental Organizations
NGR	Negotiating Group on Rules

NTBs	Non-Tariff Barriers
NTMs	Non-Tariff Measures
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OIE	World Organization for Animal Health
OPEC	Organization of the Petroleum Exporting Countries
OTDS Overall	Trade-Distorting Domestic Support
PCD	Policy Coherence for Development
PCT	Patent Cooperation Treaty
POPs	Persistent Organic Pollutants
PPMs	Process and Production Methods
PRSP	Poverty Reduction Strategy Plan
PTS	Primary Textile Sector
RMG	Readymade Garments
RTA	Regional Trade Agreement
SAARC	South Asian Association for Regional Cooperation
SCM	Subsidies and Countervailing Measures
SIA	Sustainability Impact Assessment
SIDS	Small Island Developing States
SME	Small and Medium Enterprise
SPS	Sanitary and Phytosanitary
SSA Sub-Saharan	Africa
SSG Special	Safeguard
SSM	Special Safeguard Measures
SSOQ	Shrimp Seal of Quality
STEs	State Trading Enterprises
STOs	Specific Trade Obligations
TA	Technical Assistance
TACB	Technical Assistance and Capacity Building
T&C	Textile and Clothing
TBT	Technical Barriers to Trade

TMNP	Temporary Movement of Natural Persons
TK	Traditional Knowledge
TNC	Trade Negotiation Committee
TPR	Trade Policy Review
TPRM	Trade Policy Review Mechanism
TRIMs	Trade-related Investment Measures
TRIPS	Trade-Related Aspects of Intellectual Property Rights
TRQ	Tariff-Rate Quota
UK	United Kingdom
UN CPC	UN Provisional Central Product Classification
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNCHE	United Nations Conference on the Human Environment
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNGA	United Nations General Assembly
UNLDC-IV	Fourth United Nations Conference on LDCs
UNPIC	United Nations Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
UPOV	International Union for the Protection of New Varieties of Plants
US	United States
USFDA	United States Food and Drug Administration
USITC	United States International Trade Commission
USTR	United States Trade Representative
URAA	Uruguay Round Agreement on Agriculture
W/120	WTO Services Sectoral Classification List
WCO	World Customs Organization

WCED	World Commission on Environment and Development
WCS	World Conservation Strategy
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization
WWF	Worldwide Fund for Nature (World Wildlife Fund in some countries)

# **I MARKET ACCESS AND ENVIRONMENTAL REQUIREMENTS: MAPPING OUT THE DEBATES AND ISSUES FROM A LEAST DEVELOPED COUNTRY PERSPECTIVE\***

## *A Introduction*

To protect and preserve the environment within an international community that has varied stages of development, the World Trade Organization (WTO)<sup>1</sup> recognised the critical role of the environment within its preamble of the *Marrakesh Agreement Establishing the WTO* in 1994 (hereinafter the WTO agreement).<sup>2</sup> However, the WTO has no specific agreements dealing with the environment. Rather, WTO agreements confirm governments' right to protect the environment, providing it does not constitute unnecessary protectionism or a disguised restriction to trade.<sup>3</sup> Importantly, the WTO provides an important means of advancing international environmental goals<sup>4</sup> through its rules and enforcement mechanisms that facilitate free trade.

This research considers market access and environmental requirements (ERs) in terms of trading goods and investigates their relationships, interdependence and implications on the context of developing countries.<sup>5</sup> Specifically, Bangladesh, a prominent least developed country (LDC),<sup>6</sup> will be taken as a case study.

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\*A part of this chapter was presented as 'Environmentalism in the WTO: The Developmental Challenges for Developing Countries' at the 19<sup>th</sup> Annual Australia and New Zealand Society for International Law (ANZSIL) Conference, ANU, Canberra, Australia, 23–25 June 2011.

<sup>1</sup> The WTO handles the rules of trade between nations, which came into force from 1 January 1995, at a global or near-global level. It is currently the host for new negotiations under the Doha Development Agenda launched in 2001 (available at <<http://www.wto.org>>).

<sup>2</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) 4.

<sup>3</sup> WTO, *Trade and Environment* <[http://www.wto.org/english/tratop\\_e/envir\\_e/envir\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envir_e.htm)>.

<sup>4</sup> Ibid

<sup>5</sup> WTO, *Development: Definition, Who Are the Developing Countries in the WTO?* <[http://www.wto.org/english/tratop\\_e/devel\\_e/d1who\\_e.htm](http://www.wto.org/english/tratop_e/devel_e/d1who_e.htm)>.

There is no WTO definition of 'developed' or 'developing' countries. Members decide for themselves whether they are developed or developing. A developing country status in the WTO brings certain rights. There are provisions in some WTO agreements that provide developing countries with longer implementation periods and technical assistance.

<sup>6</sup> The term 'LDC' is discussed in Section B 2 (a).

Lakshmi Puri<sup>7</sup> appropriately outlined the issue of market access and ERs by stating:

As multilateral, regional and bilateral trade negotiations on trade liberalization result in further tariff reductions, discussions on market access are increasingly focusing on the growing use of non-tariff measures, including environmental requirements.<sup>8</sup>

Indeed, the theme of ERs and market access for developing countries is an important part of the Doha Work Programme,<sup>9</sup> where the ministers in Paragraph 32(i) of the Doha Ministerial Declaration instructed the Committee on Trade and Environment (CTE) implicitly to pursue and give particular attention to:

The effect of environmental measures on market access, especially in relation to developing countries, in particular the least-developed among them and those situations in which the elimination or reduction of trade restrictions and distortions would benefit trade, the environment and development.<sup>10</sup>

Generally, in the WTO, ERs are described as procedures for assessing whether products meet required standards, product performance, labelling requirements, quarantine and disinfection requirements, plant health (phytosanitary) requirements, pest risk analysis for the local natural environment and, occasionally, bans or restrictions that are notified in different committees.<sup>11</sup> ERs were first recognised by the General Agreement on Tariffs and Trade (GATT) in Article XXIII on General Exceptions<sup>12</sup> and provide flexibility to the member countries to undertake measures as ERs (including standard, testing and certification procedures and health and safety regulations for human, animal and plant life). These measures were further negotiated within agreements such as the Agreement on

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<sup>7</sup> UNCTAD, *Trade and Environment Review* (UNCTAD, UNCTAD/DITC/TED/2005/12, 2006) xiii.

<sup>8</sup> Ibid

<sup>9</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration); WTO, *Doha Round* <[http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm#development](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm#development)>; see Doha Work Programme <[http://www.wto.org/english/thewto\\_e/minist\\_e/min01\\_e/mindecl\\_e.htm](http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm)>.

<sup>10</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [32].

<sup>11</sup> WTO, *Environmental Requirements and Market Access: Preventing 'Green Protectionism'* <[http://www.wto.org/english/tratop\\_e/envir\\_e/envir\\_req\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envir_req_e.htm)>.

<sup>12</sup> *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 194 (entered into force in 1 January 1948) art XX, 455.



Technical Barriers to Trade (TBT)<sup>13</sup> and the Agreement on the Application of Sanitary and Phytosanitary (SPS) measures.<sup>14</sup>

However, the introduction, interpretation and implications of ERs into international trade have created debate between developed and developing countries, with developing countries criticising such positions as a considerable market barrier.<sup>15</sup> As Alam elucidated:

The practice of trade measures as environmental tools has created controversy among both trade supporters and developing countries as protectionist, extra-judicial, eco-imperial and unilateral.<sup>16</sup>

He added that developing countries are in fear of trade restrictions for environmental purposes that might open the door to green protectionism.<sup>17</sup> This fear is derived from the protectionist measures that are, in reality, based on the non-environmental vested interests of certain northern stakeholders.<sup>18</sup> This is further noted by Rauscher:

Green arguments can easily be abused to justify trade restrictions that are in reality only protectionist measures and it is often difficult to discriminate between true and pretended environmentalism.<sup>19</sup>

Developing countries criticise these measures as green protectionism and discriminatory in the sense that they would provide power to developed countries to impose their own standards onto LDCs.<sup>20</sup> Moreover, developing and least developed countries are not in a position to move towards improved quality of standards without necessary capacity building, technological and financial support. In international trade, products face different

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<sup>13</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') 121.

<sup>14</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') 59.

<sup>15</sup> Magda Shahin, *Trade, Environment and the Millennium* (Routledge, 2<sup>nd</sup> ed, 2002) ch 2, 45–46.

<sup>16</sup> Shaikat Alam, *Sustainable Development and Free Trade, Institutional Approaches* (Routledge, 1<sup>st</sup> ed, 2008) 15.

<sup>17</sup> Ibid

<sup>18</sup> Ibid

<sup>19</sup> M Rauscher, *International Trade, Factor Movements, and the Environment* (Oxford: Clarendon Press, 1997) 3.

<sup>20</sup> Alam, above n 16, 16.

kinds of concerns related to process and production methods (PPMs).<sup>21</sup> Consumers from developed countries are concerned regarding PPMs through which goods have been produced, including product labour standards, fair trade, animal cruelty and the use of genetically modified organisms (GMOs).<sup>22</sup> Such concerns are about product standard, environmental safety and quality and are expressed in measures such as technical standards, SPS and labelling information.

Weiss and Jackson<sup>23</sup> noted that the world's environment is facing global changes at a pace and on a scale unknown to humankind. Taylor and Thomas<sup>24</sup> considered the rise of environmental issues as dramatic changes on international political and economic agendas and further added that consciousness of environmental issues has moved from remote issues to an understanding of a deepening global crisis that links industrial development to environmental problems.<sup>25</sup> Therefore, market access of products based on environmental grounds has been a topic of interest for both academics and practitioners.

Market access is one of the basic concepts of international trade and describes the extent to which goods or services can compete with locally made products in another market.<sup>26</sup> Generally, market access to goods in the WTO entails a negotiation of conditions and tariff and non-tariff measures (NTMs) imposed by members for the entry<sup>27</sup> of specific goods into their markets.<sup>28</sup> Market access concerns tariff<sup>29</sup> and NTMs primarily, with ERs constituting

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<sup>21</sup> Ibid 15.

<sup>22</sup> Ibid

<sup>23</sup> Edith Brown Weiss and John H. Jackson, 'The Framework for Environment and Trade Disputes' in Edith Brown Weiss and John H. Jackson (eds), *Reconciling Environment and Trade* (Transnational Publishers Inc, 2001) ch 1.

<sup>24</sup> Taylor Annie and Thomas Caroline (eds), *Global Trade and Global Social Issues* (Routledge, 1999) 61.

<sup>25</sup> Ibid 62.

<sup>26</sup> Walter Goode, WTO, University of Adelaide and Centre for International Economic Studies, *Dictionary of Trade Policy Terms* (Cambridge University, 4<sup>th</sup> ed, 2003) 222.

<sup>27</sup> Market entry means activities associated with bringing a product or service to a targeted market. During the planning stage, a company will consider barriers to entry, costs of marketing, sales and delivery and the expected outcome of entering the market.

<sup>28</sup> WTO, *Market Access for Goods* <[http://www.wto.org/english/tratop\\_e/markacc\\_e/markacc\\_e.htm](http://www.wto.org/english/tratop_e/markacc_e/markacc_e.htm)>.

<sup>29</sup> Tariff commitments for goods are set out in each member's schedule of concessions on goods. The schedules represent commitments not to apply tariffs above the listed rates that are bound.

a significant non-tariff measure.<sup>30</sup> An integrated analysis and retrieval of notified NTMs are presented in the WTO Integrated Trade Intelligence Portal Goods (see Chart 1). The chart outlines safeguard, countervailing, antidumping, TBT and SPS measures as NTMs. Within NTMs, the number of TBT and SPS agreements is increasing when compared to other NTMs, such as countervailing and antidumping.

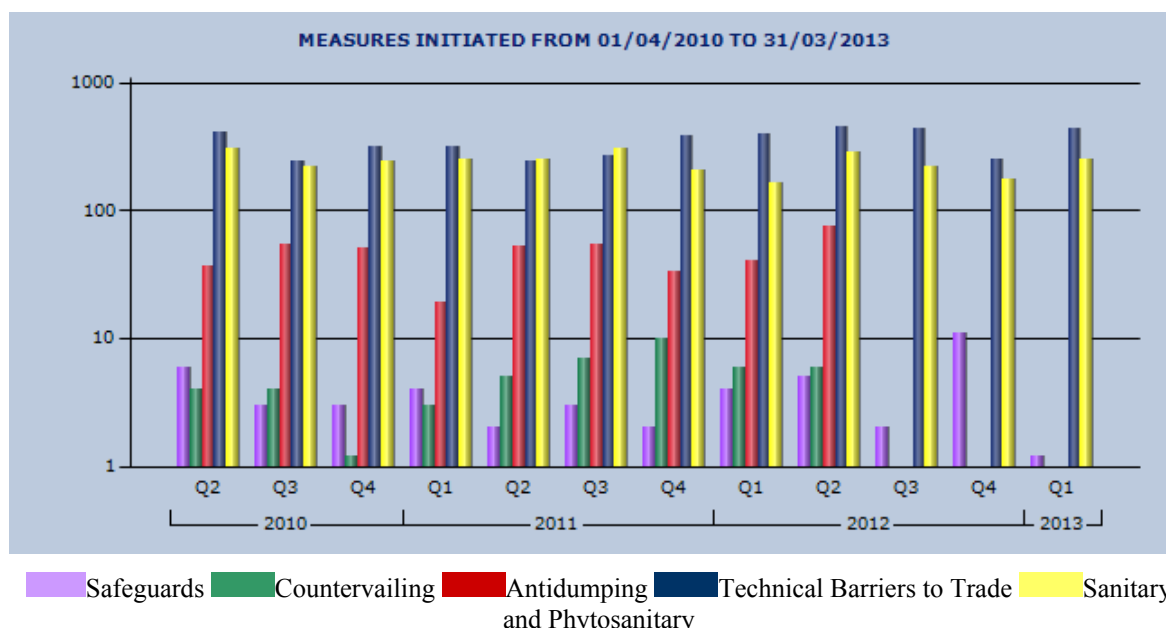
The World Trade Report 2012 dealt explicitly with NTMs inherent in three key areas. Firstly, the report focused on TBT measures in relation to manufactured goods. Secondly, SPS measures relating to food safety and animal/plant health were investigated, which was followed by an analysis of domestic regulation in services.<sup>31</sup> In this context, market access of products under WTO's environmental requirement is intended to include the conditions and NTMs agreed by the members for the entry of specific goods into their markets. WTO members seek to improve market access continually through the regular WTO work programme and through negotiations, such as those launched at the Doha Ministerial Conference in November 2001.<sup>32</sup>

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<sup>30</sup> NTMs are handled under specific WTO agreements, including import licensing, rules for the valuation of goods at customs, pre-shipment inspection, rules of origin, investment measures and environmental measures (available at <[http://www.wto.org/english/res\\_e/status\\_e/itip\\_e.htm](http://www.wto.org/english/res_e/status_e/itip_e.htm)>).

<sup>31</sup> Please note that domestic regulation in services falls outside the scope of this research.

<sup>32</sup> WTO, *Market Access for Goods* <[http://www.wto.org/english/tratop\\_e/markacc\\_e/markacc\\_e.htm](http://www.wto.org/english/tratop_e/markacc_e/markacc_e.htm)>.



*Chart 1: WTO Integrated Trade Intelligence Portal Goods—Integrated Analysis and Retrieval of Notified Non-tariff Measures*

Liberalised or freer trade <sup>33</sup> provides the opportunity for non-restricted market access of products from one country to another—a fundamental objective of the WTO. To achieve this goal, the WTO's General Council Meeting on 31 January 1995 established the WTO Committee on Market Access to implement the concession of tariff and NTMs.<sup>34</sup> Subsequent committees were formed to address further issues of agricultural and non-agricultural market access (NAMA) mandated by the Doha Ministerial Conference held in Doha in 2001.<sup>35</sup> As a result, attention has focused on the effect of ERs in international trade under the WTO because of substantial progress made in the reduction of tariffs and quantitative restrictions on trade, which subsequently resulted in a dilemma in achieving non-restrictive equitable market access through trade liberalisation. As noted by Alam:

Trade liberalization benefits all trading partners by increasing global output and economic growth. Liberal trade contributes to economic growth. Using comparative advantage that brings highest possible welfare of the participating countries across the national boundaries.<sup>36</sup>

<sup>33</sup> Freer trade is where barriers are reduced through negotiation.

<sup>34</sup> WTO, *Market Access for Goods* <[http://www.wto.org/english/tratop\\_e/markacc\\_e/markacc\\_e.htm](http://www.wto.org/english/tratop_e/markacc_e/markacc_e.htm)>.

<sup>35</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) 50 [16] and 31 (iii).

<sup>36</sup> Alam, above n 16, 2.

Ultimately, the outcome of the free trade regime positively affected the standard of living and reduced poverty.<sup>37</sup> The GATT<sup>38</sup> was adopted in an attempt to liberalise tariff and trade in the post-war period.<sup>39</sup> The primary focus of the GATT (1947) was to reduce tariffs. The widespread concern and increasing demand for environmental protection provoked the GATT to form the Environmental Measures and International Trade (EMIT) group in 1971 to recognise the relationship between trade and environment and their policies were more supportive of each other until the end of the Uruguay Round of negotiation in 1994.<sup>40</sup>

The WTO CTE was established as part of the Ministerial Decision in Marrakesh in April 1994 to supersede the GATT EMIT group with two primary objectives:

- to identify the relationship between trade measures and environment measures to promote sustainable development
- to recommend necessary modification of the policies of the multilateral trading system compatible with its open equitable and non-discriminatory nature.

In 2001, the Doha Ministerial Declaration instructed the committee to give particular attention to ERs and market access.<sup>41</sup> Accordingly, the CTE discussed accepting help from case studies on ERs and market access and the effect of these two factors on developing countries.<sup>42</sup> Hence, in December 2006, the Secretariat's note<sup>43</sup> highlighted ER trends and market access difficulties faced by developing country exporters and the approaches to address such difficulties, at both national and multilateral levels, through taking the reports of Organisation for Economic Co-operation and Development (OECD) Trade Policy

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<sup>37</sup> Paul Samuelson, *Economics* (McGraw-Hill, 11<sup>th</sup> ed, 1989) cited in OECD, *Trade Principles and Concepts* (Organisation for Economic Co-operation and Development, 1995), 18.

<sup>38</sup> *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 194 (entered into force in 1 January 1948).

<sup>39</sup> Tracey Epps, *International Trade and Health Protection—A Critical Assessment of the WTO's SPS Agreement* (Edward Elgar Publishing Limited, 2008) 23.

<sup>40</sup> *Report by Ambassador H. Ukawa (Japan), Chairman of the Group on Environmental Measures and International Trade, to the 49th Session of the Contracting Parties*, GATT Doc L/7402 (2 February 1994).

<sup>41</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [31](i).

<sup>42</sup> WTO, *Environmental Requirements and Market Access: Preventing 'Green Protectionism'* <[http://www.wto.org/english/tratop\\_e/envir\\_e/envir\\_req\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envir_req_e.htm)>.

<sup>43</sup> *Environmental Requirement and Market Access: Recent Work on OECD and UNCTAD*, WTO Doc WT/CTE/W/244 (8 December 2006) (Note by the Secretariat).

Studies 2005<sup>44</sup> and the United Nations (UN) Conference on Trade and Development (UNCTAD) Trade and Environment Review 2006.<sup>45</sup>

The GATT did not handle ERs directly. Rather, it regulated regulations of non-discrimination. However, the GATT recognised that countries may have valid reasons to justify discrimination against goods from specific sources. As mentioned, Article XX provides the exception that discriminatory measures may be justified as, inter alia, necessary to protect human, animal or plant life or health, subject to the condition that these measures are not 'applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade'.<sup>46</sup> The WTO is considered an improvement on the GATT in the context of environmental protection<sup>47</sup> because of its broader context, which established baseline rules for the application of technical measures with the potential to disrupt trade. This is particularly so given that the SPS and TBT agreements confirm governments' rights to protect the environment, provided certain conditions are met, with a number of them including provisions dealing with sanitary, phytosanitary and technical requirements.<sup>48</sup> However, there are also other WTO agreements,<sup>49</sup> such as the Agreement on Agriculture (AOA), Agreement on Subsidies and Countervailing Measures (SCM), Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and General Agreement on Trade in Services (GATS), that contain provisions for ERs that have implications for LDC market access (discussed in Chapter 3 and in relevant sections of other chapters of the thesis).

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<sup>44</sup> OECD, 'Environmental Requirements and Market Access', *OECD Trade Policy Series* (OECD Publishing, 28 November 2005).

<sup>45</sup> UNCTAD, above n 7, 25.

<sup>46</sup> *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 19–4 (entered into force in 1 January 1948) art XX.

<sup>47</sup> M A Cole, *Trade Liberalisation, Economic Growth and the Environment* (Cheltenham: Edward Elgar, 2000) 19.

<sup>48</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A, 59, 121.

<sup>49</sup> See provisions in the WTO agreements dealing with environmental issues as 'Green' provisions; WTO, *Understanding the WTO* (WTO Publications, 4<sup>th</sup> ed, 2008) 65.

The implications of market access and ERs have reinforced the rationales for examining the LDCs' overall export and constraints because of environment more closely. According to UNCTAD statistics, LDCs are divided into three groups: LDC-Africa and Haiti, LDC-Asia and LDC-Island. Bangladesh falls under LDC-Asia. According to UNCTADSTAT,<sup>50</sup> the share and volume of Asian LDCs declined from 1.025 per cent in 1950 to 0.549 per cent in 1960, 0.256 per cent in 1970, 0.104 per cent in 1980 and 0.095 per cent in 2000. Thereafter, an increasing trend is observed, with 0.295 per cent in 2010 and 0.303 per cent in 2012. This report shows their failure to benefit from the leapfrogging growth of global trade, which had taken place during the last five decades.

Many LDCs have not established the necessary mechanisms to follow up WTO matters. Moreover, they have not been able to absorb the content of various technical notifications on SPS and TBT measures delivered by developed countries that affect their export.<sup>51</sup> For example, Bangladesh has experienced a European Union (EU) ban on imports of shrimp from Bangladesh in 1997 on the grounds of health, safety and hygiene, an example of an SPS measure.<sup>52</sup> Additionally, some exporters whose products had been rejected from India on TBT and SPS grounds did not inform governments at that time and tried to resolve the issue through individual discussion with importers. However, this ultimately failed. These issues were brought to the notice of the Government of Bangladesh<sup>53</sup> to resolve in bilateral and regional meetings, with only the lead-acid battery<sup>54</sup> issue raised in the WTO dispute settlement body (DSB).

Bangladesh, being a member of the WTO, is receiving special and differential treatment through different agreements, while participating actively in WTO work. This is reflected through various projects, such as twice serving as coordinator of the LDC group in Geneva in 2007 and 2011 and advocating LDC issues, including greater market access, increased

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<sup>50</sup> UNCTADSTAT, *Percentage of Total World Volume and Share of LDC-Asia from 1948–2012* <<http://unctadstat.unctad.org/TableViewer/tableView.aspx>>.

<sup>51</sup> Ana Luiza Cortez, 'The International Development Strategy Beyond 2015: Taking Demographic Dynamics into Account' (Working Paper No 109, Department of Economic and Social Affairs, 2011) 10.

<sup>52</sup> J C Cato and C A Lima Dos Santos, 'European Union 1997 Sea-food Safety Ban: The Economic Impact on Bangladesh Shrimp Processing' (1998) 13 *Marine Resource Economics* 215–27.

<sup>53</sup> Minutes of the SPS Working Group Meeting held on 5 December 2012, Focal Point, WTO Cell, Ministry of Commerce, Government of Bangladesh.

<sup>54</sup> *India—Anti-Dumping Measure on Batteries from Bangladesh*, WTO Dispute DS306 (28 January 2004).

flexibility in the development of multilateral trade rules and targeting assistance to trade infrastructure.<sup>55</sup> Bangladesh has outlined a vision of becoming a middle income country by 2021, which would require the country to grow by eight per cent, compared with current growth rates of six to seven per cent. This is driven by growth in the industrial and service sectors, diversification of export markets and higher foreign exchange earnings from export of semi-skilled and skilled labour.<sup>56</sup> The Bangladesh Trade Policy Review (TPR) in October 2012 restated its need to carry out trade-related reforms for rapid trade-enhancing growth through reducing trade distortions, minimising anti-export bias and ensuring greater integration into multilateral trading systems (MTSs).<sup>57</sup> In this regard, the chairperson of TPR, in his concluding remarks, stated:

Members acknowledged Bangladesh's efforts to create a conducive legal regulatory framework to facilitate growth and development in many areas, competition and intellectual property.<sup>58</sup>

Bangladesh trade policy depends on its sectoral (mainly agriculture, industry and services) contribution to gross domestic product (GDP).<sup>59</sup> In the 2011 to 2012 GDP, the agricultural sector share (including crops, livestock, forestry and fisheries) was 19.29 per cent, the industry sector share was 31.26 per cent and the services share was 49.45 per cent.<sup>60</sup> According to Export Promotion Bureau (EPB) product classification, all exportable products are classified into two broad groups: primary commodities and manufactured commodities.<sup>61</sup> The primary commodities include frozen food (frozen fish, shrimp and others) and agricultural products and the manufactured commodities include all remaining products.<sup>62</sup> Considering the market access impediments that are due to ERs, contribution to

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<sup>55</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/TPR/S/270 (10 September 2012) (Report by the Secretariat) viii.

<sup>56</sup> *Ibid* vii.

<sup>57</sup> *Ibid*

<sup>58</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/TPR/S/270 (15–17 October 2012) (Closing remarks by the Chairperson).

<sup>59</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/TPR/S/270 (10 September 2012) (Report by the Secretariat) 71.

<sup>60</sup> *Bangladesh Economic Review 2012* (Ministry of Finance, Government of the People's Republic of Bangladesh, 2012) 19.

<sup>61</sup> EPB, *Export Statistics* (July 2012 – June 2013) <<http://www.epb.gov.bd/countryexportdata.php>>.

<sup>62</sup> *Ibid*



GDP and likelihood future interference, Bangladesh products are discussed under various sectors or clustered groups in the following sections.

### *1 Agricultural Products*

Agriculture is one of the most important sectors of the Bangladesh economy. Its contribution to GDP stood at 19.29 per cent<sup>63</sup> in the 2011 to 2012 financial year. It strongly supports the growth of the broad service sector in the areas of the growth of wholesale and retail trade, hotel and restaurants, transport and communication sector. Critically, approximately 43.6 per cent of the total labour force of the country is engaged in the agricultural sector.<sup>64</sup> In the 2012 to 2013 financial year, Bangladesh earned US\$535.74 million by exporting agricultural products, which was 1.98 per cent of its total export earnings (US\$27,018.26 million).<sup>65</sup> In addition to exporting main agricultural commodities, such as raw jute, jute goods, tea and frozen foods, the government has taken steps to increase exports of non-traditional agricultural commodities. Bangladesh produces diversified crops and has surpluses of some horticulture commodities, such as bananas, pineapples and mangos. Most agricultural products are perishable and require proper preservation and processing for future consumption. However, there are only a few agro-processing industries in Bangladesh.

Agricultural trade in Bangladesh has been constrained by numerous factors. For instance, a lack of essential links between production, processing and marketing of agricultural producers remains a considerable restraint to agricultural trade. This problem is decoupled by internal infrastructural deficiencies and capacity constraints, such as a slow facilitation process and technical inability to conduct scientific research, testing, conformity and equivalence to meet international safety and quality standards. SPS and TBT measures are the most crucial non-tariff barriers (NTBs) for agricultural exports from Bangladesh. Different types of SPS and TBT measures, such as import permit requirements, compliance with SPS measures, testing requirements of food items, technical regulations and marking

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<sup>63</sup> Bangladesh Economic Review 2012, above n, 60, 19.

<sup>64</sup> Ibid

<sup>65</sup> EPB, above n 62.

requirements, are major NTBs that affect agricultural trade in Bangladesh. <sup>66</sup> Deb <sup>67</sup> noted that the EU imposes import licenses on vegetables and rice and provides export subsidy on their own tobacco-related products, wheat, rice and vegetables under the EU Everything But Arms (EBA) Agreement. Exports from Bangladesh do not face import quotas but tobacco-related products are affected by import licenses and subsidies. <sup>68</sup> Additionally, the United States (US) imposes import licenses on tobacco and vegetables and import quotas on sugar and tobacco and provide export subsidies on vegetables, rice, maize and wheat. <sup>69</sup> Only a few laboratories test the quality of food and carry out chemical and biological examinations. In many instances, these institutions are not capable of carrying out the required tests to ensure compliance with the stringent quality control requirements under SPS. The market access implications of Bangladesh agricultural products because of ERs are further discussed in Chapter 4.

## 2 Fish and Fish Products

Fish and fish products is an important subsector of the agriculture industry in Bangladesh. In the WTO, the trade of fish and fish products is excluded from the AOA and are treated under NAMA. Hence, it is discussed separately in Chapter 5, where its contribution to the economic growth of Bangladesh and the vulnerability of its market access because of ERs is considered. This sector contributed 4.43 per cent to national GDP, 22.21 per cent to agricultural GDP and 2.73 per cent to foreign exchange earnings by exporting fish and fish products in the 2011 to 2012 financial year. <sup>70</sup> The EU and US are the main export destinations for Bangladesh frozen food. Export of frozen food, like shrimp, prawns and other fish, in the EU and US markets has been facing barriers, particularly a lack of traceability, labour law compliance by processing plants and capacity building of officials

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<sup>66</sup> Uttam Kumar Deb, 'Non-Tariff Barriers in Agricultural Trade: Issues and Implications for Least Developed Countries' (2007) 12 *Asia-Pacific Research and Training Network on Trade* <<http://www.unescap.org/tid/artnet/pub/polbrief12.pdf>>.

<sup>67</sup> Ibid 1.

<sup>68</sup> Ibid 2.

<sup>69</sup> Ibid

<sup>70</sup> Bangladesh Economic Review 2012 above n 60, 18.

responsible for test -related activities.<sup>71</sup> Further, frozen food exporters have been facing nitrofurantoin hazards and some antibiotic-related problems in these markets. The EU has been using Rapid Alert System for Food and Feed food and fish testing to prevent the problem.<sup>72</sup> The Department of Fisheries needs to certify every shipment , which acts as a barrier to Bangladesh exports. Nevertheless, despite these high requirements, the shrimp industry fails to ensure the supply of safe, quality products as per international demands. The quality of raw materials (shrimps and prawns) supplied to the processors is not satisfactory because of issues such as adulteration and size variation.<sup>73</sup> Further, inadequate technologies and a knowledge gap also perpetuate the barrier to trade.

An illustration of such inadequate bio -security measures includes drainage, bacterial control and viral control of medication because of technological constraints , which results in a high mortality rate and low product quality. A disease called White Spot Syndrome Virus affects the bagda shrimp specifically and is the sole contributor behind the falling productivity of bagda.<sup>74</sup> In the case of golda shrimp, bio-security-related problems mainly involve bacterial infections and contaminated medicine and feed.<sup>75</sup>

### 3 Pharmaceutical Products

The Bangladesh pharmaceutical sector is another growing sector and currently exports a wide range of pharmaceutical products to 83 countries<sup>76</sup> in Asia, Africa, Europe and Australia, with an annual export of US\$59.82 million for the 2012 to 2013 financial year.<sup>77</sup> Based on its potential market access opportunities and barriers, this sector is discussed separately from other commodities. The Bangladesh pharmaceutical sector has been facing challenges in the areas of patent protection in pharmaceutical products, access to medicine for all and patentability exclusion rights because of EUs that have market access

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<sup>71</sup> Department of Fisheries (Ministry of Fisheries and Livestock, Government of Bangladesh) available at <[www.mofl.gov.bd](http://www.mofl.gov.bd)>.

<sup>72</sup> Ibid

<sup>73</sup> Ibid

<sup>74</sup> Ibid

<sup>75</sup> Ibid

<sup>76</sup> Directorate General of Drug Administration (Ministry of Health and Family Welfare, Government of Bangladesh) see *Exporting Countries* at <[http://www.ddabd.org/exporting\\_country.htm](http://www.ddabd.org/exporting_country.htm)>.

<sup>77</sup> EPB, above n 62.

implications. TRIPS flexibilities and waiver decisions are analysed under this group from the standpoint of industry and public health interests. The market access implications of the Bangladesh pharmaceutical sector under environmental concerns are discussed in Chapter 6.

#### *4 Textile, Clothing, Leather and Leather Products as Manufactured Commodities*

Manufactured commodities are the largest group of exportable products and constituted 95.88 per cent of the total export in the 2012 to 2013 financial year.<sup>78</sup> From these, knitwear and woven garments constituted 78.55 per cent and leather and leather products constituted 1.77 per cent of the total export.<sup>79</sup> Although these manufactured commodities constituted more than 80 per cent of the total export, their vulnerability in terms of ERs is lower than the agriculture and fisheries industries. However, there is no guarantee that this would remain constant in the future. Considering these implications, Textile, Clothing, Leather and Leather Products are discussed separately in Chapter 7.

Although Bangladesh is gradually upgrading its quality and standards infrastructure towards international levels by collective efforts with its newly operational Bangladesh Accreditation Board,<sup>80</sup> it still experiences barriers in terms of financial, technological capacity and the ability for negotiators to discuss current issues within the international trade arena. Moreover, relevant domestic regulations are not well developed or updated with current international rules that can foster market access and ensure compliance not only for international consumers but also for national consumers. A lack of a coordinated approach among different government ministries is expressed in different forums by academics, researchers and experts of respective fields. Bangladesh has faced and overcome critical challenges in meeting export standards in EU markets since the largest embargo on shrimp.<sup>81</sup> However, the recently collapsed Rana Plaza<sup>82</sup> and Tazreen fashion

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<sup>78</sup> EPB, above n 62.

<sup>79</sup> Ibid

<sup>80</sup> Created under the *Bangladesh Accreditation Act, 2006*.

<sup>81</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/TPR/S/270 (10 September 2012) (Report by the Secretariat) 10.

fire<sup>83</sup> have highlighted issues within compliance, including labour standards in the garment industry, which has placed more pressure on this sector. Considering the overall critical situation in terms of ERs for the safety of human, animal and plant lives or health, this research investigates the market access implications of Bangladesh products under environmental concern. It examines the implications of these measures with an in-depth analysis of the relevant WTO rules and Bangladesh domestic trade regulations to provide policy options for Bangladesh considering its developmental needs.

Thus, this chapter outlines the market access in trade and environment debate by clarifying the evolution of ERs and their relationship with market access and, particularly, Bangladesh market access as an LDC. In doing so, it discusses the special and differential treatment in the generalised system of preference that LDCs are currently enjoying. It also briefly outlines the research question, objectives, methodological framework, limitations, thesis organisation and contributions.

## *B Market Access in Trade and Environment Debate*

### *1 What are Environmental Requirements?*

In the WTO, ERs are measures that deal with food safety and animal and plant health requirements explained in the SPS agreement and also with product standards and labelling requirements explained in the TBT agreement.<sup>84</sup>

The significant outcome of the UNCTAD XI process was the launching of the Consultative Task Force<sup>85</sup> on Environmental Requirements and Market Access for Developing Countries with the aim to assist developing countries in reducing potential effects of new ERs on their

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<sup>82</sup> The Rana Plaza collapse d on 24 April 2013. It was an eight-story commercial building in Savar, a sub-district in the Greater Dhaka Area and the capital of Bangladesh. The search for the dead ended on 13 May with the death toll being 1,127. Approximately 2,500 injured people were rescued from the building alive.

<sup>83</sup> The Tazreen fashion fire occurred on the night of 24 November 2012. A fire broke out in Tazreen Fashions, an eight-story garment factory in Ashulia on the outskirts of the capital Dhaka. From the estimated 1,150 people working to fill orders for various international brands, 113 were killed and another 200 wounded.

<sup>84</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration).

<sup>85</sup> For details, please see <[www.unctad.org](http://www.unctad.org)>

market access and in harnessing development and trade opportunities. The OECD study report<sup>86</sup> examines how ERs can be trade barriers for developing countries after investigating over 20 cases where developing countries faced new ERs. These case studies outlined the potential trade effects that have been created because of designing environmental regulations and standards, which have also showed the importance of technical assistance for developing country exporters to adjust to the new ERs without suffering adverse trade effects.<sup>87</sup>

Since the birth of the GATT in 1948, tariffs have been reduced and bound progressively.<sup>88</sup> Although some tariffs still represent significant barriers to trade, attention is shifting progressively to NTMs. NTMs refer to policy measures, other than tariffs, that can potentially affect trade in goods. TBT and SPS measures include all measures covered by the WTO's TBT and SPS agreements. Annex 1 of the TBT Agreement includes technical regulations, standards and conformity assessment procedures. According to Annex A, Paragraph 1 of the SPS agreement:

Sanitary and phytosanitary measures include all relevant laws, decrees, regulations, requirements and procedures including, inter alia, end product criteria; processes and production methods; testing, inspection, certification and approval procedures; quarantine treatments including relevant requirements associated with the transport of animals or plants, or with materials necessary for their survival during transport; provisions on relevant statistical methods, sampling procedures and methods of risk assessment; and packaging labeling requirements directly related to food safety.<sup>89</sup>

ERs expressed as NTMs are not new; however, they have raised policy concerns since the establishment of the GATT about whether they could dilute or even nullify the value tariff

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<sup>86</sup> OECD, above n 44.

<sup>87</sup> Ibid

<sup>88</sup> A tariff is bound when a WTO member has committed not to raise it above a legally agreed rate, known as tariff binding.

<sup>89</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') annex A [1].

bindings and affect trade in an unpredictable way.<sup>90</sup> NTMs continue to raise challenges for international cooperation in trade in the 21<sup>st</sup> century. This thesis focuses on TBT and SPS measures in trade in goods that are now the most frequently encountered NTMs,<sup>91</sup> known as ERs, because of the diversity and complexity of NTMs. They pose acute transparency problems, both in their formulations and administration. These measures, prompted by legitimate public policy objectives, can have adverse trade effects, leading to questions about the design and application of these measures. Ensuring the health, safety and wellbeing of consumers might have adverse trade effects that are considered by some parties as indefensible on public policy grounds.<sup>92</sup>

To streamline NTMs, the Secretary General of the UNCTAD and its Group of Eminent Persons on NTBs formed the Multi-Agency Support Team (MAST), which launched a collection of NTM data comprising 29 developing countries, including Bangladesh, plus the EU and Japan, and covering measures from Chapters A to I and Chapter P of the MAST Classification.<sup>93</sup> An analysis of the MAST data shows that TBT affects 30 per cent of products and values and SPS affects slightly less than 15 per cent of trade<sup>94</sup> but more than 60 per cent of agricultural products. Large incidents of SPS and TBT raise concerns about developing country exports.<sup>95</sup> Although these measures are not protectionist in intent, they often divert trade from developing countries, where the cost of compliance to these measures is too high. In practice, the competitive advantage of low-income developing countries might be eroded because of SPS and TBT measures.<sup>96</sup> The dataset also shows that the prevalence of TBT and SPS reflects a major change in the world trade landscape over the last two decades because of lowering tariffs, which reduced their prevalence as trade policy measures, and the rapid growth of trade because of technological change and policy

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<sup>90</sup> WTO, *World Trade Report 2012: Trade and Public Policies, a Closer Look at Non-Tariff Measures in the 21st Century* (WTO Publications, 2012) 37.

<sup>91</sup> Ibid

<sup>92</sup> Ibid

<sup>93</sup> Oliver Cadot, Mariem Malouche and Sebastian Saez, *Streamlining Non-Tariff Measures, A Toolkit for Policy Makers* (The World Bank, 2012) 11.

<sup>94</sup> Ibid 13.

<sup>95</sup> Oliver Cadot and Mariem Malouche (eds), *Non-Tariff Measures—A Fresh Look at Trade Policy's New Frontier* (The World Bank, 2012) 78.

<sup>96</sup> Ibid

reforms. As a result, governments are increasingly called on to respond in regards to environment, animal welfare and food safety and urged to agree on technical regulations.<sup>97</sup>

The World Trade Report 2012 outlined that TBTs are emerging as an increasingly salient feature of the international trade scene through the expansion of world trade.<sup>98</sup> Developed countries have expanded health, safety and environmental regulations in recent decades and the effect of these regulations on trade is often magnified by cumbersome administrative and compliance procedures.<sup>99</sup> According to the TBT Information Management System, 376 TBT concerns were raised to the TBT committee between 1995 and 18 June 2013.<sup>100</sup> Conversely, in the case of SPS, a total of 350 concerns were raised during this period.<sup>101</sup> These figures show the increasing number of TBT and SPS concerns that are raised with respective committees. The International Trade Centre business survey found a greater use of TBT and SPS measures by developed economies in import-related NTMs, depending on their level of development.<sup>102</sup> The survey<sup>103</sup> also shows that around three-quarters of burdensome NTMs reported by firms relate to TBT and SPS measures when the importing country is developed. In the case of developing countries, the share falls to approximately half.

Specific environmental disputes under the GATT and WTO<sup>104</sup> also provide the significance of such research. During the GATT period (1948–1994), six panel proceedings were completed that involved the examination of environmental measures or human health-related measures under GATT Article XX. From the six reports, three cases (*United States—Taxes on automobiles* [circulated on 11 October 1994]<sup>105</sup> brought by EU; *United States—Restrictions on imports of tuna*, ‘*son of tuna-dolphin*’ [circulated on 16 June

<sup>97</sup> Cadot et al, above n 94, 12.

<sup>98</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/TPR/S/270 (10 September 2012) (Report by the Secretariat) 45.

<sup>99</sup> Ibid

<sup>100</sup> WTO, *TBT Information Management System* <<http://tbtims.wto.org/web/pages/search/stc/Search.aspx>>.

<sup>101</sup> WTO, *SPS Information Management System* <<http://spsims.wto.org/web/pages/search/stc/Search.aspx>>.

<sup>102</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/TPR/S/270 (10 September 2012) (Report by the Secretariat) 115.

<sup>103</sup> Ibid 116.

<sup>104</sup> WTO, *Environmental Disputes in GATT* T/WTO <[http://www.wto.org/english/tratop\\_e/envir\\_e/edis00\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/edis00_e.htm)>.

<sup>105</sup> GATT Panel Report, *United States—Taxes on Automobiles*, GATT Doc DS31/R (11 October 1994).



1994]<sup>106</sup> brought by EU and *United States—Restrictions on imports of tuna, the ‘tuna-dolphin’* (circulated on 3 September 1991)<sup>107</sup> brought by Mexico) were not adopted. The remaining three adopted cases include *Thailand—Restrictions on the importation of and internal taxes on cigarettes* (ruling adopted on 7 November 1990)<sup>108</sup> brought by US; *Canada—Measures affecting exports of unprocessed herring and salmon* (ruling adopted on 22 March 1988)<sup>109</sup> brought by US and *United States—Prohibition of imports of tuna and tuna products from Canada* (ruling adopted on 22 February 1982)<sup>110</sup> brought by Canada. In 1995, the WTO’s dispute settlement procedure took over from the GATT. Since then, three such proceedings have been completed, including:

1. European Communities—Measures affecting asbestos and asbestos-containing products<sup>111</sup> brought by Canada. The panel and the Appellate Body in this case both rejected Canada’s challenge to France’s import ban on asbestos and asbestos-containing products and reinforced that the WTO agreements support members’ ability to protect human health and safety at the level of protection they deem appropriate.
2. *United States—Import prohibition of certain shrimp and shrimp products, the ‘shrimp-turtle’*<sup>112</sup> brought by India, Malaysia, Pakistan and Thailand. The Appellate Body’s ruling recognised that, under WTO rules, governments have every right to protect human, animal or plant life and health and to take measures to conserve exhaustible resources. Initially, the US lost the case because it applied its import measures in a discriminatory manner, then revised its measures to introduce flexibilities in favour of developing countries. The Appellate Body has since concluded that the US ban was consistent with WTO rules. The ruling also alleged

<sup>106</sup> GATT Panel Report, *United States—Restrictions on Imports of Tuna*, GATT Doc DS29/R (16 June 1994).

<sup>107</sup> GATT Panel Report, *United States—Restrictions on Imports of Tuna*, GATT Doc DS21/R (3 September 1991).

<sup>108</sup> GATT Panel Report, *Thailand—Restrictions on Importation of and Internal Taxes on Cigarettes*, GATT Doc DS10/R (5 October 1990).

<sup>109</sup> GATT Panel Report, *Canada—Measures Affecting Exports of Unprocessed Herring and Salmon*, GATT Doc L/6268 (20 November 1987).

<sup>110</sup> GATT Panel Report, *United States—Prohibition of Imports of Tuna and Tuna Products from Canada*, GATT Doc L/5198 (22 December 1981).

<sup>111</sup> GATT Panel Report, *European Communities—Measures Affecting Asbestos and Asbestos-containing Products*, GATT Doc WT/DS135/R (18 September 2000).

<sup>112</sup> Appellate Body Report, *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, WTO Doc WT/DS58/AB/R (12 October 1998, adopted 6 November 1998).

that WTO panels may accept ‘amicus briefs’ (friends of the court submissions) from NGOs or other interested parties

3. *United States—Standards for reformulated and conventional gasoline*, a WTO case<sup>113</sup> brought by Venezuela and Brazil. The case affirmed that the US had every right to adopt the highest possible standard to protect its air quality so long as it did not discriminate against foreign imports. The US lost the case because its requirement on domestic producers was less stringent than that imposed on imported gasoline (in this case from Venezuela and Brazil), which was discriminatory.

As mentioned, the CTE is responsible for covering trade and environment issues across the whole range of WTO agreements, and the effect of environmental measures on market access is particularly important to the work of the CTE.<sup>114</sup> WTO member governments consider the protection of the environment and health legitimate policy objectives. Here, in the case of ERs, it is explained that these can impede trade and even be used as an excuse for protectionism that could undermine the spirit of Agenda 21<sup>115</sup> and Principle 12 of the Rio Declaration.<sup>116</sup> It also provides the view that it is not to weaken environmental standards but to set appropriate standards and enable exporters to meet them.

The CTE agree that ‘sustainable development depends on improved market access for developing countries’ products’<sup>117</sup> and acknowledge that ‘measures designed to meet these objectives could hinder exports through causing unwarranted economic and social cost to

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<sup>113</sup> GATT Panel Report, *United States—Standards for Reformulated and Conventional Gasoline*, GATT Doc WT/DS2/R (29 January 1996, adopted on 20 May 1996).

<sup>114</sup> WTO, *Development: Definition, Who Are the Developing Countries in the WTO?* <[http://www.wto.org/english/tratop\\_e/devel\\_e/d1who\\_e.htm](http://www.wto.org/english/tratop_e/devel_e/d1who_e.htm)>.

<sup>115</sup> Ibid; also see *Rio Declaration on Environment and Development 1992*, Agenda 21 (provides a comprehensive action programme to attain sustainable development and addresses both environmental and developmental issues in an integrated manner at global, national and local levels), Principle 12 (cautioned for unilateral trade measures for environmental purposes and urged not to constitute arbitrary or unjustifiable discrimination for international trade).

<sup>116</sup> *Report of the United Nations Conference on Environment and Development*, UN Doc A/CONF.151/ 26 (Vol. I) (12 August 1992).

<sup>117</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/ DEC/1 (20 November 2001) (Ministerial Declaration).

others'.<sup>118</sup> The need to achieve these objectives should be based on the particular environmental and developmental context to which they apply, which is reiterated by the other agencies.<sup>119</sup> Existing research on LDC market access implications because of ERs is very limited but the issue of ERs has been taken as the central thought of this research because of the increasing trend of trade–environment disputes<sup>120</sup> and interest among researchers in such an area.

## 2 Why Market Access?

In the WTO framework, market access is a legalistic term outlining the government imposed conditions under which a product may enter into a country under non-discriminatory conditions.<sup>121</sup> Smith articulated market access as comprising of five elements: the market (nature of the markets—product and/or geographic), the entities involved (states, corporations), the impediments to access, how these impediments are perceived and how these four elements fit together to form a coherent whole.<sup>122</sup> Kyle Bagwell et al. conceptualised market access as reflecting the competitive relationship between imported and domestic products.<sup>123</sup> Tariff reduction commitment or even duty-free and quota-free (DFQF) market access commitment offered by a member can be curtailed by imposing NTBs, particularly ERs, which reflects the central idea of the research questions.

The need for improved market access for developing country and LDC export has been recognised in a number of international instruments.<sup>124</sup> According to WTO:

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<sup>118</sup> Ibid

<sup>119</sup> *Rio Declaration on Environment and Development 1992*, Principle 11.

<sup>120</sup> See dispute settlement cases at <[http://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_subjects\\_index\\_e.htm#selected\\_subject](http://www.wto.org/english/tratop_e/dispu_e/dispu_subjects_index_e.htm#selected_subject)>.

<sup>121</sup> Walter Goode, WTO, University of Adelaide and Centre for International Economic Studies, *Dictionary of Trade Policy Terms* (Cambridge University Press, 5<sup>th</sup> ed, 2007) 222.

<sup>122</sup> Fiona Smith, 'Agriculture and the WTO: Towards a New Theory of International Agricultural Trade Regulation' [2009] *Elgar International Economic Law* 81, 82.

<sup>123</sup> Kyle Bagwell, Petros C Mavroidis and Robert W Staiger, 'It's a Question of Market Access' (2002) 96 *American Journal of International Law* 56, 59.

<sup>124</sup> International rules. For instance, 2002 WSSD Declaration [93], 2001 Doha Declaration on 'The Programme of Action for the Least Developed Countries for the Decade 2001–2010' [42], 2005 Hong Kong Ministerial Declaration call for DFQF market access for the products originating from the LDCs[47].

Market access for goods in the WTO means the conditions, tariff and non-tariff measures, agreed by members for the entry of specific goods into their markets. Tariff commitments for goods are set out in each member's schedule of concessions on goods which represent commitments not to apply tariffs above the listed rates known as "bound" tariff. Non-tariff measures are dealt with under specific WTO agreements.<sup>125</sup>

WTO members seek to improve market access continually through the regular WTO work programme and through negotiations that were launched at the Doha Ministerial Conference in November 2001. Market access for agricultural products would be negotiated under the Committee on Agriculture as mandated by Paragraph 13 and 14 of the Doha Ministerial Conference in 2001.<sup>126</sup> The Agriculture Agreement provides significant scope for governments to chase important non-trade concerns, such as food security, the environment, structural adjustment, rural development and poverty alleviation.<sup>127</sup> Article 20 of the AOA says that negotiations have to take non-trade concerns into account.<sup>128</sup>

Several studies reported that everyone has non-trade concerns.<sup>129</sup> Most countries accept that agriculture is not only about producing food and fibre but also has other functions, including these non-trade objectives. The question debated in the WTO is whether trade-distorting subsidies or subsidies outside the green box are needed to help agriculture perform its many roles. Examples include food security stocks, direct payments to producers, structural adjustment assistance, safety-net programmes, environmental programmes and regional assistance programmes, which do not stimulate agricultural production or affect prices.<sup>130</sup> The onus on the proponents of non-trade concerns is to show that existing provisions are inadequate for dealing with these concerns in targeted, non-trade-distorting ways. Other countries articulate that non-trade concerns are closely linked

<sup>125</sup> WTO, *Market Access: Work in the WTO Non-agricultural Market Access Negotiations* <[http://www.wto.org/english/tratop\\_e/markacc\\_e/markacc\\_negoti\\_e.htm](http://www.wto.org/english/tratop_e/markacc_e/markacc_negoti_e.htm)>.

<sup>126</sup> Ibid

<sup>127</sup> WTO, *Agriculture Negotiations: Background 'Non-trade' Concerns: Agriculture Can Serve Many Purposes* <[http://www.wto.org/english/tratop\\_e/agric\\_e/negs\\_bkgrnd17\\_agri\\_e.htm](http://www.wto.org/english/tratop_e/agric_e/negs_bkgrnd17_agri_e.htm)>.

<sup>128</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 20(c).

<sup>129</sup> Cadot et al, above n 94, 12.

<sup>130</sup> Ibid

to production. They believe subsidies based on or related to production are needed for these purposes. For instance, rice fields have to be promoted to prevent soil erosion.

Ministers also take note of non-trade concerns (such as environmental protection, food security and rural development) reflected in the negotiating proposals already submitted.<sup>131</sup> They confirm that negotiations will take these into account, as provided for in the Agriculture Agreement.<sup>132</sup> Gourdon and Nicita<sup>133</sup> state that TBT and SPS measures are widely used, where TBT affects around 30 per cent of international trade and SPS frequently affects 15 per cent. However, there is a disproportional effect of SPS on agriculture and food products by up to 60 per cent. At Doha, ministers agreed to initiate negotiations to liberalise trade on non-agricultural goods further. To this end, the Negotiating Group on Market Access (NGMA) was created at the first meeting of the Trade Negotiation Committee (TNC) in early 2002.<sup>134</sup>

The negotiations aim to reduce or eliminate tariffs, including tariff peaks, high tariffs, tariff escalation and NTBs for non-agricultural goods, particularly on products of export interest to developing countries.<sup>135</sup> The product coverage shall be comprehensive and without prior exclusions. Special and differential treatment for developing and least developed members shall be fully taken into account, including through less than full reciprocity in the reduction commitments and measures to assist LDCs to participate effectively in the negotiations.<sup>136</sup>

This research will identify the market access implications for LDCs because of ERs of the WTO with a special reference to Bangladesh. Although market access has diverse

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<sup>131</sup> See Doha Development Agenda at WTO, *Doha Round* <[http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm#development](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm#development)> [13], [14].

<sup>132</sup> Ibid

<sup>133</sup> Julien Gourdon and Alessandro Nicita, 'NTMs: Interpreting the New Data' in Oliver Cadot and Mariem Malouche (eds), *Non-Tariff Measures-A Fresh Look at Trade Policy's New Frontier* (World Bank, 2012) 57.

<sup>134</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration).

<sup>135</sup> See Doha Development Agenda at WTO, *Doha Round* <[http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm#development](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm#development)> [16].

<sup>136</sup> Ibid

perspectives to analyse, considering its environmental barriers, this research will investigate its SPS, standards and other technical requirements, domestic subsidies in agriculture, and special provisions to exclude patentability in the intellectual property rights in relation to Bangladesh market access as an LDC.

Market access has been an issue of concern for Bangladesh since the economy began integrating rapidly with the global economy.<sup>137</sup> The challenges that Bangladesh faces regarding trade and environment are now twofold: how to get market access without degrading the environment and how to protect the environment without adversely affecting economic growth and progress in the trade liberalisation process.<sup>138</sup> Thus, market access in international trade plays an important role for economic and social development of a country.

#### *(a) Why Least Developed Country Market Access?*

Since 1971, the UN has designated LDCs, a category of states that are deemed highly disadvantaged in their development process and face more risk of failing to come out of poverty. As a result, LDCs are considered in need of the highest degree of attention for the international community. UN conferences on LDCs were held in 1981, 1990, 2001 and 2011 under the leadership of UNCTAD.<sup>139</sup> Through the periodical review of the list of LDCs on the basis of established criteria and highlighting their structural problems in relevant UNCTAD publications, the UN gives a strong indication to the development partners of these countries and pushes the need for special international support measures and concessions in their favour. Essentially, these measures are designed to reduce the competitive disadvantages from which LDCs suffer in the global economy, support the development of their physical infrastructure and human resources and enhance their institutional capacities. LDC-specific treatment mainly falls under three areas of

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<sup>137</sup> Fahmida Khatun, 'Environmental Problems and Sustainable Development' in *Emerging Issues in Bangladesh Economy* (The University Press Limited, 2008) 403.

<sup>138</sup> Diana Tussie (ed), *The Environment and International Trade Negotiations, Developing Country Stakes* (Canada International Development Research Centre, 2000) 225.

<sup>139</sup> See <[www.unctad.org](http://www.unctad.org)>.

international cooperation: the MTS, the field of development financing and the area of technical assistance.<sup>140</sup>

The WTO recognises countries as LDCs if they have been designated by the UN.<sup>141</sup> WTO work related to trade and development takes place mostly in the Committee on Trade and Development (CTD) and the Sub-Committee on LDCs. Since the launch of the Doha Round in November 2001, trade and development issues related to special and differential treatment are being negotiated in the CTD meeting in its special session. In addition, the committee is to consider ways in which developing countries, particularly LDCs, may be assisted to make best use of special and differential treatment. The mandate of the Sub-Committee on LDCs is to look specifically at issues of particular importance to LDCs. Since the Doha Ministerial Conference in 2001, the Sub-Committee on LDCs focuses on the implementation of the WTO Work Programme for the LDCs. The programme addresses the following systemic issues:

4. market access for LDCs
5. trade-related technical assistance and capacity building initiatives for LDCs
6. providing, as appropriate, support to agencies assisting with the diversification of LDCs' production and export base
7. mainstreaming, as appropriate, into the WTO's work the trade-related elements of the LDC-III Programme of Action, as relevant to the WTO's mandate
8. participation of LDCs in the MTS
9. accession of LDCs to the WTO
10. follow up on WTO ministerial decisions and declarations.<sup>142</sup>

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<sup>140</sup> See <[www.unctad.org](http://www.unctad.org)>.

At the time of the 2003 review of the list, the following three criteria were used by the UN: low income, in light of a three-year average estimate of the gross national income per capita (under \$750 for cases of addition to the list, above \$900 for cases of graduation); weak human assets (measured through a composite Human Assets Index) and economic vulnerability (measured through a composite Economic Vulnerability Index). As of 30 June 2013, there are 49 LDCs on the UN list, 34 of which are WTO members.

<sup>141</sup> WTO, *The Sub-Committee on Least-Developed Countries* <[http://www.wto.org/english/tratop\\_e/devel\\_e/dev\\_sub\\_committee\\_ldc\\_e.htm](http://www.wto.org/english/tratop_e/devel_e/dev_sub_committee_ldc_e.htm)>.

<sup>142</sup> Ibid

At the sub-committee, members examine market access initiatives taken in favour of LDCs under the enabling clause.<sup>143</sup> The WTO Work Programme mandates an annual review of market access for LDC exports. To assist this review by the sub-committee, the Secretariat undertakes comprehensive analysis on LDC market access challenges. The latest note in this regard is contained in WTO Document WT/COMTD/LDC/W/56 (October 2012).<sup>144</sup> The review of the market access situation of LDCs each year reveals that LDC exports are characterised by high concentration of their exports, as well as in their export destinations. The major challenge for LDCs remains that of addressing supply side constraints and diversification of their export base.<sup>145</sup>

Another note<sup>146</sup> carried out by the WTO Secretariat in regards to NTMs on products of export interest to LDCs showed that SPS measures are the most frequently cited NTMs faced by LDCs in the areas of agriculture (fruits and vegetables), fish and fish products and wood and wood products. This report also outlined the TBT, customs and administrative measures and trade remedies as other NTMs. Bangladesh has been facing TBT and SPS measures; customs and administrative procedures; import licensing requirement measures in the case of jute yarn and twine products; consular formalities and documentation measures in the case of toiletry products; registration and procedural problems in the case of pharmaceutical products; attestation fees and testing requirements in the case of juice, drinks, jam, jelly, pickles, spices and snacks; rules of origin in the case of garments from the EU and antidumping measures in the case of snacks and bags of jute from Brazil and lead-acid batteries from India.<sup>147</sup>

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<sup>143</sup> In 1979, GATT Contracting Parties adopted the decision on 'Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries' (the so-called enabling clause), a derogation to the most-favoured nation (MFN) principle, which allows developed country members to give differential and more favourable treatment to developing countries and forms the legal basis for the Generalized System of Preferences (GSP).

<sup>144</sup> WTO, *Market Access for Products and Services of Export Interest to Least-Developed Countries*, WTO Doc WT/COMTD/LDC/W/56 (1 October 2012) (Note by the Secretariat) 1.

<sup>145</sup> Ibid

<sup>146</sup> WTO, *Non-Tariff Measures on Products of Export Interest to Least-Developed Countries*, WTO Doc WT/COMTD/LDC/W39 (4 July 2006) 12.

<sup>147</sup> Ibid 13.



Boza's<sup>148</sup> research on SPS and TBT measures in import/export flows for food and agriculture markets concluded that increasing the stringency imposed by sanitary, phytosanitary and/or technical requirements hinders food and agricultural trade, creating a market access barrier. Some authors highlight that the difficulties that SPS and TBT measures pose for trade are greater in the case of developing countries and LDCs.<sup>149</sup> In this sense, Häberli<sup>150</sup> stated on the case of LDC agricultural exports to Switzerland that, today, NTMs represent a much more important obstacle to trade than tariffs. This would be principally because of LDCs' lack of technical and financial capacities to adapt to standards.

*(i) Special and Differential Treatment*

The GATT XXXVI in Part IV recognised the needs of LDCs in its principles and objectives, which include raising living standards and the progressive development of all contracting parties.<sup>151</sup> Special and differential treatment for developing countries has been a principle of the GATT since the 1960s and, to date, it has taken two main forms: the granting of preferential access to developed country markets and exemption from disciplines applying to the protection of domestic industries under particular conditions.

<sup>148</sup> Sofia Boza, 'Assessing the Impact of Sanitary, Phytosanitary and Technical Requirements on Food and Agricultural Trade: What Does Current Research Tell Us?' (Working Paper Series 2/2013, SECO/WTI Academic Cooperation Project, 2013); X Bao and L D Qiu, 'Do Technical Barriers to Trade Promote or Restrict Trade? Evidence from China' (2010) 17(3) *Asia-Pacific Journal of Accounting & Economics*, 253–80; J Beghin and M Melatos, 'The Trade and Welfare Impacts of Australian Quarantine Policies: The Case of Pigmeat' (2012) 35(8) *The World Economy*, 1006–21; G Wei, J Huang and J Yang, 'The Impacts of Food Safety Standards on China's Tea Exports' (2012a) 23(2) *China Economic Review*, 253–64; G Wei, J Huang and J Yang, 'Honey Safety Standards and its Impacts on China's Honey Export' (2012b) 11(4) *Asia-Pacific Journal of Accounting & Economics*, 684–93; C Wieck, S Schluter and W Britz, 'Assessment of the Impact of Avian Influenza-related Regulatory Policies on Poultry Meat Trade and Welfare', (2012) 35(8) *The World Economy*, 1037–52.

<sup>149</sup> A C Disdier, L Fontagné and D Mouni, 'The Impact of Regulations on Agricultural Trade: Evidence from SPS and TBT Agreements' (2008) 90(2) *American Journal of Agricultural Economics* 336; B Hoekman and A Nicita, 'Trade Policy, Trade Costs, and Developing Country Trade' (World Bank Policy Research Working Paper 4797, 2008); N Wilson and V Bray, 'It Happened All at Once: Switching Regressions, Gravity Models and Food Safety' (Paper presented at the AAEA, CAES, WAEA Joint Annual Meeting, Denver, Colorado, July 2010).

<sup>150</sup> C Häberli, 'Market Access in Switzerland and in the European Union for Agricultural Products from Least Developed Countries' (NCCR Working Paper 2008/5, 2008).

<sup>151</sup> *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 194 (entered into force in 1 January 1948) art XXXVI.

Preferential market access was justified as a means to encourage export diversification by developing countries to escape the ongoing decline in their terms of trade.<sup>152</sup>

The Enabling Clause was adopted in 1979 in the Tokyo Round of Negotiations to permit preferences in trade for developing countries and LDCs.<sup>153</sup> It provides a legal basis for extending the Generalized System of Preferences (GSP) beyond the original 10 years. It allows developed countries to discriminate between different categories of trading partners (developed and developing countries and LDCs) and to give preferential treatment to poorer countries, particularly to LDCs. The concessions provided to developing countries and LDCs by the Uruguay Round agreements were designed either to provide a grace period or to take protective measures to safeguard their interest.<sup>154</sup> The benefits of special and differential treatment are discussed throughout the chapters and their relevant sections.

Non-reciprocal preferential schemes have played an important role in promoting LDC exports. An example is the EU EBA scheme<sup>155</sup> that provides 100 per cent DFQF market access of which Bangladesh has been enjoying the benefits as an LDC. The African Growth and Opportunity Act (AGOA)<sup>156</sup> and Haitian Hemisphere Opportunity through Partnership Encouragement Act (HOPE-II)<sup>157</sup> are illustrations of initiatives taken by developed countries to promote imports from LDCs. Developing countries have also started to adopt preferential market access schemes for LDCs. India, China, Chinese Taipei and Korea have offered a significant degree of DFQF market access to LDC products and Bangladesh has been receiving the benefit as an LDC.<sup>158</sup> To provide opportunities for improved market access for LDCs in 2009, the General Council adopted the extension of the waiver concerning preferential tariff treatment to merchandise trade from LDCs for a further ten

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<sup>152</sup> Allan Matthews, 'Special and Differential Treatment in the WTO Agriculture Negotiations' (Discussion Paper 61, IIS, January 2005).

<sup>153</sup> *Differential and More Favorable Treatment Reciprocity and Fuller Participation of Developing Countries*, GATT Doc L/4903 (28 November 1979) (Decision).

<sup>154</sup> Alam, above n 16, 9.

<sup>155</sup> European Commission, *Everything But Arms (EBA) Initiatives for LDCs* <<http://ec.europa.eu/trade/policy/countries-and-regions/development/generalised-scheme-of-preferences/>>.

<sup>156</sup> *African Growth and Opportunity Act (AGOA)*, 2000.

<sup>157</sup> *Hemispheric Opportunity through Partnership Encouragement (HOPE-II) Act*, 2006.

<sup>158</sup> WTO, *Developing Members Confirm Commitment to Open Market for Poorest Countries* <[http://www.wto.org/english/news\\_e/news12\\_e/acc\\_16apr12\\_e.htm](http://www.wto.org/english/news_e/news12_e/acc_16apr12_e.htm)>.

years (i.e., until 30 June 2019).<sup>159</sup> In 2009, the General Council also adopted, among others, two waivers for US trade preference programmes, namely, the AGOA, which is valid until 30 September 2015,<sup>160</sup> and the Caribbean Basin Economic Recovery Act, which will remain valid until 30 December 2014.<sup>161</sup>

## *(ii) Generalized System of Preferences*

The GSP is the idea of granting developing countries preferential tariff rates in the markets of industrialised countries and was originally presented by Prebisch<sup>162</sup> at the first UNCTAD conference in 1964. There are currently 13 national GSP schemes notified to the UNCTAD Secretariat, which are Australia, Belarus, Bulgaria, Canada, Estonia, the EU, Japan, New Zealand, Norway, the Russian Federation, Switzerland, Turkey and the US. As stated in Resolution 21(ii) taken at the UNCTAD II Conference in New Delhi in 1968:

The objectives of the generalized, non-reciprocal, non-discriminatory system of preferences in favour of the developing countries, including special measures in favour of the least advanced among the developing countries, should be: (a) to increase their export earnings; (b) to promote their industrialization; and (c) to accelerate their rates of economic growth.<sup>163</sup>

Under GSP schemes of preference-giving countries, selected products originating in developing countries are granted reduced or zero tariff rates over the most favoured nation (MFN) rates. LDCs receive special and preferential treatment for a wider coverage of products and deeper tariff cuts.

In 1971, the GATT Contracting Parties approved a waiver to Article I of the General Agreement for 10 years to authorize the GSP scheme. Later, the Contracting Parties

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<sup>159</sup> *Preferential Tariff Treatment for Least-developed Countries*, WTO Doc WT/L/759 (27 May 2009) (Decision).

<sup>160</sup> *United States—African Growth and Opportunity Act*, WTO Doc WT/L/754, WT/L/818 and Corr.1 (27 May 2009) (Decision).

<sup>161</sup> *United States—Caribbean Basin Economic Recovery Act*, WTO Doc WT/L/753 and WT/L/817 (27 May 2009) (Decision).

<sup>162</sup> Raul Prebisch was the first Secretary-General of UNCTAD.

<sup>163</sup> See <[www.unctad.org](http://www.unctad.org)>.

decided to adopt the 1979 Enabling Clause, Decision of the Contracting Parties of 28 November 1979 (26S/203) entitled 'Differential and more favourable treatment, reciprocity and fuller participation of developing countries', creating a permanent waiver to the MFN clause to allow preference-giving countries to grant preferential tariff treatment under their respective GSP schemes.<sup>164</sup> Bangladesh export to the US under preference is insignificant; for example, in 2009, the GSP treatment received by Bangladesh was only 0.04 per cent of the total export.<sup>165</sup> Some Bangladesh products that have export interest are not included in the GSP list, such as apparel and clothing, footwear and leather. These products are being pursued under current Doha negotiations. In a serious warning, the US suspended trade privileges under the GSP scheme for Bangladesh after a six-year review exposed 'serious shortcomings' in safety and labour standards.<sup>166</sup> The decision will bring tariffs back on some of Bangladesh's exports to US markets. However, the scheme does not apply to Bangladesh's main export of garments. Since 2005, over 1,800 workers have died in preventable factory fires and building collapses in the garment industry.<sup>167</sup> The workers' safety issue gained momentum after the Tazreen fire that killed 112 workers in November 2012. The Rana Plaza collapse that killed 1,132 workers on 24 April 2013 intensified calls from different quarters, including US senators, for trade benefits to be curtailed. Bangladesh is enjoying GSP facilities from Canada because of its flexible rules of origin.<sup>168</sup> However, the erosion of these preferences might have negative consequences, which are discussed in the following chapters.

### *(b) Need for Market Access in International Trade for Economic Development*

International trade has been considered an important tool for economic development. It refers to cross-border economic activities between countries, trading blocs and trading

<sup>164</sup> *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('General Agreement on Tariffs and Trade 1994').

<sup>165</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/T PR/S/270 (10 September 2012) (Report by the Secretariat) 25.

<sup>166</sup> Arun Devnath and Refayet Ullah Mirdha, 'US Suspends GSP for Bangladesh' [2013] *The Daily Star (Dhaka)* <<http://www.thedailystar.net/beta2/newspaper/?date=2013-06-28>>.

<sup>167</sup> *Ibid*

<sup>168</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/T PR/S/270 (10 September 2012) (Report by the Secretariat) 26.

partners, bodies and corporations through the exchange of goods, services, technology and capital.<sup>169</sup> The transnational trading relationships of international trade have facilitated the growth and development of international trade law, which is developed through trading countries' joint endeavours to pursue their individual trading interests in an inclusive and comprehensive global trading framework.<sup>170</sup>

Trade liberalisation has a prospect for real economic growth by increasing participation in global trade by investing resources in a sector where the country has a comparative advantage, thus, increasing productivity. It also has other benefits, such as opening up the nation's businesses to competition, which improves productivity and efficiency and attracts investment that aids economic development and growth.<sup>171</sup> Trade liberalisation has improved the economies of developing nations. Between 1960 and 1999, per capita GDP increased ninefold in South Korea and threefold in Chile. These are prime examples of trade liberalisation.<sup>172</sup> However, unchecked trade liberalisation may increase an LDC's rate of trade, while decreasing its overall revenue from trade and its GDP. This is because most LDCs export low-price commodities almost exclusively and import higher-priced manufactured goods from developed nations. This creates a negative balance in payments.<sup>173</sup>

LDCs need to stimulate investments rapidly and extensively to achieve long-term restructuring of their economies and to generate productive employment. For LDCs, the market has not been able to generate sustained and inclusive growth, in part, because the market only works through incremental changes and small steps. Therefore, these countries need to 'build developmental states'. According to the UNCTAD 2009 report, a developmental state is 'a state whose ideological underpinnings are developmental and one

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<sup>169</sup> Ibid

<sup>170</sup> Ibid

<sup>171</sup> Natalie Goldstein, *Global Issues: Globalization and Free Trade* (Facts On File, Inc., 2007) 37.

<sup>172</sup> Douglas Irwin, *Free Trade Under Fire* (Princeton University Press, 2002), 38.

<sup>173</sup> Goldstein, above n 172, 38.

that seriously attempts to deploy its administrative and political resources to the task of economic development'.<sup>174</sup>

Improving access or securing better access to foreign markets has been an important goal of nations throughout history.<sup>175</sup> Numerous studies<sup>176</sup> underscored the need for market access of Bangladesh products for its economic development. Although its contribution to GDP has been limited to roughly 18 per cent since 2006, considering its capacity in producing quality products for global markets and its low-cost production facilities, Bangladesh has given top priority to increasing market access of its products to achieve economic growth.<sup>177</sup> Bangladesh continues to aim for better market access because it has to expand its export market by a significant margin to achieve GDP and Millennium Development Goals (MDGs).<sup>178</sup> Bangladesh's export base is small; readymade garments (RMGs), frozen food (i.e., frozen shrimp) and leather and leather goods constitute over 90 per cent of the country's total export basket.<sup>179</sup> There are a few items, such as light engineering products, bicycles, footwear, home textiles, pharmaceutical products, agro-products and software, that can be more competitive if favourable market access situations can be created for them. Thus, market access of Bangladesh products becomes a vital concern for Bangladesh economic development.

### *(c) Need for Market Access in International Trade for Social Development*

Products meet the requirements of national and international consumers through market access. Market access encourages production that is directly related to the wellbeing of

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<sup>174</sup> UNCTAD, 'Better Balance Needed between States and Markets to Spur Progress in Least Developed Countries' (Press Release, 16 July 2009) <<http://www.unctad.org/Templates/webflyer.asp?docid=11753&intItemID=1528&lang=1>>.

<sup>175</sup> Dhaka Chamber of Commerce & Industry (DCCI), 'Economic Policy Paper on Improving Access for Bangladesh in Global Markets' (Policy Paper, DCCI-CIPE/ERRA Project, 2005).

<sup>176</sup> IMF, 'Bangladesh: Poverty Reduction Strategy Paper' (IMF Country Report No 05/410, IMF, November 2005); Deapriya Bhattacharya et al, *Bangladesh in the Global Trade Regime* (Pathak Samabesh, 1<sup>st</sup> ed, 2005).

<sup>177</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/TPR/S/270 (10 September 2012) (Report by the Secretariat) vii.

<sup>178</sup> Ministry of Finance, *Bangladesh Economic Review* (Government of the People's Republic of Bangladesh, 2013).

<sup>179</sup> EPB, *Bangladesh* <<http://www.epb.gov.bd>>.

production-related human resources. In Bangladesh, three -quarters of the total population live and earn their livelihood in rural areas. Agriculture generates two -thirds of total employment, contributes 25 per cent of the GDP and provides food security for the increasing population.<sup>180</sup> Moreover, the garment sector's contribution to GDP is 20 per cent, earning 90 per cent of the total export that provides employment to approximately five million people. Thus, market access is contributing to the economy and to social development.

In addition, demand for quality products not only comes from international consumers but also from national consumers. Compromise in terms of product quality is not acceptable. However, the problems are equivalency of standards, PPMs, whether products are produced under environmentally friendly conditions and whether products are properly labelled or packaged. It is arguable that products originating from developing countries face environmental-requirement-related barriers that are mostly due to their lack of financial and technological support. Moreover, some developed countries set their product standards higher than those of international standards. Epps argued that all ERs are not barriers; they have some positive effects on standards that act as facilitators of trade, conveying information in a consistent and understandable way to the consumers.<sup>181</sup> She also added that ERs lead to reduction of consumer uncertainty and transaction cost, ease of comparison, increased demand for matching goods and flexibility of substitution between similar goods.<sup>182</sup> Thus, the use of international standards and regulations helps to protect the environment, as well as human, animal and plant life or health, which is recognised by the world community.

From both economic efficiency and equity considerations, it is well recognised that there is a need to develop and monitor product standards to protect the consumer's right to ensure quality without compromising on the standard for protection of human, animal and plant life. Compliance of standards should be recognised by international standard setting bodies,

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<sup>180</sup> *Trade Policy Review: Bangladesh*, WTO Doc WT/TPR/S/270 (10 September 2012) (Report by the Secretariat).

<sup>181</sup> Epps, above n 40, 26

<sup>182</sup> Ibid.

such as the Codex Alimentarius Commission (Codex) for food safety , the International Office of the Epizootics for animal health and the Secretariat of the International Plant Protection Convention for plant health standards.<sup>183</sup>

However, a fundamental issue remains, given the underlying tensions of the recent dynamics in international trade in setting standards even higher than the international standard for protecting domestic industries in the name of environmental protection. Hence, there are implications for LDC market access in developed countries (maintains higher standards) and for LDC economic development, which ultimately affects their social development.

Indeed, social development includes economic development and environmental protection. From the above discussion, it is clear that, firstly, LDCs like Bangladesh need to ensure economic development by increasing market access. Once economic development is achieved, LDCs can invest in environmental protection to achieve social development, which can secure sustainable development. To this end, the incremental number of market access barriers that Bangladesh has been facing under environmental concern is taken as the core issue of this research.

### *3 Bangladesh Market Access under Environmental Requirements*

Bangladesh has been an active member of the WTO since its inception and is well regarded because of its dynamic leadership while working as the LDC coordinator twice. Further, it has a similar agenda and issues to others in the LDC group.

In Bangladesh, the trade liberalisation process started in the mid-1980s. The government has since undertaken a number of bold steps, which include liberalising the trade and foreign investment regime; strengthening the financial sectors; creating legislative and regulatory framework; closing and privatising some loss-making, state-owned enterprises;

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<sup>183</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') 67.



adjusting or abolishing some administered prices; broadening the base of VAT collection and taking steps to improve governance.<sup>184</sup>

In respect of trade liberalisation, export diversification and import liberalisation received the highest priority in earlier years. This consisted of permitting exporters of non-traditional items to convert some of their export earnings at the higher exchange rate in the secondary market, reducing the tariff level and tariff dispersion, simplifying and rationalising the tariff structure and deregulating the import process. The result was a reduction of quantitative restrictions and some tariff cuts by the mid-1980s. These reforms led to higher growth of non-traditional exports and the emergence of a more diversified export structure. The 'positive list' carried over from the pre-liberalisation days was replaced with a smaller 'negative list', which specified items not to be imported without official sanction.<sup>185</sup>

Shifting markets from Asia/Africa to the US and EU markets, NTBs and stringent rules of origin are hindering export. From these, the NTBs, particularly the environment-related barriers, are critical for Bangladesh because it needs compliance assurance. The major exportable items of Bangladesh are listed as annexure.<sup>186</sup> Agriculture still accounts for 30 per cent of GDP, while employing 63 per cent of the total labour force. The RMG-dominated manufacturing sector and services, accounting for nine per cent and 61 per cent of GDP, respectively, have been sources of economic growth.<sup>187</sup>

Bangladesh also faces domestic barriers. Despite the immense opportunities offered by Bangladesh, including its relatively cheap and abundant labour force, its potentially large market and having one of the most liberal foreign direct investment (FDI) regimes in South Asia, FDI continues to be discouraged by a number of problems. These include an unstable labour force, inadequate basic infrastructure (notably power, telecommunications and transportation facilities) and resulting bottlenecks, slow pace of privatisation, an inefficient financial system, an institutional environment that is corrupt and possesses an inefficient

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<sup>184</sup> Ibid

<sup>185</sup> Ibid

<sup>186</sup> See Annexure 1 of this thesis.

<sup>187</sup> Ibid

culture, political uncertainty and a limited appreciation of the rule of law. These factors tend to increase the cost of doing business in Bangladesh, thereby impairing the competitiveness, not just of foreign-owned enterprises but also of domestically owned enterprises. Ever-increasing ERs in the name of standard and quality put pressure on Bangladesh exporters to produce high quality products and have serious implications on Bangladesh market access. As outlined in the introduction, the market access implications of Bangladesh products are tested in Chapters 4, 5, 6 and 7 under different sectors, depending on the degree of barriers they face because of environmental grounds.

### *C Research Question*

What are the challenges and opportunities of GATT/WTO's ERs for Bangladesh's market access?

### *D Research Objectives*

In response to this question, this research has four objectives. Firstly, it aims to examine the complex relationship between trade and environment, particularly the WTO ERs and market access. It will examine the existing environment-related trade regulations on an international, national, regional and global perspective with a view to analysing WTO's TBT, SPS, AOA, TRIPS, GATS and other relevant agreements, how these create barriers and why the WTO needs to adopt a mechanism to overcome trade-distorting measures like standards, eco-labelling, PPMs, geographical indications (GIs) and environmentally friendly goods. The special effect on Bangladesh as an LDC will also be assessed in Chapters 1 to 3. To investigate this aim, there is a need to conduct doctrinal research on relevant references for a comparison of the characteristics of barriers in the WTO.

Secondly, this research will examine how these barriers can impair the market access of agricultural; fish and fish products; pharmaceutical and textile, clothing, leather and leather products as other manufactured commodities originating from Bangladesh as an LDC under the current regulatory framework of Bangladesh (further discussed in Chapters 4 to 7). This

will also assist Bangladesh policymakers in building their analytical and statistical capacity to assess how ERs are affecting their exports.

Thirdly, this research will discuss what suitable remedies can be applied to achieve improvement in reduction or eradication of barriers. Overall, this research will help identify the problems and their probable solution to handle this pressing issue under the regulatory framework of the WTO (discussed in Chapters 3 to 7).

Finally, this project will provide a number of recommendations for legal reforms in the WTO rules and existing trade and environment-related domestic regulations of Bangladesh in light of the developmental needs of Bangladesh (discussed in Chapter 8).

### *E Methodological Framework*

Broadly, this research is carried out based on qualitative methodology.<sup>188</sup> Under the qualitative methodology, it follows doctrinal plus methods.<sup>189</sup> As doctrinal analysis, it explains legal norms and legal concepts with a view to identifying ambiguities, exploring inconsistencies and making systematic analysis to the problem.<sup>190</sup> The preliminary stage will involve collection of relevant case laws, legislations as primary sources and published materials as secondary sources<sup>191</sup> by meeting with policy makers, trade officials, business groups, civil societies, academics, non-governmental organisations, research organisations and stakeholders.

This research analyses the theory of trade liberalisation, which reflects the concepts of free trade, theories of comparative advantage, market access, ERs, sustainable development and the WTO's principles of non-discrimination, national treatment and MFN.

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<sup>188</sup> InformeDesign, *Research Methods* <[http://www.informedesign.org/\\_doc/Research\\_101\\_Part\\_III.pdf](http://www.informedesign.org/_doc/Research_101_Part_III.pdf)>. Qualitative research is often used to explore an issue and gain a better understanding of it, rather than to test or support a relationship.

<sup>189</sup> Here, plus means that it adds more than one.

<sup>190</sup> Terry Hutchinson, *Researching and Writing in Law* (Lawbook Co, 2<sup>nd</sup> ed, 2006) 70.

<sup>191</sup> Bruce Bott, Jill Cowley and Lynette Falconer, *Names and Cos s' Effective Legal Research* (Lexis Nexis Butterworths, 3<sup>rd</sup> ed, 2007) 8.

Through doctrinal analysis, the legal norms and concepts of market access and trade liberalisation will be clarified with a view to identifying the gaps between the WTO rules and the existing domestic regulations of Bangladesh and making systematic analysis to the research questions.

#### *F Limitations*

This research is carried out through qualitative research methods. The information was collected from primary and secondary sources, focusing on legal aspects of the WTO's standard regime and considering LDCs' developmental needs with particular reference to Bangladesh.

#### *G Thesis Organisation*

For organisational purposes, the contents of this thesis have been divided into eight chapters. Market access barriers of Bangladesh products because of ERs are tested in four chapters within specific sectors. According to the classification of Bangladesh exportable products by the EPB,<sup>192</sup> all products are divided into two groups:<sup>193</sup> primary commodities and manufactured commodities. Primary commodities include frozen food (frozen fish, shrimp and others), which will be discussed in Chapter 5, and agriculture products, which will be discussed in Chapter 4. Manufactured commodities are divided into 33 subgroups of which, depending on the degree of environmental barriers and export potentials, pharmaceuticals is discussed separately in Chapter 6. From the remaining manufactured commodities, only textiles, clothing, leather and leather products are discussed in Chapter 7 (knitwear, woven garments, specialised textiles, footwear, leather and leather products) as manufactured products, depending on their degree of contribution to export growth and considering their lower vulnerability to environmental concerns.

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<sup>192</sup> EPB is responsible for overseeing the overall export performance of Bangladesh products under the Ministry of Commerce (see <<http://www.epb.gov.bd>>).

<sup>193</sup> See Annexure 1. This division is based on export performance (July 2012 – June 2013).

### *1 Chapter One: Market Access and Environmental Requirements—Mapping out the Debates and Issues from a Least Developed Country Perspective*

This chapter introduces the connection between market access and ERs under the trade–environment debate and their implications on Bangladesh market access as an LDC. Based on a literature review, it identifies the research gap, formulates the research question and adopts appropriate research methodology. This chapter clearly defines the aims, objectives and scopes of this research with in-depth analysis of available data from primary and secondary sources in the relevant fields. This chapter also outlines the thesis organisation and argues for the regulatory reform approach to be undertaken for both domestic and international rules, considering the developmental needs of Bangladesh.

### *2 Chapter Two: Principles and Concepts Governing Trade and Environment Relationship and Prescriptions for Environmental Requirements*

This chapter examines the principles and concepts of international trade and environmental regulations, their relationships and the initiatives taken by international organisations to minimise the gap through extending cooperation. It also examines trade-related multilateral environmental agreements (MEA) and their prescription on ERs and introduces the challenges that LDCs face because of ERs that are directly related to economic realities, with particular reference to Bangladesh. This chapter argues that the trade measures designed to ensure compliance under environmental concerns should be part of a broader package of positive measures that includes capacity building and technical and financial support to meet all incremental costs.

### *3 Chapter Three: Legal Instruments for Environmental Requirements in the WTO and their Market Access Implications for Bangladesh: An Overview*

This chapter examines international regulations that deal with ERs under GATT/WTO and their rules governing the standards and technical regulations that have market access implications on LDCs' economic growth, in general, and Bangladesh, in particular.

Simultaneously, it outlines the domestic regulations of Bangladesh that are responsible for market access, and these are discussed in respective sectors of specific chapters. The chapter provides guidelines for policy formulation and argues for reforms in the domestic regulations of Bangladesh. It also argues for initiatives for reform to be taken in the specific rules of WTO agreements through negotiations, in light of the developmental needs of Bangladesh.

#### *4 Chapter Four: Environmental Concerns: Market Access Challenges and Opportunities of Agricultural Products in Bangladesh*

This chapter specifically focuses on market access challenges and opportunities of agricultural products in Bangladesh under WTO's ERs by examining the AOA, SPS and TBT agreements. It also examines the existing laws of Bangladesh that are related to market access of its agricultural products by analysing the WTO's provisions on special and differential treatment for LDCs, the current negotiations on agricultural market access and the compliance issues for Bangladesh. This chapter argues for the re-examination of domestic support provided by developed countries in the name of the environmental programme mentioned in Annex 2 of the AOA and reforms in the domestic regulations of Bangladesh related to agricultural market access.

#### *5 Chapter Five: Environmental Concerns: Market Access Challenges and Opportunities of Fish and Fish Products in Bangladesh*

This chapter introduces NAMA negotiation as fish and fish products are dealt with under NAMA negotiation. It outlines market access challenges and opportunities of Bangladesh fish and fish products because of ERs by examining the agreement on the application for SPS and agreement on TBT. In parallel, it examines existing relevant domestic regulations of Bangladesh that have implications on fish and fish product market access. This chapter argues for more favourable provisions on special and differential treatment to be provided for Bangladesh in regards to fulfilling standards and quality- and compliance-related obligations to meet the developmental needs of Bangladesh and also argues for reforms

both in international rules and in Bangladesh domestic regulations for its economic development.

#### *6 Chapter Six: Environmental Concerns: Market Access Challenges and Opportunities of Pharmaceutical Products in Bangladesh*

This chapter discusses market access challenges and opportunities of Bangladesh pharmaceutical products because of ERs of the WTO. It examines the agreement on TRIPS and its specific provisions related to environmental concerns. Simultaneously, it examines the existing domestic regulations of Bangladesh that have implications on pharmaceutical products under WTO and compares these with those of international instruments. This chapter argues for reforms in the domestic policy framework to maximise existing TRIPS flexibilities for grabbing greater market access. It also argues for meaningful participation in ongoing negotiations to acquire more flexibility in terms of compliance and obligations, technology transfer and financial support.

#### *7 Chapter Seven: Environmental Concerns: Market Access Challenges and Opportunities of Textile, Clothing, Leather and Leather Products in Bangladesh*

This chapter mainly outlines knitwear, woven garments, specialised textiles, footwear, leather and leather products, which have implications on environmental concerns that have significant contribution to export and examines the international regulations responsible for market access barriers of these products. In parallel, it examines the existing domestic regulations of Bangladesh that are responsible for market access of these particular products. In analysing current Doha negotiations, it argues for special and differential treatment, 100 per cent DFQF market access, bound commitment for financial and technological support from the developed and advanced developing partners. It also argues for reform of domestic regulations, ensuring compliance in regards to PPMs, and product standards for the safety of human, animal and plant life and health within its capacity.

## *8 Chapter Eight: Conclusions and Recommendations: A Quest for Market Access, Better Compliance and Policy Reform*

This chapter briefly outlines ERs and their implications on Bangladesh's market access, as identified in different sectors throughout this research. It discusses the findings of the research question, along with limitations. It focuses on Bangladesh's challenges and opportunities for an open and equitable international trading system as an LDC. It provides recommendations for legal reforms in the WTO rules, as well as Bangladesh domestic regulations to cope with the standard regime as an LDC. Finally, this chapter draws attention to the actors of the current state of play and the possible ways forward for Bangladesh in eradicating current challenges on environmental concerns and creating opportunities for greater market access through optimal use of its resources and capabilities for mitigating compliance and obligations under WTO.

### *H Conclusions*

This thesis focuses on market access as one of the vital areas of international trade. In general, market access is the central issue in the Doha negotiations, where LDCs' market access has become one of the core issues that depend on ongoing trade negotiations. There is no shortage of literature on trade and environment issues.<sup>194</sup> However, few emphasise LDCs' market access under ERs, particularly in the context of Bangladesh; this thesis is the first to focus on this. The bulk of the literature on LDCs' market access barriers focuses on preferential market access schemes without addressing trade-distorting policies of developed and advanced developing countries. This thesis fills this gap by identifying holistic market access concerns of LDCs with particular reference to Bangladesh, which is similar to other LDCs but divergent from other developing countries.

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<sup>194</sup> Alam, above n 16, 1; Steve, 'Exploring the Environmental Exceptions in GATT Article XX' (1991) 25(37) *Journal of World Trade* 38; Graham Mayeda, 'Developing Disharmony? The SPS and TBT Agreements and the Impact of Harmonization in the Developing Countries' (2003) 7(4) *Journal of International Economic Law* 737; *Report of the United Nations Conference on Sustainable Development*, UN Doc A/CONF.216/16 (20–22 June 2012).



This chapter critically outlined the trade and environment debate through defining environmental requirements and market access and their inter-connectivity. Further, it elaborates market access issues in terms of least developed country's perspective particularly for their economic and social development showing Bangladesh as a case study.

The originality of this thesis lies in focusing on Bangladesh market access implications in different significant sectors (agricultural products; fish and fish products; pharmaceutical products; textile, clothing, leather and leather products), depending on their vulnerability because of environmental concerns, by examining its domestic regulations in a comprehensive manner under the WTO. This thesis contributes to the existing literature by suggesting a regulatory reform approach with a clear emphasis on the developmental needs of Bangladesh as an LDC.

## II PRINCIPLES AND CONCEPTS GOVERNING TRADE AND ENVIRONMENT RELATIONSHIP AND PRESCRIPTIONS FOR ENVIRONMENTAL REQUIREMENTS\*

### *A Introduction*

This chapter explores the trade–environment relationship by outlining the general principles and rules of international trade and international environmental law, as reflected in treaties, practices of international organisations, state practices and soft law commitments. Such principles are potentially applicable to all members of the international community across a range of activities related to protection of the environment.<sup>1</sup> The application of each principle in relation to a particular activity or incident and its consequences must be considered on the facts and circumstances of each case, having regard to several factors.<sup>2</sup> Although it was not mentioned in the GATT 1947, in recent years, trade and environmental policy making have appeared increasingly to be linked and often seem to collide.<sup>3</sup> According to Esty:

Environmental advocates have come to fear that freer trade means increased pollution and resource depletion. Free traders worry that protectionism in the guise of environmental policy will obstruct efforts to open markets and integrate economies around the world.<sup>4</sup>

The composite and transboundary nature of environmental problems are global issues that have integrated the issues of ecology, economics and politics.<sup>5</sup> Alam noted that:

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\*A part of this chapter was presented as 'Environmentalism in the WTO: The Developmental Challenges for Developing Countries' in the 19<sup>th</sup> Annual Australia New Zealand Society for International Law (ANZSIL) Conference, ANU, Canberra, Australia, 23–25 June 2011.

<sup>1</sup> Philippe Sands et al, *Principles of International Environmental Law* (Cambridge University Press, 3<sup>rd</sup> ed, 2012) 187.

<sup>2</sup> Ibid 188.

<sup>3</sup> Daniel C Esty, 'Economic Integration and Environmental Protection' in Regina S Axelrod, Stacy D VanDeveer and David Leonard Downie (eds) *The Global Environment: Institution, Law, and Policy* (CQ Press, 3<sup>rd</sup> ed, 2011) 155.

<sup>4</sup> Ibid

<sup>5</sup> Shawkat Alam, *Sustainable Development and Free Trade, Institutional Approaches* (Routledge, 1<sup>st</sup> ed, 2008) 24.

The global environmental problems warrant global solutions on a multilateral basis that requires that countries follow a comprehensive and effective set of norms, rules and methodologies to carry out their commitments for environmental protection.<sup>6</sup>

Considering the interdependence of trade and environment, the principles of both trade and environment are outlined in this chapter. Under international trade, the principle of comparative advantage, the principle of MFNs and the principle of national treatments are discussed as guiding principles. Under environmental law, Principle 21 of the Stockholm Declaration, Principle 2 of the Rio Declaration, the principle of preventive action, the principle of cooperation, the concept of sustainable development, the precautionary principle, the polluter pays principle and the principle of common but differentiated responsibility (CBDR) are discussed as key principles of environmental protection.

As MEAs provide the regulatory framework of principles and policies for the protection of the global environment and address international environmental problems, the increasing scope and development of such MEA framework underscores the need for international cooperation in trade-related issues. This chapter outlines some of the MEAs that are directly linked with trade and, particularly, have influenced the incorporation of ERs in WTO agreements.

Finally, the contesting issues that were revealed in the discussion of the trade–environment debate in Chapter 1 are discussed elaborately in this chapter. In this context, this chapter outlines the following emerging issues for ERs that are directly related to LDC economic realities: PPMs, packaging, eco-labelling, geographical indicators and standards. These contesting issues are introduced here; however, they are tested throughout Chapters 4, 5, 6 and 7 during the discussion of sector-specific international trade rules, as well as Bangladesh domestic regulations.

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<sup>6</sup> Ibid

## B *Principles of International Trade*

This section introduces the theoretical and ideological framework of international trade on which the GATT/WTO regime of trade liberalisation is founded. The international trading system, which is built on the principle of comparative advantage, is intended to promote economic growth.<sup>7</sup> It obligates countries to reduce barriers like tariffs, import quotas, subsidies and other NTBs to efficient trading that enables economies to grow.

### 1 *Comparative Advantage*

According to Smith:

What is prudence in the conduct of every private family can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage. The general industry of the country, being always in proportion to the capital which employs it, will not thereby be diminished...but only left to find out the way in which it can be employed with the greatest advantage.<sup>8</sup>

The fundamental theory of trade liberalisation is the Ricardian model of comparative advantage, developed by Ricardo.<sup>9</sup> He asserted that the international trade liberalisation will facilitate economy-wide specialisation in production, leading to improvements in productivity and national income.<sup>10</sup> The Ricardian theory is built on several assumptions and abstractions through which it divides the world into two trading states that trade only two goods and use only one type of material to produce those two goods.<sup>11</sup>

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<sup>7</sup> Edith Brown Weiss and John H. Jackson, 'The Framework for Environment and Trade Disputes' in Edith Brown Weiss and John H. Jackson (eds), *Reconciling Environment and Trade* (Transnational Publishers Inc, 2001) 2.

<sup>8</sup> Adam Smith, *The Wealth of Nations* (Random House, Inc., Modern Library ed, 1776) 29.

<sup>9</sup> A British economist developed this theory in the early nineteenth century.

<sup>10</sup> P Samuelson, 'Where Ricardo and Mill Rebut and Confirm Arguments of Mainstream Economists Supporting Globalisation' (2004) 18(3) *Journal of Economic Perspectives*, 137.

<sup>11</sup> Ibid

Generalising the example, the overarching proposition of liberal trade theory is that free and open trade will benefit all states, regardless of their comparative levels of productivity. The concept of the principle of comparative advantage was described further by the Leutwiler report given below:

Trade allows countries to concentrate on what they can do best. No two countries are exactly alike in natural resources, climate or workforce. Those differences give each country a “comparative advantage” over the others in some products. Trade translates the individual advantages of many countries into maximum productivity for all. This is the classic theory of International trade. It is still valid today.<sup>12</sup>

The principle of the Ricardian model is tested in Chapter 3 during the discussion on SPS, TBT and other relevant agreements.

## *2 Core Principles of GATT*

The core principles of GATT that affect trade–environment issues are: MFN treatment in Article I,<sup>13</sup> national treatment on internal taxation and regulation in Article III<sup>14</sup> and general elimination of quantitative restrictions in Article XI.<sup>15</sup>

### *(a) Most Favoured Nation Treatment, Article I*

According to this obligation, any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product of all other contracting

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<sup>12</sup> Bill Bradley, Fritz Leutwiler and General Agreement on Tariffs and Trade, *Trade Policies for a Better Future: Proposals for Actions* (GATT, Volume 27, Issue 9, 1985); *ibid* cited in *Trade Principles and Concepts*, OECD Doc OCDE/GD(95)141 (1995) 18.

<sup>13</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multi lateral Trade Negotiations* (WTO Publications, 2002) 424; MFN refers to treating other people equally.

<sup>14</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multi lateral Trade Negotiations* (WTO Publications, 2002) 427; National treatment refers to treating foreigners and locals equally.

<sup>15</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multi lateral Trade Negotiations* (WTO Publications, 2002) 437.

parties.<sup>16</sup> This clause requires a party to treat like products alike and not to discriminate between trading partners of like products. The GATT preamble proclaims the elimination of discriminatory treatment in international trade as one of its fundamental goals. The GATT requires each of its members to treat each other as favourably as it treats its most favoured members.

The MFN clause in the WTO agreements entails greater breadth and new content. It automatically extends universal effect to all members when an advantage is granted by one WTO member to another. Each WTO member plays a dual role as both grantor and beneficiary of MFN treatment vis-a-vis other members. MFN operates a legal restraint on sovereign and discretionary powers of WTO members in matters of world trade law and policy. Given its universal effect, MFN has the potential to play a pivotal role in promoting the expansion of global free trade in regards to quality and non-discrimination.<sup>17</sup>

The prerequisites for the parties to qualify for equal treatment under Article I need to clarify the criteria for like products.<sup>18</sup> The definition of 'like product' is contentious and interpreted on a case-by-case basis. Its essential features include the end use of the product, consumer tasting habits and the properties, nature and quality of the product. For example, the varieties of bath soaps may be treated as like products but varieties of soaps used for washing clothes are not like products. According to WTO, a like product is a product that is alike in all respects to the product under consideration.<sup>19</sup> Developing countries, including LDCs, fear that the shift away from the definition of like products on the basis of PPMs<sup>20</sup> is likely to be used as a protectionist measure by developed countries.<sup>21</sup>

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<sup>16</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 2002) 424; *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 194 (entered into force in 1 January 1948) art I.

<sup>17</sup> Rafiqul M Islam, *International Trade Law of the WTO* (Oxford University Press, 1<sup>st</sup> ed, 2006) 13.

<sup>18</sup> The term 'like product' refers to products that have similar physical characteristics.

<sup>19</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 2002) 150; WTO, *Agreement on Implementation of the Article VI of the General Agreement on Tariffs and Trade 1994* <[http://www.wto.org/english/docs\\_e/legal\\_e/19-adp.pdf](http://www.wto.org/english/docs_e/legal_e/19-adp.pdf)> art 2.6.

<sup>20</sup> PPMs are discussed in Section F(1) of this chapter.

<sup>21</sup> Alam, above n 5, 66.

*(b) National Treatment on Internal Taxation and Regulation, Article III*

According to this obligation:

Internal taxes and other internal charges, and laws, regulations and requirements affecting internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products so as to afford protection to domestic production.<sup>22</sup>

Article III contains provisions for national treatment on international taxation and regulation. It requires all WTO members to treat imported products no less favourably than domestic products. National treatment is applicable, regardless of whether tariff is bound or unbound, on an imported product. The obligation of national treatment provides a fundamental guideline for trade liberalisation on a non-discriminatory basis in important WTO agreements, especially GATS (Article 17) and TRIPS (Article 3).<sup>23</sup>

The interpretation of like products first appeared in the US tuna–dolphin dispute in 1991.<sup>24</sup> The US put restrictions on the import of tuna from Mexico because the tuna acquired using Mexico's method may likely harm dolphins. Mexico challenged the US restrictions and argued that Mexican tuna and tuna available in the US market were like products; therefore, US restrictions were discriminating against Mexican products. The GATT Panel ruled that the physical characteristics were the same and the differential treatment on the basis of any other factor was held to be inconsistent with the national treatment principle.<sup>25</sup> The GATT Panel concluded that 'a contracting party may not import products merely because they originate in a country with environmental policies different to its own'.<sup>26</sup> In keeping with

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<sup>22</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 2002) 427–9; *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 194 (entered into force in 1 January 1948) art III.

<sup>23</sup> Islam, above n 17, 19.

<sup>24</sup> GATT Panel Report, *United States–Restrictions on Imports of Tuna*, GATT Doc DS21/R (3 September 1991) 23[4.47].

<sup>25</sup> Ibid

<sup>26</sup> Ibid [6.2].

this idea, the *Tuna–Dolphin* case, the *Thai—Cigarettes* case,<sup>27</sup> the *Canadian Fisheries* case<sup>28</sup> and the *Reformulated Gasoline* case<sup>29</sup> have all indicated that discriminatory trade practices will not be tolerated in the GATT, even if there is justification on environmental, health and conservation grounds.<sup>30</sup> Thus, the non-discrimination principle, with its narrow scope, does not permit parties to impose import restrictions.

(i) *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.<sup>31</sup>

GATT rules prohibit the use of quantitative restrictions like quotas or import or export licenses. The GATT also provides exceptions to these restrictions. 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, agriculture or fisheries products.

Measures taken by countries for the attainment of environmental objectives may violate GATT Article XI. For example, in the case *Canada—Measures Affecting Exports of Unprocessed Herring and Salmon*,<sup>32</sup> the US alleged that Canada's prohibition on the export

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<sup>27</sup> GATT Panel Report, *Thailand—Restrictions on the Importation of and Internal Taxes on Cigarettes* (7 November 1990) GATT BISD 38 Supp.200,201.

<sup>28</sup> GATT Panel Report, *Prohibition of Imports of Tuna Fish and Tuna Products from Canada* (22 February 1982) GATT BISD 29 Supp.91.

<sup>29</sup> Appellate Body Report, *United States—Standards for Reformulated and Conventional Gasoline*, WTO Doc WT/DS2/AB/R, AB-1996-1 (29 April 1996).

<sup>30</sup> J McDonald, 'Greening the GATT: Harmonizing Free Trade and Environmental Protection in the New World Order' (1993) 23 *Environmental Law* 27.

<sup>31</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 2002) 427; *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 194 (entered into force in 1 January 1948) art XI.

<sup>32</sup> GATT Panel Report, *Canada—Measures Affecting Exports of Unprocessed Herring and Salmon*, GATT Doc L/6268 (adopted 22 March 1988) BISD 35S/98(1984).



of unprocessed pink and sockeye salmon 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 it was justified under Article XI Paragraph 2(b) and Article XX(g). The panel found 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 did not stand. Thus, it is clear that the export prohibitions could not be considered ‘necessary to the application of standards’ within the meaning of Article XI Paragraph 2(b) nor could they be considered to consist of ‘regulations for the marketing’ of the goods in international trade within the meaning of Article XI Paragraph 2(b).<sup>33</sup>

Countries that impose export restrictions while tackling the uncontrolled exportation of natural resources may violate their GATT obligations under Article XI. The Indonesian measures that were taken in 1986 aimed to restrict the export of unprocessed rattan and propose an imposition on semi-processed rattan from 1 January 1989.<sup>34</sup> These measures were imposed in an attempt to affect the uncontrolled exploitation of forest resources and shortages of rattan. But the EU raised the issue to the GATT, expressing concern that it did not confirm GATT Article XI. Indonesia argued that it was justified under Article XI Paragraph 2(a). This example shows that developing countries, while taking measures to protect their natural resources, may come under GATT scrutiny for violation of their obligations under Article XI.

### *C Principles of Environmental Regulations*

#### *1 Principle of Preventive Action*

The principle of preventive action is the principle that requires prevention of damage to the environment. Under the prevention principle, a state may be under an obligation to prevent not only transboundary harm but also damage to the environment within its own jurisdiction, including by means of appropriate regulatory, administrative and other

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<sup>33</sup> Ibid

<sup>34</sup> Meeting on 13 October 1987, GATT Doc MTN/SB/3 (5 November 1987).

measures.<sup>35</sup> The preventive principle requires action to be taken at an early stage and, if possible, before damage has actually occurred.<sup>36</sup> The preventive approach was endorsed by the Stockholm Declaration, the 1978 UNEP Draft Principles and the 1982 World Charter for Nature.<sup>37</sup>

## 2 Principle of Cooperation

The principle of good neighbourliness enunciated in Article 74 of the UN Charter<sup>38</sup> in relation to social, economic and commercial matters has been translated into the development and application of rules promoting international environmental cooperation. This principle is reflected in many treaties, agreements and acts and supported by the state practice in relation to hazardous activities and emergencies.<sup>39</sup> Principle 24 of the Stockholm declaration reflects the general political commitment to international matters concerning the protection of environment, and Principle 27 of the Rio Declaration urges the states to cooperate for further development of international law in the field of sustainable development.

## 3 Sustainable Development

The general principle that the states should ensure development and use of their natural resources in a manner that is sustainable emerged in the run up to United Nations Conference on Environment and Development (UNCED). Sands tracked the origin of the concept of sustainable development in the early conservation agreements.<sup>40</sup> Additionally,

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<sup>35</sup> R D Muñero and J G Lambers (eds), *Environmental Protection and Sustainable Development: Legal Principles and Recommendations* (Graham & Trotman/Martinus Nijhoff, 1987) xi–xii.

<sup>36</sup> Sands et al, above n 1, 201.

<sup>37</sup> Ibid 202.

<sup>38</sup> United Nations, *Charter of the United Nations* (United Nations, 26 June 1945) ch XI, art 74.

<sup>39</sup> Declaration of United Nations Conference on Human Environment, UN Doc A/Conf.48/14/rev (16 June 1972) (hereinafter the Stockholm declaration in 1972), and the United Nations Conference on Environment and Development (Annex 1), UN Doc, A/Conf.151/26/R.v.1, (Vol 1) (4–14 June, 1992) adopted 12 August 1992) (hereinafter Rio declaration in 1992).

<sup>40</sup> Philippe Sands, *Principles of International Environmental Law* (Cambridge University Press, 2<sup>nd</sup> ed, 2003); Some treaties that intended to protect fisheries, flora and fauna are the Convention between France and Great Britain Relative to Fisheries, 1867; North Sea Fisheries (Over Fishing Convention), 1982; Convention to Protect Birds Useful to Agriculture, 1902; Convention between the United States and Great

the concept is identified in a number of treaties featuring a more integrated economic, social and environmental approach in international law.<sup>41</sup> However, the definition of sustainable development is now universally accepted by the World Commission on Environment and Development (WCED), established in 1983 by the UN General Assembly to work out an action plan for long-term environmental strategies. It was chaired by Gro Harlem Brundtland, the then Prime Minister of Norway. The commission's report, *Our Common Future*, was published in 1987. According to the Brundtland report,<sup>42</sup> sustainable development is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.<sup>43</sup> It contains within it two key concepts:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.<sup>44</sup>

This is a shift from the ecology-based concept of sustainable development to the socioeconomic context of sustainable development.<sup>45</sup> The UN 2005 World Summit Outcome refers to the 'interdependent and mutually reinforcing pillars' of sustainable development as economic development, social development and environmental protection.<sup>46</sup> The Brundtland definition of sustainable development has been adopted both

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Britain for the protection of Migratory Birds in the United States and Canada, 1916, and Convention on the Preservation of Fauna and Flora in their Natural State, 1933.

<sup>41</sup> Ibid 257–8; For instance, the 1946 Convention for the International Regulation of Whaling, the 1947 GATT, the 1981 African Charter of Human and Peoples' Rights, the 1982 UN Convention of the Law of Sea, the 1985 ASEAN Agreement on the Conservation of Nature and Natural Resources (the first treaty to refer to sustainable development), the 1986 Single European Act amending the EEC treaty, the 1987 Montreal Protocol on Ozone Depleting Substances, the 1989 ILO Convention No 69 concerning indigenous and tribal peoples in independent countries and the 1990 Agreement establishing the European Bank for reconstruction and development.

<sup>42</sup> It was defined by the Brundtland Commission, which was formally the WCED, is known by the name of its Chair, Gro Harlem Brundtland, and was convened by the United Nations in 1983.

<sup>43</sup> NGO Committee on Education, *Report of the World Commission on Environment and Development: Our Common Future* <<http://www.un-documents.net/ocf-02.htm>> ch 2.

<sup>44</sup> NGO Committee on Education, *Report of the World Commission on Environment and Development: Our Common Future* <<http://www.un-documents.net/ocf-02.htm>> ch 2.

<sup>45</sup> William M Adams, 'Green Development, Environment and Sustainability in the Third World' (1990) 50(2) *The Journal of Asian Studies* 361–2.

<sup>46</sup> 2005 World Summit Outcome, UN Doc A/60/L.1 (15 September 2005) [48].

domestically and internationally in a broader aspect of social and economic policy. The WTO incorporated the sustainable development and the protection of environment as its fundamental goals, which are of particular interest to this research.<sup>47</sup> The Brundtland report emphasised that many present development trends are leaving an increasing number of people poor and vulnerable because of environmental degradation.<sup>48</sup> Alam acknowledges that, in maintaining the acceleration of economic growth, the development is achieved increasingly at the expense of environment.<sup>49</sup>

To minimise environmental degradation, economic activity should be implemented through proactive design of projects and policies by taking into consideration the goals of sustainable development.<sup>50</sup> This will improve the present quality of life and leave behind a stock of natural resources for future generations.<sup>51</sup> The landmark 1992 UNCED in Rio de Janeiro recommended that 'states should promote a supportive and open international economic system', which would contribute to economic growth and sustainable development.<sup>52</sup> Chapter 2 of Agenda 21 states that the 'development process will not gain momentum...if barriers restrict access to markets and if commodity prices and the terms of trade of developing countries remain depressed'.<sup>53</sup> Alam reiterated that these important international declarations reaffirmed that trade liberalisation and environment should be mutually supportive.<sup>54</sup>

Both the Rio Declaration and Agenda 21 speak of the integration between environment and development.<sup>55</sup> The WTO Appellate Body in the *Shrimp–Turtle* case accepts the concept of sustainable development as integration of economic and social development and

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<sup>47</sup> WTO, *Trade and Environment* <[http://www.wto.org/english/tratop\\_e/envir\\_e/envir\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envir_e.htm)>.

<sup>48</sup> NGO Committee on Education, *Report of the World Commission on Environment and Development: Our Common Future* <<http://www.un-documents.net/ocf-02.htm>> ch 2..

<sup>49</sup> Alam, above n 5, 5.

<sup>50</sup> Fahmida Khatun, 'Environmental Problems and Sustainable Development' in *Emerging Issues in Bangladesh Economy* (The University Press limited, 2008) 403.

<sup>51</sup> NGO Committee on Education, *Report of the World Commission on Environment and Development: Our Common Future* <<http://www.un-documents.net/ocf-02.htm>> ch 2.

<sup>52</sup> *Rio Declaration on Environment and Development 1992*.

<sup>53</sup> See Section 3.1 regarding Agenda 21.

<sup>54</sup> Alam, above n 5, 5.

<sup>55</sup> *Rio Declaration on Environment and Development 1992*, Principle 4.

environmental protection.<sup>56</sup> The need for integration was strongly reinforced in 2002 in the World Summit on Sustainable Development (WSSD), known as Johannesburg Declaration on Sustainable Development,<sup>57</sup> for strengthening and promoting the integration of the four components of sustainable development, economic development, social development and environmental protection as interdependent and mutually reinforcing pillars.<sup>58</sup>

The principle of integration is closely related to market access. In the context of developing countries and LDCs, market access is directly related to poverty, economic growth, food security and employment, which are the elements of sustainable development. When trade restrictions are imposed on ERS, economic and social issues need to be integrated with sustainable development. This section outlined the concept of sustainable development and its relationship with the MT S. However, market access constraints because of WTO ERS and its relationship with sustainable development are discussed in Chapter 4, 5, 6 and 7.

#### 4 *Precautionary Principle*

The precautionary principle began to appear in international legal instruments in the mid-1980s, although it had featured as a principle in domestic legal systems in West Germany and also in other developed countries, such as Australia.<sup>59</sup> This principle is clearly articulated in Principle 15 of the Rio Declaration where it is stated that, for the protection of the environment from the threats of serious or irreversible damage, the lack of scientific certainty should not be an excuse. This principle states that, in decision making, countries do not have to wait for available information before taking action to protect the environment. This precautionary principle is mentioned in the WTO SPS agreement in Article 5(7).<sup>60</sup> The Appellate Body of the EC-Hormones<sup>61</sup> states that the principle finds

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<sup>56</sup> *United States-Import Prohibition of Certain Shrimp and Shrimp Products: Report of the Appellate Body, WTDS58/AB/R (October 12 1998) [hereinafter, "Shrimp-Turtle AB Report"]* [185,186]

<sup>57</sup> *Johannesburg Declaration on Sustainable Development, 2002.*

<sup>58</sup> *Ibid* [5].

<sup>59</sup> K Von Moltke, *The Vorsorgeprinzip in West German Environmental Policy* (Institute for European Environmental Policy, 1987) 57.

<sup>60</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 5.7.

reflection in Article 5.7 of the SPS agreement. This article allows members to adopt provisional SPS measures if relevant scientific measures are insufficient.

This seems reasonable; however, its explanation is debatable. While developed countries think that it is serious or irreversible, developing countries might find it insignificant in the sense that developing countries lack the scientific knowledge, financial resources and technological base to assess the risk necessary for the adoption of precautionary measures.<sup>62</sup> Alam<sup>63</sup> also argued that, in the absence of scientific proof, this principle might be used as a protectionist measure to exclude goods from the domestic market. This principle is tested in Chapters 3, 4 and 5 during discussion of SPS measures that have market access barriers.

### *5 Polluter Pays Principle*

Principle 16 of the Rio Declaration clearly mentions that:

national authorities should endeavour to promote the internalization of environmental cost and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.<sup>64</sup>

Developed countries provide subsidies to their industries since environment subsidies are allowed in both the AOA<sup>65</sup> and SCM agreement<sup>66</sup> under the WTO. This principle is relevant to the developing country and LDC market access context and the creation of their market access constraints. However, there is no binding commitment as international obligations that can enforce this principle.

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<sup>61</sup> Appellate Body Report, *EC Measures Concerning Meat and Meat Products (Hormones)*, WTO Doc WT/DS26/AB/R, WT/DS48/AB/R, AB-1997-4 (16 January 1998).

<sup>62</sup> Alam, above n 5, 26.

<sup>63</sup> Ibid

<sup>64</sup> *Rio Declaration on Environment and Development 1992*, Principle 16.

<sup>65</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture').

<sup>66</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Subsidies and Countervailing Measures').

The polluter pays principle often imposes uneven burdens on developing countries, which lack the pollution control infrastructure, financial resources and environmental technology necessary to reduce their pollution and to bring it to international standards.<sup>67</sup>

International trade law purports to promote and protect a fair and free trading environment worldwide. Multilateral negotiations for the creation of international trade law generate more conflict of interests, which are resolved through diplomatic consensus and political trade-offs. For this, the international trading order reflects the interplay of law, economics, politics, diplomacy and balance of power in international relations, which is constantly changing to accommodate the changing needs and shared expectations of the international trading neighbourhood.<sup>68</sup>

#### *6 The Common but Differentiated Responsibility Principle*

The principle of CBDR was developed to ensure equity in general in international law and to ensure that the special needs of developing countries are considered in regards to their development, application and interpretation of rules in environmental law.<sup>69</sup> Principle 7 of the Rio Declaration states that:

States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth ecosystem. In view of the different contributions to global environmental degradation, states have common but differentiated responsibilities. The developed countries acknowledge the responsibility that bears in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and the technologies and financial resources they command.<sup>70</sup>

This principle includes two elements. The first concerns the common responsibility of the states for the protection of the environment at a national, regional and global level that

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<sup>67</sup> Alam, above n 5, 28.

<sup>68</sup> Islam, above n 17, 13.

<sup>69</sup> Sands et al, above n 1, 233.

<sup>70</sup> *Rio Declaration on Environment and Development 1992*, Principle 7.

appears in a wide range of international treaties, such as biodiversity<sup>71</sup> and climate change<sup>72</sup>. The second concerns each state's contribution to the environmental problem and its ability to prevent, reduce and control the threat that also appears in a number of international treaties like marine pollution and protecting the ozone layer.<sup>73</sup> This principle recognises that, while all countries have a responsibility to protect the environment and to prevent further environmental harm, these responsibilities vary according to the socioeconomic situation of each country.<sup>74</sup> Principle 7 of the Rio Declaration recognises that developed countries have a bigger responsibility than developing countries and LDCs because of their superior economic situation. Special and differential treatment is acknowledged by the GATT/WTO and most agreements have special and differential treatment for LDCs.<sup>75</sup> Among these, preferential treatment under GSP schemes for developing countries and DFQF treatment for LDC exports to developed countries' markets are directly related to market access issues and have implications on Bangladesh market access (discussed in Chapters 4, 5, 6, 7 and 8); however, the implementation of this policy is barely satisfactory.

#### *D International Treaties and Instruments for Environmental Protection*

##### *1 Stockholm Declaration of the United Nations Conference on Human Environment, 1972*

Although environmental protection was not an issue on the original UN agenda, the role of the UN in terms of global environmental awareness can be found in Paragraphs 1(4) and 3 of the preamble and Article 55 of the Charter of the UN. These provisions aim to promote a higher standard of living, full employment and better conditions of economic and social

<sup>71</sup> *United Nations Convention on Biological Diversity*, opened for signature 5 June 1992, 31 ILM 822 (1992) (entered into force 29 December 1993) art 1.

<sup>72</sup> *United Nations Framework Convention on Climate Change* (New York), opened for signature 9 May 1992, 31 ILM 849 (1992) (entered into force 24 March 1994) art 4(1).

<sup>73</sup> For example, *United Nations Convention of the Law of the Sea* (Montego Bay), opened for signature 10 December 1982, 21 ILM 1261 (1982) (entered into force 6 December 1994) Preamble and art 207; *Convention of the Protection of Ozone Layer* (Vienna), opened for signature 22 March 1985, 26 ILM 1529 (entered into force 22 September 1988) art 2(2).

<sup>74</sup> *Rio Declaration on Environment and Development* 1992, Principle 7.

<sup>75</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multi-lateral Trade Negotiations* (WTO Publications, 2002) iv.



progress and development.<sup>76</sup> Importantly, 1972 marked a turning point in the UN role in protection of the world environment. The UN Conference on the Human Environment (UNCHE) in Stockholm 1972 was the first all-encompassing international conference on the environment; from this, action plans emerged, along with the creation of the first international body within the UN system to focus on the environment: the UN Environment Programme (UNEP).<sup>77</sup> Trade and environment issues emerged as a result of the UNCHE's recognition of the concern of competitiveness associated with trade and environment interactions.<sup>78</sup>

Principle 4 of the Stockholm Declaration recognises that 'developing countries must direct their efforts to development bearing in mind their priorities and the need to safeguard and improve the environment'.<sup>79</sup> It seems that protection of the environment is a common responsibility but that developed countries have an obligation to improve their own environmental practices and provide assistance to developing countries and LDCs. Principle 11 of the Stockholm Declaration specifically states that environmental measures should not adversely affect the present and future development potential of developing countries and LDCs.<sup>80</sup> Principle 12 of the Stockholm Declaration recognises the special situation and particular needs of individual developing countries and LDCs where resources should be made available for the purpose of environmental improvement.<sup>81</sup>

While the Stockholm Declaration was confined to the human environment, developing countries attempted to link it with their developmental needs and questions of distributive justice. The ideological differences between developed and developing countries continued and were confronted in the international forum.<sup>82</sup> Although it was unanimously adopted by the UN General Assembly, it is not binding on states. It was a result of the reflections and aspirations of the governments with regards to the preservation of the human environment. To this end, although there is slight improvement in the environmental protection of

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<sup>76</sup> United Nations, *Charter of the United Nations* (United Nations, 26 June 1945) ch IX, art 55.

<sup>77</sup> *Stockholm Declaration on the United Nations Conference on the Human Environment, 1972*.

<sup>78</sup> Alam, above n 5, 29.

<sup>79</sup> *Stockholm Declaration on the United Nations Conference on the Human Environment, 1972*, Principle 4.

<sup>80</sup> *Ibid* Principle 11.

<sup>81</sup> *Ibid* Principle 12.

<sup>82</sup> Alam, above n 5, 33.

Bangladesh in incorporating environmental regulations as an LDC, its market access is affected because of the imposition of WTO ERs and setting up higher standards than the international standards.

## 2.2 *The United Nations Conference on Environment and Development, 1992*

In 1992, the UNCED, also known as the Rio Summit, Rio Conference and Earth summit, in Rio de Janeiro was the outcome of the UN General Assembly Resolution of 22 December 1989, which insisted on a global meeting to promote environmentally sound development for all countries.<sup>83</sup> The principles adopted by the UNCED and its action plan (Agenda 21) focus on trade and trade-led economic growth as a key tool in meeting environmental challenges.<sup>84</sup>

Principle 3 of the Rio Declaration emphasises the right to development, which must be fulfilled in an equitable way to meet developmental and environmental needs of present and future generations.<sup>85</sup> However, developing countries and LDCs have long been insisting that right to development cannot be sacrificed for the protection of the environment.<sup>86</sup> Principle 7 of the Rio Declaration puts emphasis on the common but differentiated responsibilities that impose obligations on developed countries to provide resources to developing countries and LDCs so that they could achieve sustainable development.<sup>87</sup> Principle 12 of the Rio Declaration relevant to international trade emphasised that:

States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development...Environmental measures...[should] be based on an international consensus.<sup>88</sup>

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<sup>83</sup> *Rio Declaration on Environment and Development 1992.*

<sup>84</sup> M Halle, 'Trade and Environment: Looking Beneath the Sands of Doha?' (2006) 2 *Journal for European Environmental and Planning Law* 107.

<sup>85</sup> *Report of the United Nations Conference on Environment and Development*, UN Doc A/CONF.151/26 (Vol. I) (12 August 1992) Principle 3.

<sup>86</sup> Alam, above n 5, 36.

<sup>87</sup> *Ibid* 37.

<sup>88</sup> *Rio Declaration on Environment and Development, 1992, Principle 12.*

This principle reflects the fear of developing countries and LDCs of environmental measures that might be used as protectionist measures by developed countries.

### *3 Millennium Declaration by the United Nations and Millennium Development Goals, 2000*

The Millennium Summit was held in September 2000 at the UN headquarters in New York with the goal to examine ‘the role of the UN in the twenty-first century’.<sup>89</sup> The key outcome of the Summit was the Millennium Declaration<sup>90</sup> and its role in the inception of the eight MDGs. <sup>91</sup> Goal 8 of the MDGs is ‘Develop a Global Partnership for Development’, which sets six targets from which the following are of particular interest in this research:

- target 8a: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system —includes a commitment to good governance, development and poverty reduction; both nationally and internationally
- target 8b: Address the special needs of the least developed countries—includes tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction.
- target 8d: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term
- target 8e: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries—proportion of population with access to affordable essential drugs on a sustainable basis

In regards to LDC market access, it reemphasises the:

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<sup>89</sup> United Nations Millennium Summit (17 December 1998, General Assembly Res 53/202 held in 55th Session of the General Assembly, 6-8 September 2000).

<sup>90</sup> United Nations Millennium Declaration, UN Doc A/RES/ 55/2/60(b) (18 September 2000).

proportion of total developed country imports from developing countries and least developed countries, admitted free of duty; average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries; agricultural support estimate for OECD countries as a percentage of their gross domestic product and Proportion of ODA provided to help build trade capacity.<sup>92</sup>

#### 4 *Johannesburg Declaration on World Summit on Sustainable Development, 2002*

The WSSD in Johannesburg, South Africa, from 2 to 4 September 2002 reaffirmed commitment to sustainable development. Thirty years after the Stockholm Declaration,<sup>93</sup> where the world community agreed on the urgent need to respond to the problem of environmental deterioration, and ten years ago, at the UNCED in Rio de Janeiro,<sup>94</sup> the WSSD agreed that the protection of the environment and social and economic development are fundamental to sustainable development, based on the Rio Principles. Between Rio and Johannesburg, the world's nations have met in several major conferences under the auspices of the UN, including the International Conference on Financing for Development<sup>95</sup> and the Doha Ministerial Conference.<sup>96</sup> For the world, these conferences defined a comprehensive vision for the future of humanity. At the Johannesburg Summit, the world community achieved much in bringing together a rich tapestry of people and views in a constructive search for a common path towards a world that respects and implements the vision of sustainable development.<sup>97</sup> The Johannesburg Summit also confirmed that significant progress has been made towards achieving a global consensus and partnership among all the people of the planet.

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<sup>92</sup> See Goal 8 of the Millennium Development Goals, available at < <http://iif.un.org/content/mdg-8-market-access-trade>>

<sup>93</sup> *Stockholm Declaration on the United Nations Conference on the Human Environment, 1972.*

<sup>94</sup> *Report of the United Nations Conference on Environment and Development*, UN Doc A/CONF.151/26 (Vol. I) (12 August 1992).

<sup>95</sup> *Report of the International Conference on Financing for Development, Monterrey, Mexico* UN Doc A/CONF.198/11 (18–22 March 2002) chapter I, resolution 1, annex.

<sup>96</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration).

<sup>97</sup> *Johannesburg Declaration on Sustainable Development, 2002.*

The Johannesburg Plan of Implementation (JPOI)<sup>98</sup> makes an important step in taking the commitments of other organisations, like WTO, on board. To this effect, Paragraph 48 and 90 seek to implement the outcomes of the Doha Ministerial Conference concerning capacity building to participate effectively in the negotiations and Paragraph 92 encourages the implementation of the Doha Declaration in relation to market access. Paragraph 93 of the JPOI calls on developed countries to provide DFQF market access for LDCs. The decision taken in the 6<sup>th</sup> WTO Conference in favour of LDCs was that they would be provided with 97 per cent DFQF market access with an agreed list.<sup>99</sup> The fear of LDCs and Bangladesh is that most exportable items would not be kept in the remaining three per cent list during negotiations, which may distract their market access. Paragraph 96 is concerned with enhancing the benefits of developing countries and LDCs' trade liberalisation through technical support and development of technology and capacity building.<sup>100</sup>

#### *5 Rio+20: United Nations Conference on Sustainable Development, 2012*

The UN Conference on Sustainable Development (UNCSD), having met in Rio de Janeiro, Brazil, from 20 to 22 June 2012, adopted the outcome document entitled 'The Future We Want'.<sup>101</sup> It recognises the 20 years since the UN Conference on Environment and Development in 1992, reaffirming the Rio Principles and past action plans,<sup>102</sup> including the full implementation of the Programme of Action for LDCs for the decade 2011–2020 (Istanbul Programme of Action).<sup>103</sup> It reiterates commitment in advancing integration, implementation and coherence and addressing new and emerging challenges.<sup>104</sup>

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<sup>98</sup> Ibid

<sup>99</sup> *Doha Work Programme*, WTO Doc WT/MIN(05)/DEC (22 December 2005, adopted 18 December 2005) (Ministerial Declaration) annex F [36 a (i) (ii) (iii)].

<sup>100</sup> *Johannesburg Declaration on Sustainable Development, 2002*.

<sup>101</sup> *Report of the United Nations Conference on Sustainable Development (UNCSD)*, UN Doc A/CONF.216/16 (20–22 June 2012) 1.

<sup>102</sup> Ibid 2.

<sup>103</sup> *Programme of Action for the Least Developed Countries for the Decade 2011–2020*, UN Doc A/CONF.219/7 (22 July 2011) (Resolution).

<sup>104</sup> *Programme of Action for the Least Developed Countries for the Decade 2011–2020*, UN Doc A/CONF.219/7 (22 July 2011) (Resolution) 4.

It considers green economy in the context of sustainable development and poverty eradication as an important tool. It affirms the policies for green economy in the context of sustainable development and poverty eradication in accordance with all the Rio Principles, Agenda 21 and the JPOI and contributes towards achieving relevant internationally agreed development goals, including the MDGs.<sup>105</sup> It urges for the following:

(e) take into account the needs of developing countries, particularly those in special situations<sup>106</sup>

(f) strengthen international cooperation, including the provision of financial resources, capacity-building and technology transfer to developing countries<sup>107</sup>

(h) not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade, avoid unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country, and ensure that environmental measures addressing transboundary or global environmental problems, as far as possible, are based on an international consensus.<sup>108</sup>

It has been observed that the document 'Future We Want' contains all the necessary elements for achieving sustainable development for all. It also mentions LDC issues in the relevant subsections.

#### *E Multilateral Environmental Agreements under the United Nations and Their Prescription on Environmental Requirements*

MEAs have long been detained as a concrete solution to potential trade and environment conflicts.<sup>109</sup> A multilateral solution to a multilateral problem is more acceptable for both trade and environmental concerns. It has also long been understood that the multilateral system of trade rules will need to find some accommodation with MEAs—a separate body

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<sup>105</sup> Ibid 10.

<sup>106</sup> Ibid 10 [58](e).

<sup>107</sup> Ibid 10 [58](f).

<sup>108</sup> Ibid 10 [58](h).

<sup>109</sup> International Institute for Sustainable Development, *Environment and Trade: A Handbook* (IISD, 2<sup>nd</sup> ed, 2005) 64.

of international law that sometimes addresses the same issues. According to Agenda 21, the WSSD Plan of Implementation and numerous WTO declarations, the MTS and MEAs should be mutually supportive.<sup>110</sup> It has been on the agenda of the CTE since its inception in 1995; however, there has been no clear result. The 2001 Doha Declaration mandated work on this issue but only on a narrowly defined slice of the whole.<sup>111</sup>

The trade–MEA relationship has three distinct components: the MEAs may affect trade either directly or indirectly, the relationship that has potential for trade liberalisation to affect the subject matter of MEAs and the legal and policy relationship between the body of law represented in the MEAs and the body of law represented in trade and investment agreements.<sup>112</sup>

There are more than 250 MEAs currently in force that deal with various environmental issues. However, only approximately 20 of these include provisions that can affect trade. For example, they may contain measures that prohibit trade in certain species or products or that allow countries to restrict trade in certain circumstances.<sup>113</sup> MEAs that use trade measures to achieve their objectives and aim to regulate and control or prohibit environmentally harmful trade include the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Montreal Protocol on Substances that Deplete the Ozone Layer, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes, the Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention), the Cartagena Protocol on Biosafety to the Convention on Biological Diversity (CBD), the Stockholm Convention on Persistent Organic Pollutants, the United Nations Framework Convention on Climate Change and the Kyoto Protocol.

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<sup>110</sup> *Report of the United Nations Conference on Environment and Development*, UN Doc A/CONF.151/ 26 (Vol. I) (12 August 1992) Agenda 21.

<sup>111</sup> International Institute for Sustainable Development, above n 109, 65.

<sup>112</sup> Ibid

<sup>113</sup> WTO, *WTO Matrix on Trade-Related Measures Pursuant to Selected Multilateral Environmental Agreements (MEAs)* <[http://www.wto.org/english/tratop\\_e/envir\\_e/envir\\_matrix\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envir_matrix_e.htm)>.

No formal dispute involving a measure under a multilateral environmental agreement has so far been brought to the WTO. However, the complexity of the relationship between environmental and trade rules was highlighted in the *Chile—Swordfish* case.<sup>114</sup> At the 2001 Doha Ministerial Conference, members agreed to negotiate on the relationship between WTO rules and the MEAs, particularly those that contain specific trade obligations (STOs). These negotiations take place in special sessions of the Trade and Environment Committee. Members have agreed that the scope of these negotiations would be limited to applicability of WTO rules to WTO members that have signed the multilateral environmental agreement under consideration.

In addition to looking at the relationship between STOs in environmental agreements and WTO rules, the negotiations have covered procedures for MEA secretariats and relevant WTO committees to exchange information regularly. Closer cooperation between MEA Secretariats and WTO Committees is essential to ensure that the trade and environment regimes develop coherently. This objective was recognised in the Plan of Implementation of the 2002 WSSD in Johannesburg, which calls for efforts to strengthen cooperation between UNEP and other UN bodies and specialised agencies, the Bretton Woods's institutions and WTO, within their mandates.

Various forms of cooperation and information exchange between WTO and MEA secretariats are already in place. These include information sessions held by the WTO Trade and Environment Committee with MEA Secretariats, exchange of documents, collaboration between the WTO and UNEP and MEAs in providing technical assistance to developing countries on trade and the environment and the organisation of side events by the WTO Secretariat in the margins of MEA meetings of their parties. A number of concrete elements have been put forward since the beginning of the negotiations to improve or complement these existing setups.

Since the beginning of the negotiations, discussions have focused on the scope of the negotiating mandate (including the definition of STOs) and on potential outcomes of the

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<sup>114</sup> *Chile—Measures Affecting the Transit and Importing of Swordfish*, WTO Dispute DS193 (19 April 2000).



negotiations. In parallel, members have also embarked on an exercise of sharing their national experiences in the negotiation and domestic implementation of trade measures under MEAs.

#### *F Understanding the Problems with Environmental Requirements: Confronting LDC Economic Realities*

Under WTO rules, as confirmed by WTO jurisprudence, members can adopt trade-related measures aimed at protecting the environment, subject to certain specified conditions being met.<sup>115</sup> These measures are not necessarily discussed or raised as formal disputes at the WTO but are raised at the CTE committee level.<sup>116</sup> However, certain measures taken to achieve environmental protection goals may restrict trade and, thereby, affect the WTO rights of other members that may violate basic trade rules, such as the non-discrimination obligation and the prohibition of quantitative restrictions.<sup>117</sup> The Appellate Body in the *Brazil—Retreaded Tyres* case<sup>118</sup> recognised that such tension may exist between international trade and public health and environmental concerns. This is why exceptions to such rules are particularly important in the trade and environment context. One of the most important areas for debate for possible further negotiation at the WTO is the issue of PPMs.<sup>119</sup>

#### *1 Process and Production Methods*

Environmentalists are concerned not only with the product but also with the method by which it is produced, used and disposed.<sup>120</sup> PPMs refer to the desire of some countries to regulate international trade in goods and services on the basis of the inputs and process

<sup>115</sup>WTO, *WTO Rules and Environmental Policies: Introduction* <[http://www.wto.org/english/tratop\\_e/envir\\_e/envt\\_rules\\_intro\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envt_rules_intro_e.htm)>.

<sup>116</sup> Ibid

<sup>117</sup> Ibid

<sup>118</sup>WTO, *Brazil—Measures Affecting Imports of Retreaded Tyres* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds332\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds332_e.htm)>.

<sup>119</sup> Robert Read, 'Process and Production Methods and the Regulation of International Trade' in Christiane R Conrad (ed), *Process and Production Methods (PPMs) in WTO Law: Interfacing Trade and Socials Goals* (Cambridge University Press, 1<sup>st</sup> ed, 2011) 537, 239.

<sup>120</sup> Alam, above n 5, 16.

technologies used in their production.<sup>121</sup> PPM-based labels may effectively provide consumers with information regarding whether a product is environmentally friendly or not.<sup>122</sup> Read<sup>123</sup> states that the broadest interpretation of PPMs embraces several contentious international trade issues of contemporary concern:

- the health and safety aspects of new technologies
- resource depletion, both renewable and non-renewable
- environmental pollution
- the use of child, forced, prison and slave labour.

The key debate concerning PPMs is how these contentious issues can be dealt with under existing WTO agreements, particularly the GATT Article XX and the SPS and TBT agreements. The health and safety aspects of new technology include uncertainty about the effects of the use of beef hormones and GMOs that led the EU to invoke the precautionary principle to restrict trade of these products.<sup>124</sup> The conservation of renewable and non-renewable resources is used to limit trade in scarce or environmentally important resources, notably the logging of tropical hardwoods and Antarctic ice fish. Under certain circumstances, WTO rules permit controls on trade for environmental reasons.<sup>125</sup> Pollution control targets for industrialised countries were agreed as part of the Rio and Kyoto UN Conference on Environment and Development to limit the negative externalities generated by the pollution at the global level as the general targets for the pollution created by each country. International labour standards that are the remit of the International Labour Organization (ILO) were recognised by the WTO Singapore Meeting in December 1996<sup>126</sup> as the competent body to deal with core minimum labour standards, including restrictions on the use of child, forced, prison and slave labour. The PPM issue arises with respect to labour because WTO rules apply only to international trade in the resultant goods and

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<sup>121</sup> Read, above n 119, 237.

<sup>122</sup> Ibid

<sup>123</sup> Ibid

<sup>124</sup> Ibid

<sup>125</sup> *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('*General Agreement on Tariffs and Trade 1994*') art XX [g].

<sup>126</sup> WTO First Ministerial Conference, 1996 < [http://www.wto.org/english/thewto\\_e/minist\\_e/min96\\_e/min96\\_e.htm](http://www.wto.org/english/thewto_e/minist_e/min96_e/min96_e.htm) >.

services rather than whether or not they were produced contrary to ILO standards. WTO permits trade barriers to be used against products made with prison labour.<sup>127</sup>

CTE's effective policy role is to facilitate trade in environmental goods and to assess the effect of environmental measures on market access; it is also working to define environmental goods and services on the basis of their production process, for example, the use of recycled materials. The theoretical debate regarding the relationship between international trade and the environment remains unresolved. There are two principal schools of thoughts on this issue. One group<sup>128</sup> regards environmental concerns as separate and distinct from the regulation of international trade and, hence, argue that they should be dealt with through appropriate MEAs. Others<sup>129</sup> argue that it is essential to consider environmental issues within trade agreements. To this degree, the CTE has been charged to bring WTO and MEAs closer, as part of Doha responsibilities. But the recent development in WTO case law, notably with respect to the *Shrimp–Turtle* case, highlighted the existence of MEAs under the GATT 1994 Article XX(g), health and safety issues covered under Article XX(b) and gasoline emission standards and asbestos cases using Article XX(b) as a defence.

The increased impetus for consideration of PPMs within WTO rules comes primarily from consumers based on qualitative grounds.<sup>130</sup> The desire of the regulation based on PPMs is perhaps a direct consequence of multilateral trade liberalisation in industrialist countries.<sup>131</sup> There is considerable concern that, even if there is a consensus on PPMs, extending the rules to include them would give rise to the complexity and scope for disputes. Failure of member countries to deal with consumer concerns and the acts of PPMs is likely to widen the gap between developed and developing countries and undermine the WTO's

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<sup>127</sup> *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('*General Agreement on Tariffs and Trade 1994*') art XX [e].

<sup>128</sup> J N Bhagwati, 'On Thinking Clearly about the Linkage between Trade the Environment' (2000) 5(4) *Environment and Development Economics* 485; J N Bhagwati, *Free Trade Today* (Princeton University Press, 2002) 1.

<sup>129</sup> C L Deere and D C Esty (eds), *Greening the Americas: NAFTA's Lessons for Hemispheric Trade* (MIT Press, 2002) 329.

<sup>130</sup> Read, above n 119, 243.

<sup>131</sup> Ibid

credibility.<sup>132</sup> Many developing countries are suspicious of the explicit inclusion of PPMs in the WTO because they fear the imposition of harmonised environmental, technological and other qualitative standards with high thresholds set by developed countries. Therefore, the treatment of PPMs within the WTO remains problematic and there is no leeway for the implementation of a voluntary code, as agreed in the Tokyo Round.

The regulatory treatment of most PPM issues is subject to two important articles of the GATT, 1994. Article III, National Treatment on Internal Taxation and Regulations, oversees the implementation of the GATT principle of non-discrimination and Article XX, General Exceptions, covers a range of specific circumstances when trade barriers may be used.

In Article III, the national treatment describes the principle of non-discrimination that requires equal treatment to be afforded to domestic and imported goods and services. The critical wording of the article is 'like product',<sup>133</sup> defined as meaning 'directly competitive or substitutable products'. For PPMs, the critical issue here is that the qualitative criteria for trade regulation are generally inconsistent with the product-based customs methodology.<sup>134</sup> In many cases, the physical characteristics of PPM products concerned are identical or similar, whereas the goods-based approach assumes implicitly that apparently like products are close substitutes. The use of national environmental and/or social legislation to deal with PPMs has implications because these restrictions are WTO incompatible under Article III, which is the same as reversing discrimination against domestic producers and a deterrent to raising domestic standards unless equivalence can be applied to imports.<sup>135</sup>

Article XX(b) and XX(g) are relevant to PPM discussions. Article XX(b) requires that any such exceptional measures are 'necessary to protect human, animal or plant life or health'.

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<sup>132</sup> Ibid

<sup>133</sup> *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('*General Agreement on Tariffs and Trade 1994*') art III:2.

<sup>134</sup> *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('*General Agreement on Tariffs and Trade 1994*') art III:3.

<sup>135</sup> C Fisher, 'Who's afraid of PPMs?' (Paper presented at the EC Ad Hoc NGO Consultation Meeting on PPMs, Brussels, 31 May 2001).

Article XX(g) states that any such exceptional measures are permitted when ‘relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption’. In the GATT tuna–dolphin cases, the issues raised relating to PPMs are the interpretation of GATT Article III, National Restrictions, and Article XX by the two dispute panels with respect to the US dolphin safe measures.<sup>136</sup> The panel discussions of Article III focus on whether US measures to protect dolphins could be applied to domestic or imported tuna. The difficulty with the definition of like products in the context of the PPM discussion is where negative externalities arise because of joint production, such as certain catch technologies catching protected dolphins and yellow fin tuna in the eastern Pacific. The issue of negative externalities arising from production was never tested by the panels because of the indirect nature of the US measure. The second tuna panel found that the US dolphin conservation policy was GATT consistent and could be applied extraterritorially.<sup>137</sup> However, the first panel found that the actual measures were neither necessary nor GATT consistent.<sup>138</sup>

PPMs are covered under existing WTO rules, particularly in SPS and TBT agreements. Restraining trade measures can be taken under Article XX (b) exception on health grounds ‘only to the extent necessary’,<sup>139</sup> ‘not more restrictive than required to achieve the appropriate level of protection’<sup>140</sup> must be based on scientific evidence<sup>141</sup> or in absence of

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<sup>136</sup> M Hurlock, 'The GATT, US Law and the Environment: A Proposal to Amend the GATT in the Light of Tuna/Dolphin Decision' (1992) 92(8) *Columbia Law Review* 2098; S J Porter, 'The Tuna/Dolphin Controversy: Can the GATT become Environmentally Friendly?' (1992) V *Georgetown International Environmental Law*; P R Yechout, 'In the Wake of Tuna II: New Possibilities for GATT-complaint Environmental Standards' (1996) 5 *Minnesota Journal of Global Trade*, 247–75.

<sup>137</sup> GATT Panel Report, *United States—Restrictions on Imports of Tuna*, GATT Doc DS29/R (16 June 1994).

<sup>138</sup> GATT Panel Report, *United States—Restrictions on Imports of Tuna*, GATT Doc DS21/R (3 September 1991).

<sup>139</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 2.2.

<sup>140</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 5.6.

<sup>141</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 3.4.

temporary measures,<sup>142</sup> must be consistent with WTO principles and must not constitute disguise restriction on trade<sup>143</sup> of the SPS agreement. The TBT agreement also allows international technical standards to justify Article XX (b) exceptions for health and safety reasons. Such measures (for example, packaging and labelling requirements should not be more trade restrictive than is necessary,<sup>144</sup> must be consistent with WTO principles.<sup>145</sup>

The original GATT article dealing with product labelling was Article IX, Marks of Origin, and was designed to prevent fraud and misleading of consumers. Part of Article IX has been superseded by the TRIPS agreement, part 3 of which deals with GIs,<sup>146</sup> which recognise that like products may have location-specific characteristics. Both GIs and PPMs rely on qualitative characteristics, where GIs resolved their qualitative issue through trademark protection, geographical names and product labelling, which are potential ways to deal with PPM issues.

The issue of disguised protection remains a particular concern of the WTO with respect to PPMs, as it uses qualitative criteria for restrictive trade measures. The infeasibility of scrutinising products embodying intangible PPMs in the absence of adequate documentation and traceability of consignments gives rise to potential for fraud. The ever-increasing importance of PPMs proportionately increases the regulatory complexity and cost of monitoring and enforcement.<sup>147</sup> There have been several recent trade disputes at the GATT/WTO that have addressed various issues regarding PPMs, such as bananas, beef hormones and GMOs.

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<sup>142</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 5.7.

<sup>143</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 2.3.

<sup>144</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') art 5.1.2.

<sup>145</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') art 2.1.

<sup>146</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 22-4.

<sup>147</sup> Read, above n 119, 248.

## 2 Packaging

Packaging is the science, art and technology of enclosing or protecting products for distribution, storage, sale and use.<sup>148</sup> Packaging also refers to the process of design, evaluation and production of packages. Packaging can be described as a coordinated system of preparing goods for transport, warehousing, logistics, sale and end use. Packaging contains, protects, preserves, transports, informs and sells. In many countries, it is fully integrated into government, business and institutional, industrial and personal use. Package labelling is any written, electronic or graphic communication on the packaging or on a separate but associated label. However, the introduction of packaging requirements has created controversy in member countries. For example,<sup>149</sup> Australia's tobacco plain packaging bill was introduced to regulate the appearance and features of tobacco packaging. According to the legislation, all tobacco products sold in Australia would have olive-coloured plain packaging as of 1 July 2012. No logos or brand images would be permitted on the packaging. The product brand name would appear in uniform font on the front, top and bottom of the package and graphic health warnings would continue to be displayed. Fourteen members raised trade concerns with Australia's measure. They did not challenge Australia's public health objectives but argued that such regulations could create an unnecessary barrier to trade, since they viewed the measure as more trade restrictive than necessary to achieve Australia's public health objective.

## 3 Eco-labelling

Eco-labels are affirmations given to products that are deemed to have less effect on the environment than functionally or competitively similar products.<sup>150</sup> Eco-labelling is defined as a voluntarily adopted certification of the environmental performance of a firm. It is a label placed on a good that identifies its overall environmental performance characteristics

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<sup>148</sup> WTO, *Labelling* <[http://www.wto.org/english/tratop\\_e/envir\\_e/labelling\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/labelling_e.htm)>.

<sup>149</sup> WTO, *Concerns Raised about Tobacco and Environmental Measures* <[http://www.wto.org/english/news\\_e/news11\\_e/tbt\\_15jun11\\_e.htm](http://www.wto.org/english/news_e/news11_e/tbt_15jun11_e.htm)>; Notification, WTO Doc G/TBT/N/AUS/67 (8 April 2011).

<sup>150</sup> Elliot B Staffin, 'Trade Barrier or Trade Boon? A Critical Evaluation of Environmental Labeling and Its Role in "Greening" the World' (1996) 21(2) *Columbia Journal International Environmental Law* 221.

within a given category. Depending on the scheme, a good is granted a label if it satisfies at least some minimum requirements of environmental performance. There are different types of environmental labels and declarations. The International Organisation for Standardisation (ISO) Sub-Committee on Environmental Labelling is responsible for developing standards in the field of environmental labels and declarations and, thus, the objectives of the ISO14020 series is to set standards for the design and implementation of different types of eco-labelling programmes.<sup>151</sup> The ISO identifies three types of voluntary labels within eco-labelling fitting type I.<sup>152</sup> Eco-labelling is the well-established practice of marking certain consumer goods with some form of logo or symbol to indicate that the product has been manufactured using environmentally acceptable methods. Thus, eco-labelling involves many complex issues, such as PPMs, the definition of international standards and equivalence.

Although eco-labelling is not compulsory, Paragraph 32 of the Doha Declaration instructed the Committee of Trade and Environment to address labelling requirements for environmental purposes.<sup>153</sup> Developing countries and LDCs are concerned that an increase in the use of eco-labelling schemes would restrict their products from the markets of developed countries.<sup>154</sup> The issues of environmental concerns for developing countries and LDCs are not receiving adequate attention from developed countries and, thus, the gap between rhetoric and reality is becoming wider each day without any improvement.<sup>155</sup> The desire of WTO members to regulate trade-related issues, particularly goods embodying

<sup>151</sup> *Environmental Labeling: Guiding Principles*, ISO Standard 14020 (1999).

<sup>152</sup> Laura Valentini, *Environmental Quality Provision and Eco-labelling: Some Issues* (June 2005) <[http://www.wto.org/english/res\\_e/reser\\_e/reser\\_e.htm](http://www.wto.org/english/res_e/reser_e/reser_e.htm)>; According to ISO, there are three types of Eco-labels:

- Type I (ISO 14024 Series): voluntary, multi-criteria based, third party program that awards a license that authorises the use of environmental labels on products indicating the overall characteristics of a product within a certain class, based on life cycle considerations
- Type II (ISO 14021 Series): informative self-declaration claims
- Type III (ISO 14025 Series): voluntary programs that provide quantified environmental data of a product, under pre-set categories of parameters set by a qualified third party and based on life cycle assessment, and verified by a qualified third party.

<sup>153</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [32].

<sup>154</sup> Alam, above n 5, 17.

<sup>155</sup> Ibid 18.



health and safety or environmental issues is likely to increase the complexity of many trade regulation problems.<sup>156</sup>

The objective of eco-labelling is to affect the product through demand. The idea is to encourage the demand of those products and services that are less harmful for the environment. Consumers of developed countries will base their choices on these eco-labels; however, developing countries and LDCs are lacking in clean technologies, financial resources and infrastructure to comply with the eco-labelling requirements of the importing country. There has been a proposal to extend the coverage of TBT and SPS agreements to include eco-labelling schemes with a view to harmonising the product standards that can be used as a barrier to the interest of developing countries and LDCs.<sup>157</sup>

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.<sup>158</sup> However, an equal application of the eco-labelling scheme may have different effects on domestic and foreign goods.<sup>159</sup> Usually, it is developed countries that push for the adoption of the scheme, while developing countries oppose it. The reason behind this is that the scheme is bound to harm them unnecessarily and inefficiently. Firstly, the environmental problems that developed countries face are different from those faced by developing countries. Secondly, the costs associated with applying for eco-labelling may be too high for the poorer country. Finally, developing countries, particularly LDCs, fear that they will not have a voice in determining the standards to which the eco-label is granted.

Bangladesh exporters have experienced various kinds of eco-labelling barriers. For example, India's labelling requirement for jute bags and certificate requirement for the content of non-halogenated hydrocarbon to jute products is a market access barrier faced by

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<sup>156</sup> Read, above n 119, 239.

<sup>157</sup> Alam, above n 5, 17.

<sup>158</sup> Ibid

<sup>159</sup> Ibid

Bangladesh exporters.<sup>160</sup> Statistics<sup>161</sup> show that Bangladesh export to India was US\$498,500,000 in the 2011 to 2012 financial year and US\$512,500,000 in the 2010 to 2011 financial year. That is an export decrease of 2.8 per cent. Although India has provided duty-free market access for almost all products, other than drug- and tobacco-related products, from November 2011,<sup>162</sup> Bangladesh has still not received the benefit to which it was entitled because of NTBs. One of the most important barriers is the interference<sup>163</sup> of different agencies on the importation of foreign products other than through the Director General of Foreign Trade (DGFT). Like the DGFT, the Customs Office of the State Government can impose para-tariff on foreign products. The Indian authority often changes its direction regarding the placement of labelling of expiry and manufacturing dates above or under the products that have substantial market access barriers.<sup>164</sup> Another problem is that Bangladesh exporters have to wait for a long time at the clearance office to obtain the testing report for chemical items, as the laboratories are far away from the land port.<sup>165</sup> The report highlighted that India is now accepting some Bangladesh items, like food products, textiles and cement, without raising standard issues as certified by the Bangladesh Standards and Testing Institution (BSTI). This is an achievement; however, at the same time, this report also emphasises that the products must meet international standards.<sup>166</sup>

#### 4 Geographical Indications

A GI is a name or sign used on goods that have a specific geographical location or origin (e.g., a town, region or country) and possess qualities, reputation or characteristics that are essentially attributable to that place of origin.<sup>167</sup> Most commonly, a geographical indication includes the name of the place of origin of the goods. Agricultural products in general have qualities that derive from their place of production and are influenced by specific local

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<sup>160</sup> Ibid

<sup>161</sup> EPB statistics (see <<http://www.epb.bd.gov>>).

<sup>162</sup> India's declaration on duty free market access for LDCs (see at <[commerce.nic.in/trade/international\\_tpp\\_DFTP.pdf](http://commerce.nic.in/trade/international_tpp_DFTP.pdf)>).

<sup>163</sup> Asjadul Kibria, 'Bangladesh-India Bilateral Trade: Eradication of Non-tariff barriers is the current foremost challenge', *Prothom Alo (Dhaka)*, 3 December 2012.

<sup>164</sup> Ibid

<sup>165</sup> Ibid

<sup>166</sup> Ibid

<sup>167</sup> WIPO, *About Geographical Indications* <[http://www.wipo.int/geo\\_indications/en/about.html](http://www.wipo.int/geo_indications/en/about.html)>.

factors, such as climate and soil.<sup>168</sup> It may be used for a wide variety of products, whether natural, agricultural or manufactured, and it is a matter of national law whether a sign is recognised as a GI. The use of a GI may act as certification that the product possesses certain qualities or enjoys a certain reputation because of its geographical origin.

Governments have been protecting trade names and trademarks used in relation to food products identified with a particular region since, at least, the end of the nineteenth century, using laws against false trade descriptions or passing, which generally protect against suggestions that a product has a certain origin, quality or association when it does not. In such cases, the consumer protection benefit is generally considered to outweigh the limitation on competitive freedoms represented by the grant of a monopoly of use over a GI.

In 1994, when negotiations on the WTO agreement on TRIPS were concluded, governments of all WTO member countries agreed to set certain basic standards for the protection of GIs in all member countries. In effect, there are two basic obligations on WTO member governments relating to GIs in the TRIPS agreement:

11. Article 22 of the TRIPS agreement says that all governments must provide legal opportunities in their own laws for the owner of a GI registered in that country to prevent the use of marks that mislead the public as to the geographical origin of the good. This includes prevention of use of a geographical name which although literally true “falsely represents” that the product comes from somewhere else.
12. Article 23 of the TRIPS agreement says that all governments must provide the owners of GI the right, under their laws, to prevent the use of a geographical indication identifying wines not originating in the place indicated by the geographical indication. This applies *even where the public is not being misled*, where there is no unfair competition and where the true origin of the good is indicated or the geographical indication is accompanied by expressions such as

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<sup>168</sup> Ibid

“kind”, “type”, “style”, “imitation” or the like. Similar protection must be given to geographical indications identifying spirits.<sup>169</sup>

Article 22 of the TRIPS agreement also says that governments may refuse to register a trademark or may invalidate an existing trademark (if their legislation permits or at the request of another government) if it misleads the public as to the true origin of a good. Article 23 says governments may refuse to register or may invalidate a trademark that conflicts with a wine or spirits GI whether the trademark misleads or not.<sup>170</sup>

Article 24 of the TRIPS agreement provides a number of exceptions to the protection of GIs that are particularly relevant for GIs for wines and spirits under Article 23.<sup>171</sup> For example, members are not obliged to bring a GI under protection where it has become a generic term for describing the product in question. Measures to implement these provisions should not prejudice prior trademark rights that have been acquired in good faith, and, under certain circumstances (including long-established use), continued use of a GI for wines or spirits may be allowed on a scale and nature as before.

According to the World Intellectual Property Organization (WIPO),<sup>172</sup> GIs are protected in accordance with international treaties and national laws under a wide range of concepts, including:

- special laws for the protection of geographical indications or appellations of origin
- trademark laws in the form of collective marks or certification marks
- laws against unfair competition
- consumer protection laws
- specific laws or decrees that recognise individual geographical indications.<sup>173</sup>

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<sup>169</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 22–3.

<sup>170</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 24.

<sup>171</sup> Ibid; WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') art 2.4, 122.

<sup>172</sup> WIPO, above n 159.

In the Doha Development Round of WTO negotiations, launched in December 2001, WTO member governments were negotiating on the creation of a multilateral register of GIs.<sup>174</sup> Some governments participating in the negotiations (especially the European Communities) wish to go further and negotiate the inclusion of GIs on products other than wines and spirits under Article 23 of the TRIPS agreement. These governments argue that extending Article 23 will increase the protection of these marks in international trade. However, this is a controversial proposal that is opposed by other governments, including the US who question the need to extend stronger protection of Article 23 to other products. They are concerned that Article 23 protection is greater than required, in most cases, to deliver the consumer benefit that is the fundamental objective of GI laws. The GI-related market access barriers of developing countries and LDCs are discussed in the relevant chapters, particularly in Chapter 6.

## 5 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 are intended to. They establish a common language that defines quality and safety criteria.<sup>175</sup> Standards are voluntary consensus documents that are developed by agreement and their application is by choice unless their use is mandated by government or called up in a contract. Standards are just one tool in a regulatory spectrum that may be applied by governments to provide a solution to a problem.<sup>176</sup>

Depending on the issue, the optimal solution might be ‘no action’ or a non-regulatory solution, like a publicity campaign or self-regulation by means of a voluntary industry code

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<sup>173</sup> Ibid.

<sup>174</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration).

<sup>175</sup> Standards Australia, *History* <<http://www.standards.org.au/DevelopingStandards/HistoryofStandards.aspx>>.

<sup>176</sup> Ibid

or standard, quasi-regulation, such as a standard endorsed by government, co-regulation, such as a standard cross-referenced in a general or high-level regulation, or legislation.<sup>177</sup>

It was not until the late nineteenth century that the value of standardisation in specifications, materials, testing and conformance was recognised as a national priority. By the turn of the century, standardisation was flourishing and has continued to where it is now intrinsic to modern society. It has extended far beyond its original industrial focus to include consumer safety, occupational health and a myriad of other topics, all of which serve to improve the quality and comfort of our everyday life.

Standards are the tools we use to organise our technical world and the measures we employ to establish norms for management procedures. They underpin consumer expectations that products purchased will be safe, reliable and fit for their purpose. Indeed, standards have become such integral components of our economic, social and legal systems that they are often taken for granted and their crucial role in a modern society is often not recognised.

According to Annex 1 of the WTO's TBT agreement, a 'standard' is defined as a:

document approved by a recognized 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 labelling requirements as they apply to a product, process or production method.<sup>178</sup>

Standards in trade stand to convey requirements of customers to suppliers define a product or service and verify or assess products. Standards in industry mean product specifications for material components, defining processes and test or inspection methods.<sup>179</sup> The TBT agreement encourages WTO members to base their national technical regulations and

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<sup>177</sup> Ibid

<sup>178</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') annex A.

<sup>179</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 3.1, 3.3; CPD *WTO and Bangladesh Trade Policy* (CPD, 2008), 182.

standards in international standards, while at the same time allowing individual members to impose their own standard where appropriate.<sup>180</sup>

The standard set by developed countries sometimes causes serious market access barriers for developing countries, particularly LDCs, and the situation is vulnerable in Bangladesh. Bangladesh experienced a ban on imports of Bangladesh shrimp by the EU in 1997. This happened because of failure to maintain standards in areas related to health, quality control, infrastructure and hygiene in the processing plant. The product standards are necessary for domestic and international use. However, Bangladesh needs financial assistance and technological development to improve and ensure product standards are met through the technical assistance programme by developed countries committed several times in international agreements.

In Bangladesh, BSTI, a national body for developing standards, has developed basic standards based on international standards, which include product specification, test methods, system standards, guidelines and code of practices. By 2010, BSTI had developed 3,300 standards.<sup>181</sup> The development of national standards is essential for national and international consumers and will improve overall market access. BSTI has developed a product certification scheme in light of ISO Guide 65 and has taken on the task of management system certification, which includes a quality management system, environmental management system and food safety management system.<sup>182</sup>

For quality assurance of products, there is need to assess the conformity of the requirements of the standards and Bangladesh needs to have technological support from developed countries to set up new laboratories. The country also needs proper training for operational staff so that they can work properly with the new technology.

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<sup>180</sup> Ibid; WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('*Agreement on Technical barriers to Trade*') art 2.4, 122.

<sup>181</sup> Bangladesh Standards and Testing Institute Annual Report, 2010, (Ministry of Industries, Government of Bangladesh, 2010) 7.

<sup>182</sup> Ibid

The point of contention as far as LDCs are concerned is that some standards are more trade restrictive than necessary for health and life protection, and LDCs do not have adequate resources to comply with the increasingly stringent standards that are required in the name of environmental protection. Thus, it is not surprising that LDCs complain that SPS measures often act as border protection instruments, which inhibit their market access capacity.<sup>183</sup> The TBT agreement urges countries to participate in various international standard setting organisations and encourages the development of their own national standards, if the existing guidelines are not appropriate. The TBT allows countries to adopt conformity assessment procedures, which include registration, inspection, laboratory accreditation, independent audit and quality registration schemes and are also geared to ensure conformity with technical requirements in packaging, marking and labelling.<sup>184</sup> However, LDCs are not in a position to comply with all the requirements because of their financial and institutional incapacities, even though plenty of commitments to financial assistance for LDCs are given by developed countries in almost all declarations and important decisions of the WTO.

In the case of LDCs, ERs are the highest in those sectors that have export potential and comparative advantage, such as textiles and clothing, leather and leather products, footwear, forestry products and food products.<sup>185</sup> The cost of compliance is higher on small and medium-sized entrepreneurs in LDCs. From this perspective, environmental measures work as obstacles to market access. It has been demanded by developing countries and LDCs that a longer time frame is required to achieve these standards. Market access during this period should not be denied to products from these countries, since economic growth and employment in such countries are dependent to a great extent on the export of their products.<sup>186</sup>

The complex requirements covered by SPS and TBT measures represent threats to existing exporters and barriers to new entrants. SPS measures are far more serious for developing

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<sup>183</sup> Mustafizur Rahman, 'Market Access Implications of SPS and TBT: Bangladesh Perspective' (Research Report #0215, CUTS Centre for International Trade, Economics & Environment, 2002)11.

<sup>184</sup> Ibid 14.

<sup>185</sup> Alam, above n 5, 67.

<sup>186</sup> Ibid



countries, particularly LDCs, than they are for developed countries.<sup>187</sup> SPS and TBT measures affect trade in agriculture and food products.<sup>188</sup> Countries with improved infrastructure and greater resources are in an advantageous position to deal with stringent quality standards.<sup>189</sup> Developing countries and LDCs find it difficult to trade with developed countries because quality requirements differ.<sup>190</sup> The SPS measures can affect a country's trade in three ways:<sup>191</sup> prohibiting trade by imposing an import or by prohibitively increasing production and marketing costs, diverting trade from one trading partner to another by imposing regulations that discriminate between potential suppliers and reducing overall trade flows by increasing costs or raising barriers for all potential suppliers. It has been established in various studies that SPS measures have negative effects on fishery resources.<sup>192</sup> The case of the EU ban on imports of shrimp from Bangladesh in 1997 (imposed on the grounds of health, safety and hygiene) is an example of the use of SPS measures.<sup>193</sup>

The development gap between countries is brought into clear view in the area of health and environmental standards. Many developing countries and LDCs do not have SPS legislation and lack the regulatory infrastructure to enforce the controls that they do have.<sup>194</sup> Developing countries and LDCs have complained that developed countries use SPS measures as a form of disguised protectionism.<sup>195</sup> Although regulations are enacted to advance legitimate public health objectives, the issues of protectionism can have

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<sup>187</sup> UNCTAD, 'Elements of the Positive Agenda on the SPS Agreement' (Paper presented at United Nations Conference on Trade and Development, Geneva, Switzerland, 1998).

<sup>188</sup> P Digges, A Gordon and A Marter, *International Markets for African Agricultural Exports: Agricultural Policy Reform and Agricultural Exports* (Natural Resources Institute (NRI), Greenwich, UK, 1997).

<sup>189</sup> P Greenhalgh, 'Sanitary and Phyto-sanitary Measures and technical Barriers to Trade' (Trade Issue Background Paper, Food and Agriculture Organization of the United Nations, Rome, 2004).

<sup>190</sup> K M Murphy and A Shleifer, 'Quality and Trade' (1997) 53(1) *Journal of Development Economics* 1-15.

<sup>191</sup> S R Henson, R J Loader, A Swinbank, M Bredahl and N Lux, 'Impact of Sanitary and Phyto-Sanitary Measures on Developing Countries' (Report, The University of Reading, Department of Agriculture and Food Economics, 1999).

<sup>192</sup> United Nations ESCAP, 'Promoting Export of Fish and Fishery Products in Selected Island Developing Countries of the ESCAP Region' (Studies in Trade and Investment No. 20, Report No ST/ESCAP/1677, Economic and Social Commission for Asia and the Pacific, 1996).

<sup>193</sup> J C Cato and C A Lima Dos Santos, 'European Union 1997 Sea-food Safety Ban: The Economic Impact on Bangladesh Shrimp Processing' (1998) 13 *Marine Resource Economics* 215-27.

<sup>194</sup> Tracey Epps, *International Trade and Health Protection—A Critical Assessment of the WTO's SPS Agreement* (Edward Elgar Publishing Limited, 2008) 46.

<sup>195</sup> Graham Mayeda, 'Developing Disharmony? The SPS and TBT Agreements and the Impact of Harmonization in the Developing Countries' (2003) 7(4) *Journal of International Economic Law* 737.

disproportionate effects on developing countries.<sup>196</sup> Developing countries have exhibited frustration with the strict standards faced by their exports.<sup>197</sup> According to Zarrilli, developing countries, including LDCs, are lacking information regarding the measures affecting their export; they are not sure whether the measures are consistent with the SPS agreement and they experience serious problems with respect to scientific research, testing, conformity assessment and equivalency. In addition, they have problems in participating effectively in the international standard setting process and, therefore, face problems in meeting foreign requirements based on international standards.<sup>198</sup> Bangladesh, as a member of the LDC group, faces the same scenario in almost all cases, which is why Bangladesh has been taken as the case study of this research.

This raises the question of how these tensions can be minimised and of what the possible ways to overcome these situations are. To minimise the tensions concerning environmental regulations, greater harmonisation of standards in accordance with the SPS agreement is necessary; however, the question of how developing countries and LDCs can meet these harmonised standards still needs to be addressed.<sup>199</sup> The concept of special and differential treatment has been incorporated into the SPS agreement; however, issues remain on how to promote the integration of LDCs into the international trading system, considering their developmental needs and institutional capacities.<sup>200</sup> The G-90 group (developing countries and LDCs) has called on WTO members to exercise restraint in applying SPS measures to their products and to provide technical assistance.<sup>201</sup> Developing countries argue that the level and type of technical assistance provided to them often fails to address the day-to-day problems faced by developing countries; many of these problems relate to their overall level of economic development.<sup>202</sup> A survey conducted on low and lower-middle income

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<sup>196</sup> Epps, above n 194, 41.

<sup>197</sup> Laurian Unnevehr and Donna Roberts, 'Food Safety and Quality: Regulations, Trade, and the WTO' (Paper presented at the International Conference on Agricultural Policy Reform and the WTO: Where Are We Heading?, Capri, Italy, June 23-26, 2003).

<sup>198</sup> Simonetta Zarrilli, 'WTO Sanitary and Phytosanitary Agreement: Issues for Developing Countries' (Working Paper 3, South Centre, Trade-related Agenda, Development and Equity (TRADE), July 1999).

<sup>199</sup> Epps, above n 194, 47.

<sup>200</sup> Ibid

<sup>201</sup> Ibid

<sup>202</sup> Alam, above n 5, 82.

countries found that significant impediments were observed on exports to the EU, Australia and the US because of SPS requirements.<sup>203</sup>

Developing countries and LDCs have been arguing for the necessary financial support and the transfer of environmentally friendly technology to enable them to develop their capacity to tackle environmental issues, but the commitments and promises of the north<sup>204</sup> in this regard have not materialised. Developing countries perceive the debate on harmonisation of environmental standards as an effort by developed countries to ignore the commitments they made at UNCED in 1992 to respect the development needs of individual countries.<sup>205</sup> While trade-related measures are gaining momentum in the policy consideration of different forums, including the WTO CTE, the issues faced by developing countries are still not receiving adequate attention. Consequently, the gap between rhetoric and reality is becoming wider each day without any significant improvement in the capacity of developing countries to address environmental concerns.<sup>206</sup>

During the review, it has been observed that trade-restrictive domestic health regulations are not a new development. Earlier, trade disputes arose over health and safety regulations, many of which are the same today, including the concern of public health; a degree of uncertainty about the unsettling effects of globalisation and tension between protectionist and free traders.<sup>207</sup> History shows that health-related trade disputes are not isolated incidents, rather they were recognised by WTO members when the SPS agreement was negotiating and is evidenced by a number of trade concerns that have arisen to date.<sup>208</sup> The situation is that developing countries, including LDCs, have been unable to participate actively in the working group of the SPS agreement and, thus, hardly see any benefit from it. Moreover, developing countries are facing a number of constraints, like notification of

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<sup>203</sup> Ibid

<sup>204</sup> North refers to the developed countries.

<sup>205</sup> Ibid

<sup>206</sup> Ibid 17.

<sup>207</sup> Epps, above n 194, 34.

<sup>208</sup> Ibid

new SPS measures, risk assessment, scientific evidence and implementation of international standards, lack of technology and financial limitations.<sup>209</sup>

In general, developing countries and LDCs are not against setting standards and designing regulations to safeguard health and hygiene.<sup>210</sup> However, they argue that such measures can inhibit market access if they are not well equipped to address the relevant problems and to comply with the incremental safety measures. It is also recognised that countries at unequal levels of development have different policy priorities and different levels of capacity to adopt or comply with environmental measures. To find the answer to the question raised (whether WTO environmental and health-related measures are creating unnecessary barriers to trade in setting protectionist measures), it is worthwhile to undertake in-depth critical analysis through appropriate methodologies by collecting quality data and up-to-date information from relevant scholarly literature with a thorough study of their implications on international trade and to establish a mechanism to address the issues for building a better future for the world community.

## *G Conclusion*

This chapter attempts to establish the links between trade and environment, their principles and their concepts that govern trade and environment. This chapter reiterated the preamble of the Marrakesh Agreement establishing the WTO in regards to protecting and preserving the environment in a manner consistent with needs at different levels of economic development.<sup>211</sup> It also highlighted the need for positive efforts to ensure developing countries and LDCs secure their share of growth in international trade.<sup>212</sup> In addition, it outlined the international treaties and instruments that govern environmental protection and their relationships with LDCs trade particularly their market access implications.

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<sup>209</sup> Alam, above n 5, 82.

<sup>210</sup> Mustafizur Rahman, 'Market Access Implications of SPS and TBT: Bangladesh Perspective' (Research Report #0215, CUTS Centre for International Trade, Economics & Environment, 2002) i.

<sup>211</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 2002) 4.

<sup>212</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 2002) 4.

In the course of examining the trade–environment interface, this chapter observed a clear division between the perceptions of developed countries and developing countries, including LDCs. The chapter closely examined the issues that are at the heart of the conflicting perceptions. To promote environmental protection, developed countries impose ERs on exports from developing countries, including LDCs. In the form of SPS and TBT measures, they use voluntary standards, eco-labelling and PPMs to this end. These instruments are imposed without considering LDCs' financial needs, technical knowhow, technological support and capacity to deal with the current electronic regime. Therefore, it argues for providing adequate support and flexibilities for LDCs to enable them to cope with the standard regime before imposing ERs.

To establish a link between trade and environment, this chapter addressed part of the research question. It analysed the constituent principle of trade and environment and found that LDCs can receive more benefit from the principles of comparative advantage, the GATT principles of MFN and national treatment and the CBDR principle. This chapter also outlined the relevant MEAs that are related directly to trade and environment. The next chapter examines the basic international instruments for ERs under the WTO, as well as the domestic regulations of Bangladesh that are responsible for its market access under those environmental measures.

### III LEGAL INSTRUMENTS FOR ENVIRONMENTAL REQUIREMENTS IN THE WTO AND THEIR MARKET ACCESS IMPLICATIONS ON BANGLADESH: AN OVERVIEW\*

#### *A Introduction*

The WTO's involvement in the protection of the environment comes in the form of trade liberalisation, which promotes the efficient distribution of resources, economic growth and increased income levels that, in turn, provide additional possibilities for protecting the environment.<sup>1</sup> The importance of trade's contribution to environmental protection has been recognised in forums such as the 1992 Rio Summit,<sup>2</sup> 2002 Johannesburg Summit<sup>3</sup> and 2005 UN World Summit.<sup>4,5</sup> WTO agreements dealing with ERs that have market access implications for LDCs are the TBT agreement and the SPS agreement. These two agreements confirm governments' rights to protect the environment provided certain conditions are met, a number of them including provisions dealing with sanitary, phytosanitary and technical requirements. However, there are also other WTO agreements, such as the AOA, SCM agreement, TRIPS agreement and GATS, that contain provisions dealing with ERs.

This chapter examines the WTO rules on ERs that have remarkable market access implications on LDCs in general and Bangladesh in particular. It also examines and

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\*A part of this chapter was presented as 'Environmental Requirements in the WTO: The Developmental Challenges for Developing Countries' in the New Zealand Centre of International Economic Law (NZCIEL) Conference Wellington, New Zealand, 7–8 July 2011. Also published as Pradip Royhan, 'Environmental Requirements in the WTO: Developmental Challenges of the Least Developed Countries with a Particular Reference to Bangladesh' (2013) 9(1) *Macquarie Journal of International and Comparative Environmental Law* 78.

<sup>1</sup> WTO, *An Introduction to Trade and Environment in the WTO* <[http://www.wto.org/english/tratop\\_e/envir\\_e/envt\\_intro\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envt_intro_e.htm)>.

<sup>2</sup> *Report of the United Nations Conference on Environment and Development*, UN Doc A/CONF.151/26 (Vol. I) (12 August 1992).

<sup>3</sup> *Johannesburg Declaration on Sustainable Development, 2002*.

<sup>4</sup> *2005 World Summit Outcome*, UN Doc A/60/L.1 (15 September 2005).

<sup>5</sup> WTO, *An Introduction to Trade and Environment in the WTO* <[http://www.wto.org/english/tratop\\_e/envir\\_e/envt\\_intro\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envt_intro_e.htm)>.

outlines the domestic regulations of Bangladesh that are responsible for its market access under environmental concerns. Bangladesh domestic regulations are also discussed in Chapters 4, 5, 6 and 7 in the relevant sections.

### *B Development of the WTO*

After a series of brain-storming sessions over eight years (1986–1994), the Uruguay Round of multilateral trade negotiations (MTNs) was substantially concluded on 15 December 1993 and the Marrakesh Agreement was signed in April 1994, establishing the WTO.<sup>6</sup> Prior to the Uruguay Round of talks, there were seven rounds of GATT trade round talks in the following years: 1947 in Geneva, 1949 in Annecy, 1951 in Turkey, 1956 in Geneva, 1960–1961 in Geneva (Dillon Round), 1964–1967 in Geneva (Kennedy Round) and 1973–1979 in Geneva (Tokyo Round).

The Tokyo Round of Negotiations (1973–1979) was the first serious attempt to tackle non-tariff trade barriers on a multilateral basis and the negotiations recognised that discrimination against imports existed in technical regulations of the products specific characteristics with which they had to comply. Governments adopted more regulations on product standards to protect the health and safety of their citizens, safeguard the environment and protect consumers. In 1979, the TBT agreement (known as standard code) was adopted. The standard code applied to ‘all products, including industrial and agricultural products’.<sup>7</sup> The TBT agreement is discussed later in this chapter and also in the relevant sections of other chapters.

In the Uruguay Round of negotiations (1986–1994), consensus emerged that the GATT and the standard code had failed to curtail disruptions of trade caused by NTBs, particularly in respect to agricultural products. Most notably, the *EC—Hormone* case had failed to reach a

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<sup>6</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 2002); see also WTO Web at (<http://www.wto.org>). The WTO’s predecessor, the GATT covered only trade in goods. The coverage of the WTO is much wider, extending to trade in services and intellectual property rights. The WTO also has a DSB.

<sup>7</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A (‘Agreement on Technical Barriers to Trade’) art 1.3.

solution under the GATT legal infrastructure.<sup>8</sup> This failure led to the US increasing hard work to harmonise national health and safety standards, leading to negotiation of the SPS agreement.<sup>9</sup> The Uruguay Round negotiations in 1986 included NTMs among its subjects for negotiations, aiming to reduce or eliminate NTMs where agriculture was a key component and, thus, SPS measures formed a crucial part of negotiations on agriculture.<sup>10</sup>

The WTO is the only international body that deals with trade rules between nations and independent customs territories. It has three main objectives: to help trade flow as freely as possible, to achieve further liberalisation gradually through negotiation and to set up an impartial and effective means of dispute settlement.<sup>11</sup> The WTO replaced the GATT organisation, which is now one of the trade agreements under WTO. It provides an umbrella organisation that sets the rules by which nations regulate trade in manufactured goods, services (including banking, insurance, tourism and telecommunications), intellectual property, textiles and clothing and agricultural products.<sup>12</sup> The role of the WTO is to facilitate international cooperation to open markets, provide a forum for future trade negotiations between members and provide a forum for the settlement of trade disputes.<sup>13</sup> The WTO will have a stature equal to that of the International Monetary Fund (IMF) or World Bank and will cooperate with those agencies on economic matters. The WTO's membership includes those countries that previously belonged to GATT and is now open to other countries, if accepted by a two-thirds majority vote of current members.<sup>14</sup> At present, the total number of WTO members is 159.<sup>15</sup> The total number of LDCs is 49<sup>16</sup> from which

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<sup>8</sup> Tracey Epps, *International Trade and Health Protection—A Critical Assessment of the WTO's SPS Agreement* (Edward Elgar Publishing Limited, 2008) 26.

<sup>9</sup> Ibid

<sup>10</sup> Ibid

<sup>11</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multi-lateral Trade Negotiations* (WTO Publications, 2002).

<sup>12</sup> Ibid

<sup>13</sup> Ibid

<sup>14</sup> Richard Schaffer, Beverley Earle and Filiberto Agusti, *International Business Law and Its Environment* (Thomson/South-Western, 2005) 1.

<sup>15</sup> WTO, *Understanding the WTO: The Organization, Members and Observers* <[http://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/org6\\_e.htm](http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm)>.

<sup>16</sup> United Nations Office of the High Representative for the Least Developed Countries, *Least Developed Countries* <<http://www.unohcrlls.org/en/ldc/25/>>.



34<sup>17</sup> are WTO members. The most crucial outcome of the Uruguay Round is that the WTO has emerged as a legal body that provides the principal contractual obligations determining how governments frame and implement domestic trade legislation and regulations.

*C WTO Agreements Dealing with Environmental Requirements and Their Implications on Bangladesh Market Access*

As mentioned earlier, the following provisions relating to ERS are discussed in light of LDC market access. The provisions in WTO agreements dealing with environmental issues are GATT Articles XX(b) and XX(g), TBT agreement, SPS agreement, AOA, SCM agreement, TRIPS agreement (Article 27) and GATS (Article 14).<sup>18</sup> However, the GATS is excluded from this research as Bangladesh domestic regulations of the service sector have already been excluded in Chapter 1.

*1 General Agreement on Tariff and Trade Article XX*

GATT exceptions contained in Article XX permit a party to restrict or prohibit imports by 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 exhaustible natural resources, if such measures are made effective in conjunction with restrictions on domestic production or consumption (Article XX(g)).<sup>19</sup>

*(a) Article XX(b)—Protection of Human, Animal and Plant Life or Health*

Article XX(b) allows trade-related environmental measures (TREM) where they are necessary to protect human, animal or plant life or health. The term 'necessity' or

<sup>17</sup> WTO, *Understanding the WTO Organization—Least-developed Countries* <[http://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/org7\\_e.htm](http://www.wto.org/english/thewto_e/whatis_e/tif_e/org7_e.htm)>.

<sup>18</sup> WTO, *Understanding the WTO Organization—Least-developed Countries* <[http://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/org7\\_e.htm](http://www.wto.org/english/thewto_e/whatis_e/tif_e/org7_e.htm)>.

<sup>19</sup> *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 194 (entered into force in 1 January 1948) art XX.

‘necessary’ here entails an obligation on members to choose a TREM that is least restrictive and as consistent as possible with their GATT obligations. The necessity requirement for the measure for which the exception is being invoked has great controversy. To pass the necessity test, a party is required to demonstrate that they have exhausted alternative GATT-consistent or less-inconsistent options and that the measure in question involves the least degree of inconsistency with GATT provisions. In other words, as long as GATT-consistent alternatives are available, these measures should be employed and the party should not adopt another measure of a different nature and then justify its adoption as necessary.

In the *Tuna–Dolphin* case in 1991,<sup>20</sup> the panel examined the US prohibition on imports of certain tuna and tuna products from Mexico. The US argued that the measures were necessary to protect the dolphin life and health and no other measure was reasonably available to them to achieve this objective. The panel found no evidence that the US had exhausted all options, particularly the option of negotiating an international cooperative arrangement that would have been consistent with GATT, before taking this step. In the *Tuna–Dolphin II* case,<sup>21</sup> the US ban on tuna imports from intermediate countries was challenged by the EU. Here, the US argued that the ban was necessary to protect dolphins and justified this action under Article XX(b). However, the panel examined the application of Article XX(b) and noted that the ordinary meaning of the term ‘necessary’ meant that no alternative existed.

To fulfil the requirement of ‘necessity’ in invoking Article XX(b), a party must ensure that the measures adopted constitute a reasonable, proportionate relationship to the conservation policy or the public health policy. In the *Tuna–Dolphin* case, the proportionality requirement to which the panel was referring of the method of calculating the maximum incidental dolphin capture rate was too unpredictable for trade measures to be regarded as

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<sup>20</sup> GATT Panel Report, *United States—Restrictions on Imports of Tuna*, GATT Doc DS29/R (16 June 1994) art XX(b) [5.28].

<sup>21</sup> GATT Panel Report, *United States—Restrictions on Imports of Tuna*, GATT Doc DS21/R (3 September 1991).

necessary to protect the health or life of dolphin.<sup>22</sup> This proportionality test was also deployed in the *Danish—Beer Bottle* case in which the panel stated that the trade measures should not be disproportionate to their objective and should be least disruptive to trade.<sup>23</sup>

Although the ‘necessity’ requirement demands that the measure should be at the least degree of inconsistency with GATT, it does not provide any guidelines for the determination of the method with other GATT provisions. The ‘least restrictive’ interpretation of the necessary requirement in Article XX(b) has also been criticised by trade and environmental groups. The panel on many cases identified measures as not ‘necessary’ but has not specifically identified less-GATT-inconsistent measures, which could have been used to protect the environment. Therefore, the DSB should take into account the intent of Article XX and find a balance between the goals of the liberal trade and environmental protection goals of Article XX.

*(b) Article XX(g)—Protection of Exhaustible Natural Resources*

Article XX(g) permits TREMs for the purpose of conservation of exhaustible natural resources only when they are combined ‘with restrictions on domestic production or consumption’ to ensure non-discrimination between domestic and imported like products. The scope of Article XX exceptions cover only domestic jurisdiction. TREM-based import restrictions would undermine multilateral trade liberalisation. The domestic environment protection policies and practices of a member should not dictate the course of multilateral trade liberalisation. Therefore, Article XX imposes serious restrictions on members pursuing TREMs having extraterritorial effects on production methods and or consumption patterns of another member. It seeks to strike a balance between the objective of TREMs and other considerations relevant to the facilitation of trade, which should not be restricted disproportionately and unnecessarily by TREMs.

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<sup>22</sup> J McDonald, 'Greening the GATT: Harmonizing Free Trade and Environmental Protection in the New World Order' (1993) 23 *Environmental Law* 42.

<sup>23</sup> Environment protection: Commission v Denmark, Case 302/86, [1988] ECR 4607 ; [1989], 1 CMLR 619.

The requirement that a trade measure must be aimed primarily at the related conservation purpose was confirmed in the tuna–dolphin II panel report.<sup>24</sup> In this case, the US trade measure was not aimed primarily at conservation since it was based on unpredictable factors, such as the incidental capture rate of US vessels, not to any objective standard of dolphin death. The interpretations of Article XX (g) have left many questions unanswered. It is not clear whether the term ‘exhaustible natural resources’ covers all natural resources or only the commercially valuable natural resources. There have been suggestions that Article XX(g) was inserted to authorise members to take measures only for commercially valuable resources to ensure their availability for future use in international trade.<sup>25</sup> It seems clear that Article XX(g)’s exception for the conservation of exhaustible natural resources will continue to be interpreted with the same preference for free trade as has the interpretation of Article XX(b)’s health and safety exception.<sup>26</sup>

In the case *China—Measures Related to the Exportation of Various Raw Materials*,<sup>27</sup> the Appellate Body found that the panel erred in interpreting the phrase ‘made effective in conjunction with’ in Article XX(g) of the GATT 1994 to require that the purpose of the challenged measure must be to ensure the effectiveness of restrictions on domestic production and consumption. Therefore, it reversed this interpretation by the panel. Contrary to the panel’s findings, the Appellate Body saw nothing in the text of Article XX(g) to suggest what the panel found.<sup>28</sup>

The introductory Paragraph to Article XX states that trade measures must not constitute a means of arbitrary unjustifiable discrimination between countries where the same conditions prevail nor may they be disguised restrictions on international trade. In the *Shrimp–Turtles* case, the Appellate Body acknowledged the difficulty in interpreting the expressions ‘arbitrary discrimination’ and ‘unjustifiable discrimination’, which has opened

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<sup>24</sup> GATT Panel Report, *United States—Restrictions on Imports of Tuna*, GATT Doc DS29/R (16 June 1994).

<sup>25</sup> McDonald, above n 22, 46.

<sup>26</sup> Ibid 55.

<sup>27</sup> GATT Panel Report, *China—Measures Related to the Exportation of Various Raw Materials*, GATT Doc DS394 (23 June 2009).

<sup>28</sup> Ibid

up a debate with respect to whether unilateral measures to protect global environmental commons will ever be expected under Article XX.<sup>29</sup> In 1991, Charnovitz wrote:

At this time, opinions differ as to whether the growing interest in the connection between trade environment should be viewed as a blooming of “sustainable development” or a weed of “eco-protectionism”. But one conclusion seems clear. New attitudes about the GATT are definitely taking root.<sup>30</sup>

These attitudes were focused on the possibilities for protection of the environment offered by Article XX(b) and XX(g). The emergence of the WTO and its dispute resolution along with the SPS and other agreements expanded the range of issues raised in the trade and environment context.<sup>31</sup>

The GATT does not permit trade measures that are directed against environmental conditions outside of a country's own territory. The limitation of the scope of this provision is known as extraterritorial provision of Article XX and is beneficial in preventing developed countries from taking unilateral measures against developing countries for having lower international standards. Environmental measures addressing transboundary or global environmental problems should be based on an international consensus. However, the absence of such an international institution and the limitation of the extraterritorial scope of Article XX have left nations without a device to handle global environmental and health-related requirements of the WTO.<sup>32</sup>

## *2 Agreement on the Application of Sanitary and Phytosanitary Measures*

The SPS agreement stipulates rules that member countries should follow before adopting measures to protect human, animal and plant life against risks arising from, inter alia, pests,

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<sup>29</sup> Fiona Macmillan, *WTO and the Environment* (Sweet & Maxwell Limited, 2001) 70.

<sup>30</sup> Steve Charnovitz, 'Exploring the Environmental Exceptions in GATT Article XX' (1991) 25(37) *Journal of World Trade* 38.

<sup>31</sup> Macmillan, above n 29, 70.

<sup>32</sup> Shawkat Alam, *Sustainable Development and Free Trade, Institutional Approaches* (Routledge, 1<sup>st</sup> ed, 2008) 74.

additives, contaminants, toxins or diseases.<sup>33</sup> According to the definitions of Annex A of the agreement:

Sanitary or phytosanitary measures include all relevant laws, decrees, regulations, requirements and procedures including, inter alia, end product criteria; process and production methods; testing, inspection, certification and approval procedures; quarantine treatments including relevant requirements associated with the transport of animals or plants, or with the materials necessary for their survival during transport; provisions on relevant statistical methods, sampling procedures and methods of risk assessment; and packaging and labeling requirements directly related to food safety.<sup>34</sup>

It has been questioned whether the SPS agreement is capable, in its current form, of resolving disputes where regulatory differences between nations' health protection regimes arise from different cultural, political, ethical and social values.<sup>35</sup> The interpretation of health issues mentioned in the SPS agreement reflects countries' unique circumstances. The individual countries need to manage their regulatory processes in a transparent manner to ensure that they follow accepted scientific protocols. Tracy suggests that the panels and the Appellate Body are likely to respond with decisions that allow countries flexibility to regulate to protect health if they can follow accepted scientific protocols according to the SPS agreement.<sup>36</sup>

Article XX of the GATT allows governments to act on trade to protect human, animal or plant life or health. This forms the basis of the SPS agreement, which was accepted in the Uruguay Round. The preamble of the SPS agreement reaffirmed that these measures would not constitute a means of arbitrary or unjustifiable discrimination between members or a

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<sup>33</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') annex A, 67.

<sup>34</sup> Ibid

<sup>35</sup> Nicholas Perdakis, William A Kerr and J E Hobbs, 'Can the WTO/GATT Agreements on Sanitary and Phytosanitary Measures and Technical Barriers be Renegotiated to Accommodate Agricultural Biotechnology?' in William H. Lesser (ed), *Transitions in Agbiotech: Economics of Strategy and Policy* (University of Connecticut, Food Marketing Policy Centre, 2000) 1.

<sup>36</sup> Epps, above n 8, 305.

disguised restriction on international trade.<sup>37</sup> The SPS agreement allows members to take scientifically based measures to protect public health and commits the members to base these measures on internationally established guidelines and risk-assessment procedures, with further obligations where, in the case of particularly stringent measures, countries must present scientific justification. Members may adopt measures on the basis of available information, when existing scientific evidence is insufficient to determine risk, but must obtain additional information to objectively ground their assessment of risk within a reasonable period.<sup>38</sup>

In terms of international standards, the SPS agreement identifies three relevant organisations. For food safety, it identifies the standards, guidelines and codes of hygienic practice adopted by the Food and Agriculture Organization (FAO) and World Health Organization (WHO)'s Codex, relating to food additives, veterinary drug and pesticide residues, contaminants, analysis methods and sampling. The guidelines of the Office International des Epizooties (known as the International Animal Health Organization) are considered the reference for animal health protection and the protection of humans from animal-carried diseases. The international standards for plant health protection were developed under auspices of the FAO's International Plant Protection Convention.<sup>39</sup>

A study quantifying the effect of the EU's harmonised aflatoxin standard on food exports from Africa concluded that the implementation of new aflatoxin standards would have a negative effect on African's export of cereals, dried fruits and nuts to Europe, which would reduce the health risk by approximately 1.4 deaths per billion a year, decrease African export by 6.4 per cent or US\$670 million.<sup>40</sup> Likewise, another study concluded that a one

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<sup>37</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') 59.

<sup>38</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 2, art 5.

<sup>39</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 3, 61.

<sup>40</sup> Tsunehiro Otsuki, John S. Wilson and Mirvat Sewadeh, 'Saving Two in a Billion: Quantifying the Trade Effect of Food Safety Standards on African Exports' (2001) 26 *Food Policy* 495.

per cent increase in regulatory stringency—tighter restrictions on chlorpyrifos (pesticides used for banana production worldwide)—leads to a decrease of banana imports by 1.63 per cent<sup>41</sup> and also projected that US\$ 5.5 billion would be lost per year if an international standard were set at the EU level in contrast to the Codex recommended level.<sup>42</sup> There was a cholera outbreak in Mozambique, Kenya, Tanzania and Uganda in 1997 and the EC placed restrictions on fish imports from these countries. Studies by a group of authors estimated that each of the states suffered a loss in trade, which, as a percentage of GDP, rose from 0.26 per cent in 1997 to 0.96 per cent in 2002. This has harmful effects on developing countries because of high standards in exports.<sup>43</sup> The authors also pointed out that losses were significant for these countries because they were poor and fully dependant on export.<sup>44</sup> Epps argued for strict disciplines on the use of SPS measures to prevent them being used as a disguise for protectionism.<sup>45</sup>

The SPS agreement contains detailed requirements relating to scientific justification.<sup>46</sup> Article 2.1 recognises member rights to take SPS measures that must be necessary for protection of human, animal or plant life or health and Article 2.3 states that the risk to human, animal and plant life or health must be based on scientific principles and must not be maintained without sufficient scientific evidence. The requirement of such sufficient scientific evidence might provide ambiguity, as scientists are often not unanimous in all issues that lead ultimately to the application of NTBs by developed countries because of their advanced SPS technologies.<sup>47</sup>

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<sup>41</sup> J S Wilson and Tsunehiro Otsuki, 'To Spray or Not to Spray: Pesticides, Banana Exports, and Food Safety' (2004) 29 *Food Policy* 144.

<sup>42</sup> Ibid

<sup>43</sup> A M Kimball, K Y Wong and K Tanaka, 'An Evidence Base for International Health Regulations: Quantitative Measurement of the Impacts of Epidemic Disease on International Trade' (2005) 24(3) *OIE Scientific and Technical Review* 829.

<sup>44</sup> Epps, above n 8, 31–32.

<sup>45</sup> Ibid

<sup>46</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 2, art 5, 60–61.

<sup>47</sup> Alam, above n 32, 79.



The reliance of the SPS agreement on scientific evidence has drawn much criticism from commentators and scholars.<sup>48</sup> One view was concerned with the integrity of the trade liberalisation objectives of the SPS agreement. These critics contend that the use of scientific benchmarks allow member countries too much discretion in their regulatory decision making and, as such, they allow for the possibility that the scientific evidence requirement fails to achieve the drafters' goal of adequately guarding against protectionism.<sup>49</sup> A different view was that scientific requirements impose too much of a straightjacket on governments. For example, Sykes argued that the scientific benchmark represents undue hurdles for regulators who sincerely pursue objectives other than protectionism.<sup>50</sup> Other critics argued that reliance on science is misplaced because it precludes any consideration of social, cultural and ethical concerns and that nations will suffer if there is no space for consumer anxieties to be respected and domestic politics accommodated.<sup>51</sup> Science is vulnerable to manipulation and capture by protectionist interests and such capture may defeat the original purpose of the SPS agreement's science-based approach.<sup>52</sup>

In Article 5.1, 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<sup>53</sup> must take into account, inter alia, 'available scientific evidence'. Article 5.3 states that, in assessing the risk, members shall take into account the relevant economic factors and the relative cost-effectiveness of alternative approaches to limiting risks. The preamble and Article 5.5 require that members should avoid arbitrary or unjustifiable discrimination between countries and the SPS measures may not be used as disguised restriction on international trade. In the absence of sufficient scientific evidence, members can adopt provisional measures on the basis of

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<sup>48</sup> Epps, above n 8, 4.

<sup>49</sup> Ibid 5.

<sup>50</sup> Alan O. Sykes, 'Domestic Regulation, Sovereignty, and Scientific Evidence Requirements: A Pessimistic View' (2002) 3(2) *Chicago Journal of International Law* 354.

<sup>51</sup> Dayna Nadine Scott, 'Nature/Culture Clash: The Transnational Trade Debate over GMOS' (Global Law Working Paper No 06/05, Hanser Global Law School Program, 2005) 42.

<sup>52</sup> Epps, above n 8, 299.

<sup>53</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 5.2, 62.

pertinent information under Article 5.7. However, members can seek additional information for more assessment of the risk and review the measures within a reasonable period. This provisional measure is related to the precautionary principle, as expressed in Article 15 of the Rio Declaration on Environment and Development.<sup>54</sup> The SPS agreement emphasises the need for risk and scientific assessment, whereas developing countries have a lack of adequate knowledge to assess the risk of scientific evidence and serious environmental damage.<sup>55</sup>

Article 4.1 requires members to accept SPS measures of other members as equivalent.<sup>56</sup> For this purpose, members are required to give, on request, reasonable access to the importing member for inspection, testing and other relevant procedures. Developed countries are reluctant to accept equivalence and developing countries reported that the inspectors have sought identical specification, rather than equivalency.<sup>57</sup> Article 4.2 also encourages members to enter into bilateral or multilateral agreements on the recognition of the equivalence of specified SPS measures. However, developing countries have limited capacity to gain necessary certification and accreditation because of their financial and technological limitations.

The protection of human health designed by the SPS measures is the particular branch of health known as 'public health', which 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.<sup>58</sup> Animal health also refers to physical diseases, and measures to protect animal health may apply in different categories of animals, such as livestock, aquatic animals, wild animals (fauna) and domestic animals (pets).<sup>59</sup> 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

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<sup>54</sup> *Rio Declaration on Environment and Development 1992, Article 15.*

<sup>55</sup> H Ward, 'WTO Rules and the Application of the Precautionary Principle' (2000) January–February *Bridges (International Centre for Trade and Sustainable Development)* 15.

<sup>56</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 4, 61.

<sup>57</sup> Alam, above n 32, 81.

<sup>58</sup> Epps, above n 8, 11.

<sup>59</sup> *Ibid*

interest of livestock- and/or fisheries-related industries by regulating diseases, vaccines, feed additives and the conditions under which animals are reared and processed.<sup>60</sup> Plant health regulation focuses 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.<sup>61</sup>

Article 12 of the SPS agreement establishes the WTO Committee on SPS Measures and mandates it by providing a regular forum for consultations. In 1996, the committee agreed that members would be encouraged to raise issues in meetings before initiating formal dispute settlement procedures.<sup>62</sup>

*(a) Interpretation of SPS Measures in the WTO Dispute Settlement Body*

All challenges to the SPS agreement go before the WTO, which has the responsibility of determining whether a member's standards conform to the agreement. For this, the agreement allows the WTO to draw on independent experts in the area of the dispute. The WTO uses experts to judge not only the trade effects of the standard but also the proper risk assessments and the scientific evidence that support the standard. Otherwise, the WTO handles disputes on SPS standards in the same way it handles other disputes.<sup>63</sup> Since 3 July 2013, a total of 40 WTO cases have cited the SPS agreement.<sup>64</sup> The important cases concerning environment and health regulations that cited SPS measures are *Thailand—Cigarettes*, 1990; *EC—Beef Hormones*, 1998; *Australia—Salmon*, 1998; *Japan—Agricultural Products*, 1999; *EC—Asbestos*, 2001; *Japan—Apples*, 2003; *EC—Biotech*, 2006; *Brazil—Retreaded Tyres* and *Australia—Apples*, 2007.<sup>65</sup> Other cases are discussed in relevant chapters, particularly in Chapters 4 and 5.

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<sup>60</sup> Ibid

<sup>61</sup> Ibid 12.

<sup>62</sup> *WTO Committee on Sanitary and Phytosanitary Measures, Summary of the Meeting Held on 29–30 May 1996*, WTO Doc G/SPS/R/5, 6.

<sup>63</sup> Kevin B. Underbaugh and Richard Fulton, *The WTO Primer: Tracing Trade's Visible Hand through Case Studies* (Palgrave Macmillan TM, 1<sup>st</sup> ed, 2007), 68.

<sup>64</sup> WTO, *Dispute Settlement: Disputes by Agreement* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_agreements\\_index\\_e.htm?id=A19#selected\\_agreement](http://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm?id=A19#selected_agreement)>.

<sup>65</sup> Epps, above n 8, 203.

*(i) Thailand—Cigarettes, 1990*<sup>66</sup>

In regards to public health, Thailand argued that import restrictions were justified under Article XX(b) and showed that, under the *Tobacco Act of 1966*, Thailand prohibited the importation of cigarettes and other tobacco preparations. The Thai government had adopted these measures because they could only be effective if cigarette imports were prohibited and the chemicals and other additives contained in US cigarettes might make them more harmful than Thai cigarettes. The US complained that the import restrictions were not justified under Article XX(b). The panel found that these measures were not ‘necessary’ within the meaning of Article XX(b).

*(ii) EC—Beef Hormones, 1997*<sup>67</sup>

The US complained that the measures taken by the EC under council directive, prohibiting the use of livestock farming of certain substances that have a hormonal action, restricted or prohibited imports of meat and meat products from the US that were inconsistent with Articles 2, 3 and 5 of the SPS agreement. The panel found that the EC ban on imports of meat and meat products from cattle was inconsistent with Articles 3.1, 5.1 and 5.5 of the SPS agreement. The Appellate Body upheld the panel’s finding that the EC import prohibition was inconsistent with Articles 3.3 and 5.1 of the SPS agreement; however, it reversed the panel’s finding that the EC import prohibition was inconsistent with Articles 3.1 and 5.5 of the SPS agreement. On general and procedural issues, the Appellate Body upheld most of the findings and conclusions of the panel, except with respect to the burden of proof in proceedings under the SPS agreement. A mutually acceptable solution on implementation was notified on 25 September 2009.

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<sup>66</sup> WTO, *US versus Thailand: Cigarettes* <[http://www.wto.org/english/tratop\\_e/envir\\_e/edis03\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/edis03_e.htm)>.

<sup>67</sup> WTO, *European Communities—Measures Concerning Meat and Meat Products (Hormones)* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds26\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds26_e.htm)>.

(iii) *Australia—Salmon, 1998*<sup>68</sup>

Canada made a complaint against Australia about Australia's prohibition of imports of salmon from Canada based on a quarantine regulation and alleged that the prohibition was inconsistent with Article 2, 3 and 5 of the SPS agreement. The panel found that Australia's measures were inconsistent with Articles 2.2, 2.3, 5.1, 5.5 and 5.6 of the SPS agreement and also impaired benefits accruing to Canada under the SPS agreement. The Appellate Body reversed the panel's reasoning with respect to Articles 5.1 and 2.2 of the SPS agreement; however, it found that Australia had acted inconsistently with Articles 5.1 and 2.2 of the SPS agreement and broadened the panel's finding that Australia had acted inconsistently with Articles 5.5 and 2.3 of the SPS agreement. The Appellate Body reversed the panel's finding on Article 5.6 of the SPS agreement; however, it was unable to conclude whether Australia's measure was consistent with Article 5.6 because of insufficient factual findings by the panel. The DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report, on 6 November 1998. A mutually acceptable solution was notified on 18 May 2000.

(iv) *Japan—Agricultural Products, 1999*<sup>69</sup>

The US made a complaint against Japan about quarantine measures of imports of certain agricultural products and alleged that there were violations of Articles 2, 5 and 8 of the SPS agreement. In addition, the US made a claim for nullification and impairment of benefits. The panel found that Japan acted inconsistently with Articles 2.2 and 5.6 of the SPS agreement and Annex B and, consequently, Article 7 of the SPS agreement. The Appellate Body upheld the basic finding that Japan's varietal testing of apples, cherries, nectarines and walnuts was inconsistent with the requirements of the SPS agreement. The DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body

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<sup>68</sup> WT O, *Australia—Measures Affecting Importation of Salmon* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds18\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds18_e.htm)>.

<sup>69</sup> WT O, *Japan—Measures Affecting Agricultural Products* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds76\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds76_e.htm)>.

report, on 19 March 1999. A mutually acceptable solution on implementation was notified on 25 September 2001.

*(v) EC—Asbestos, 2001*<sup>70</sup>

In regards to public health protection, this case dealt with measures (prohibiting the import, sale and use of asbestos) to address the dangers posed to human health from an exposure to asbestos and products containing asbestos. Canada, the complainant, had to prove that products imported from Canada to France were like products of French domestic substitutes (polyvinyl acetates (PVA), cellulose and glass fibres) and that the French regulation on imported products was ‘less favourable treatment’ than like domestic products. In fact, in this case, the panel found that domestic and imported products were like products. However, the Appellate Body reversed this finding with the explanation that the risk to health was posed by the two products because of their different physical characteristics. In this case, both the panel and the Appellate Body rejected Canada’s challenge against a French import ban on asbestos and asbestos-containing products. This reinforced that the WTO supports members’ ability to protect human health and safety at a level they deem appropriate.<sup>71</sup>

*(vi) Japan—Apples, 2003*<sup>72</sup>

The US complained that Japan allegedly imposed restrictions on imports of apples from the US. Japan’s restrictions were said to be necessary to protect against the introduction of fire blight. The US claimed that these measures might be inconsistent with the obligations of Japan under Articles 2.2, 2.3, 5.1, 5.2, 5.3, 5.6, 6.1, 6.2 and 7 and Annex B of the SPS agreement. The panel found that Japan’s phytosanitary measure was contrary to Article 2.2 of the SPS agreement and was not justified under Article 5.7 of the SPS agreement. It also found that Japan’s 1999 Pest Risk Assessment did not meet the requirements of Article 5.1

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<sup>70</sup> WTO, *European Communities—Asbestos* <[http://www.wto.org/english/tratop\\_e/envir\\_e/edis09\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/edis09_e.htm)>.

<sup>71</sup> Abdul Ghafur Hamid, 'The WTO Rules Versus Multilateral Environmental Agreements: The Search for Reconciliation' (2008) 5(1) *Macquarie Journal of International and Comparative Environmental Law* 57.

<sup>72</sup> WTO, *Japan—Measures Affecting the Importation of Apples* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds245\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds245_e.htm)>.

of the SPS agreement. The Appellate Body upheld the panel's findings that the phytosanitary measure at issue was inconsistent with Japan's obligations under Articles 2.2, 5.7 and 5.1 of the SPS agreement. At its meeting on 10 December 2003, the DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report. A mutually acceptable solution on implementation was notified on 30 August 2005.

*(vii) EC—Biotech, 2006*<sup>73</sup>

The US made a complaint against the EC concerning certain measures taken by the EC and its member states affecting imports of agricultural and food imports from the US. According to the US, the measures at issue appeared to be inconsistent with the EC's obligations under Articles 2, 5, 7 and 8 and Annexes B and C of the SPS agreement. The panel found that, by applying this moratorium, the EC had acted inconsistently with its obligations under Annex C(1)(a), first clause, and Article 8 of the SPS agreement because the de facto moratorium led to undue delays in the completion of EC approval procedures. However, the panel found that the EC had not acted inconsistently with its obligations under other provisions raised by the complaining parties, including Articles 5.1, 5.5, 5.6, 2.2 and 2.3 of the SPS agreement. With regards to the EC member state safeguard measures, the panel found that the EC acted inconsistently with its obligations under Articles 5.1 and 2.2 of the SPS agreement, as these measures were not based on risk assessments and, hence, could be presumed to be maintained without sufficient scientific evidence. At its meeting on 21 November 2006, the DSB adopted the panel reports.<sup>74</sup>

*(viii) Brazil—Retreaded Tyres, 2007*<sup>75</sup>

The EC made a complaint against Brazil about the imposition of measures that adversely affected exports of retreaded tyres from the EC to the Brazilian market. The panel concluded that, with respect to Brazil's import prohibition on retreaded tyres, Portaria

<sup>73</sup> WTO, *European Communities—Measures Affecting the Approval and Marketing of Biotech Products* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds291\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds291_e.htm)>.

<sup>74</sup> Buterbaugh and Fulton, above n 63, 68.

<sup>75</sup> WTO, *Brazil—Measures Affecting Imports of Retreaded Tyres* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds332\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds332_e.htm)>.

SECEX 14/2004 and Portaria DEC EX 8/1991 was not justified under Article XX(b) of GATT 1994. With respect to the fines imposed by Brazil on importation, marketing, transportation, storage and keeping or warehousing of retreaded tyres, Presidential Decree 3.179, as amended by Presidential Decree 3.919, was not justified under either Article XX(b) or Article XX(d) of GATT 1994. With respect to the measures maintained by the Brazilian State of Rio Grande do Sul for retreaded tyres, Law 12.114, as amended by Law 12.381, was not justified under Article XX(b) of GATT 1994. With respect to Article XX of the GATT 1994, the Appellate Body upheld, albeit for different reasons, the panel's findings that the import ban was not justified under Article XX of the GATT 1994. On 17 December 2007, the DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report. Buterbaugh and Fulton also suggested that the issuance of import licences for retreaded tyres was not justified under Article XX because it constituted a means of unjustifiable discrimination and a disguised restriction to international trade within the meaning of the introductory Paragraph of the same article.<sup>76</sup>

(ix) *Australia—Apples, 2007*<sup>77</sup>

Australia's Director of Animal and Plant Quarantine determined a policy on 27 March 2007 for the importation of apples from New Zealand. New Zealand considered that these restrictions were inconsistent with Australia's obligations under the SPS agreement, particularly Articles 2.1, 2.2, 2.3, 5.1, 5.2, 5.3, 5.5, 5.6, 8 and Annex C. The panel found that the 16 measures were not based on a proper risk assessment and were inconsistent with Article 5.1 and 5.2 of the SPS agreement. The panel also concluded that, by implication, these 16 measures were inconsistent with Article 2.2 of the SPS agreement. The Appellate Body upheld the panel's finding that the 16 measures at issue, both as a whole and individually, constituted SPS measures within the meaning of Annex A(1) and were covered by the SPS agreement. The Appellate Body also upheld the panel's finding regarding the 16 measures that were inconsistent with Articles 5.1 and 5.2 of the SPS agreement and that, by implication, those measures were also inconsistent with Article 2.2

<sup>76</sup> Buterbaugh and Fulton, above n 63, 69.

<sup>77</sup> WTO, *Australia—Measures Affecting the Importation of Apples from New Zealand* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds367\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds367_e.htm)>.



of the SPS agreement. The Appellate Body then completed the legal analysis and found that New Zealand had not established that the 16 measures at issue were inconsistent with Australia's obligations under these provisions of the SPS agreement. At its meeting on 17 December 2010, the DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report. Implementation was notified by respondent on 2 September 2011.

The common trend observed from the above case findings is that there is no consistency in dealing with SPS-related articles. Each article is interpreted differently in different cases. In most cases, Appellate Body findings are opposite to the panel findings. This warrants necessary reform in the SPS agreement and a reduction in gaps in understanding and interpreting the agreement.

*(b) Existing Sanitary and Phytosanitary Regulations of Bangladesh*

Bangladesh, being a member of the WTO, is entrusted with controlling the quality and safety of food and protecting the health of humans, animals and plants. The BSTI, the national standards body, is responsible for setting up national standards for goods and services, product certification and measurement activities throughout the country. The laws and regulations involving implementation of SPS measures to control safety and quality of food for human consumption are as follows:

- *The Bangladesh Standards and Testing Institution Ordinance, 1985, as amended in 2003*
- *The Pure Food Ordinance, 1959, as amended in 2005*
- *The Pure Food Rules, 1976*
- *The Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983*
- *The Fish and Fish Products (Inspection and Quality Control) Rules, 1997*
- *The Protection and Conservation Fish Act, 1950*
- *The Protection and Conservation Fish Rules, 1985*
- *The Marine Fisheries Ordinance, 1983*
- *The Marine Fisheries Rules, 1983*

- *The Private Fisheries Protection Act, 1889*
- *The Fisheries Research Institute Ordinance, 1984*
- *The Bangladesh Environment Conservation Act, adopted 1995*
- *The Environment Conservation Rules, adopted 1997*
- *The Environment Court Act, adopted 2000*
- *The Nuclear Safety and Radiation Control Act, 1993*
- *The Nuclear Safety and Radiation Controls Rules, 1997.*<sup>78</sup>

Under the above rules and regulations and as per international and national standards, codes of practice and recommendations (SPS measures) are implemented in regards to microbiological investigations, determination of maximum residue limits and its control, food additives, metal contamination mycotoxin contaminants, packaging and labelling requirements. To protect animal and plant health and life from risks arising from additives, contaminants, toxins or disease-causing organisms in their food and from pests and diseases and to prevent human life from animal and plant carried diseases, the government of Bangladesh takes action on application of the WTO SPS agreement through enforcement of the following laws and regulations:

- *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*
- *The Livestock Research Institute Ordinance, 1984.*<sup>79</sup>

Under the above laws and regulations, the Plant Protection Wing of the Department of Agriculture Extension is involved in regulating quarantine measures for plant and plant products, the Department of Livestock regulates quarantine activities of animal and animal products intended for export and import and livestock research activities and the Department of Forest regulates conservation activities in forest and wildlife conservation

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<sup>78</sup> Government of the People's Republic of Bangladesh, *Laws of Bangladesh* <<http://bdlaws.minlaw.gov.bd/>>.

<sup>79</sup> Ibid

activities. Although Bangladesh has sufficient domestic regulations to protect human, animal and plant life and health during importation and exportation of goods, the country has problems with compliance of these regulations in meeting international standards. The above mentioned laws and regulations are discussed in the relevant chapters relating to SPS measures and their implications on Bangladesh market access. This discussion will identify loopholes that need to be modified or upgraded for ensuring compliance with international standards and recommend reform of WTO rules, which have serious implications on Bangladesh's market access as an LDC.

### *3 The WTO Agreement on Technical Barriers to Trade*

The TBT agreement deals with the regulations of a product relating to its quality, size and performance. Compliance with technical regulations is mandatory,<sup>80</sup> as they set product characteristics or related PPMs, including applicable administrative provisions. However, compliance with the standards is not mandatory, as it is a voluntary<sup>81</sup> document approved by a recognised body that provides rules, guidelines or characteristics of products or related PPMs for common and repeated use. Both the technical regulations and standards may include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements.<sup>82</sup> Both government and non-government bodies use these mechanisms to specify the characteristics to which products must conform for safety, health and environmental purposes.<sup>83</sup> The technical regulations and standards are the core ER issues of this research. Like the SPS agreement, the core ERs of the TBT agreement are discussed in the context of LDC market access.

The TBT agreement is one of the most important legal instruments used by the WTO to achieve its objective. All products, including industrial and agricultural products, are

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<sup>80</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') annex 1 [1], 137.

<sup>81</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') annex 1 [2], 137.

<sup>82</sup> Ibid

<sup>83</sup> Ibid art 2.2; Alam, above n 32, 75.

subject to the provisions of the WTO TBT agreement.<sup>84</sup> The principal aim of the TBT agreement is to ensure that technical regulations are not formulated and applied to create market access barriers. The preamble of the TBT agreement reaffirms the agreement's purpose as:

to ensure that technical regulations and standards, including packaging, marking and labeling requirements, and procedures for assessment of conformity with technical regulations and standards do not create unnecessary obstacles to international trade.<sup>85</sup>

The TBT agreement seeks to ensure that the non-discrimination and national treatment provisions of the GATT 1994 are applied during the adoption of technical regulations. Its preamble recognises the right to adopt regulations concerning 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 like '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'.<sup>86</sup>

Several regulations in developed countries apply stringent rules on food quality, packaging and labelling. Obtaining approvals is a lengthy process that involves substantial documentation and tedious bureaucratic procedures. However, such barriers are encountered not only in developed country markets but also in developing countries. Addressing these issues could increase south-south trade.<sup>87</sup> Technical standards and SPS standards aimed at ensuring food safety are also a substantial obstacle for expanding the fish trade. To comply with different foreign technical regulations and standards involves

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<sup>84</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade'), 121-42.

<sup>85</sup> Ibid

<sup>86</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') art 2.2, 122.

<sup>87</sup> *Methodologies, Classifications, Quantification and Development Impacts of Non-Tariff Barriers*, UN Doc TD/B/COM.1/EM.27/2 (23 June 2005) 11.

significant costs for producers and exporters that might discourage manufacturers from trying to sell abroad.<sup>88</sup>

Growing bodies of legal rulings on disputes brought to the GATT and the WTO have served to provide guidance on the interpretation of this provision, which could provide a large loophole through which the TBT agreement could be applied. One of the most important disputes relating to environmental protection is the US restriction on import of shrimp.<sup>89</sup> The dispute relates to the obligation of the use of turtle excluder devices during wild capture of turtles to prevent incidental injury to some of their species. The WTO ruling confirms that unilateral environmental measures on the part of one country are not, *per se*, inconsistent with the WTO.<sup>90</sup>

Two kinds of PPMs have significant environmental effects. First, a PPM can affect the characteristics of a product so that the product itself may pollute or degrade the environment when it is consumed or used. This is known as a product-related PPM. Alternatively, a process or method itself can have a negative effect on the environment when natural resources are harvested or extracted in the production phase. This is known as a non-product-related PPM.<sup>91</sup> As noted by Gaines,<sup>92</sup> non-product-related PPMs are often used to regulate the acquisition of primary resources and have regulated the practices of fisheries, farms, loggers, miners and hunters. In the *EC—Asbestos* case,<sup>93</sup> the Appellate Body suggested that a product characteristic may include features, qualities, attributes or distinguishable mark. However, the TBT agreement covered only the ‘related process and production method’ that affected the final products, that is, product-related PPMs. In that case, an importing member can impose non-product-related PPMs without contravening the

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<sup>88</sup> Ibid

<sup>89</sup> WTO, *India etc versus US: ‘Shrimp–Turtle’* <[http://www.wto.org/english/tratop\\_e/envir\\_e/edis08\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/edis08_e.htm)>.

<sup>90</sup> Spencer Henson and John S. Wilson (eds), *The WTO and Technical Barriers to Trade*, Critical Perspectives on the Global Trading System and the WTO Series (Edward Elgar Publishing Limited, 2005) XVII.

<sup>91</sup> Cathy Roheim Wessells et al, ‘Product Certification and Labelling for Fisheries Sustainability’ (FAO Fisheries Technical Paper 422, 2001) 63.

<sup>92</sup> S Gaines, ‘Products and Production Methods: How to Produce Sound Policy for Environmental PPM-based Trade Measures’ (2002) 27 *Columbia Journal of Environmental Law* 399.

<sup>93</sup> WTO, *European Communities—Asbestos* <[http://www.wto.org/english/tratop\\_e/envir\\_e/edis09\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/edis09_e.htm)>.

TBT agreement. This aspect of the TBT agreement might create problems for developing countries, particularly, LDCs, as they heavily depend on primary industries.<sup>94</sup> Another argument against PPMs is that PPM-based conformity assessment needs to be done at the production site, which makes the assessment expensive. Finally, the producing countries either need to introduce new technology or lose market access.<sup>95</sup>

The TBT agreement also indicates that difficulties faced by developing countries in the development of international standards should be considered.<sup>96</sup> In regards to technical assistance, it also indicates that priority to LDCs should be provided.<sup>97</sup> Article 12.4 of the TBT agreement makes special provisions for developing countries in relation to international standards and regulations. It recognises that, while international standards may exist, developing members may adopt 'certain technical regulations, standards or conformity assessment procedures aimed at preserving indigenous technology and production methods'. As a result, developing 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'.

In practice, despite these principles, the legitimate objectives exception can be used as an excuse to introduce more stringent regulations, even in a settled condition of international standards.<sup>98</sup> Thus, this standard will need to impose a non-market environmental cost on the producer, which would increase production costs and create a market access constraint for developing countries, particularly LDCs.

TBT measures have also arisen when standards, regulations and assessment systems intended to ensure safety are not applied uniformly. Experience has shown that duplication of testing procedures that do not add value to a product adds to the cost of compliance.<sup>99</sup>

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<sup>94</sup> Alam, above n 32, 75.

<sup>95</sup> Wessells et al, above n 91, 65.

<sup>96</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') art 11.2, 133.

<sup>97</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') art 11.8.

<sup>98</sup> Alam, above n 32, 78.

<sup>99</sup> Ibid

Overall, the TBT agreement was designed to combat the trade-distorting effects of different national regulations on products. It does this by encouraging the adoption of international standards, while allowing individual members to impose their own standards where appropriate.<sup>100</sup> Predictably, LDCs will lack the clean technologies, financial resources and infrastructure to comply with the eco-labelling requirements of the importing country. There has been a proposal to extend the coverage of the TBT and SPS agreements to include eco-labelling schemes with a view to harmonising the product standards.<sup>101</sup> The criteria in eco-labelling schemes are determined by a national body, rather than internationally, and vary from product to product. As a result, it is difficult for exporters in LDCs to have sufficient information about and advance knowledge of the standards to ensure they comply with them. Thus, product standards can be used as NTBs to the trade interests of LDCs.<sup>102</sup>

*(a) Interpretation of TBT Measures in the WTO Dispute Body*

As of now,<sup>103</sup> a total of 47 cases<sup>104</sup> have cited the TBT agreement from which few are discussed here. Some cases are discussed in Chapters 4, 5, 6 and 7. Important cases concerning environment and health regulations that cited TBT measures are *EC—Beef Hormones, 1998*; *EC—Asbestos, 2001* and *EC—Biotech, 2006*. Some current cases are now under consultation, for example, *European Union and Certain Member States—Certain Measures on the Importation and Marketing of Biodiesel and Measures Supporting the Biodiesel Industry, 2013*<sup>105</sup> and *Australia—Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging, 2013*.

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<sup>100</sup> Ibid

<sup>101</sup> Ibid 17.

<sup>102</sup> Ibid

<sup>103</sup> Now being 5 July 2013.

<sup>104</sup> WTO, *Dispute Settlement: Disputes by Agreement* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_agreements\\_index\\_e.htm?id=A19#selected\\_agreement](http://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm?id=A19#selected_agreement)>

<sup>105</sup> WTO, *European Union and Certain Member States—Certain Measures on the Importation and Marketing of Biodiesel and Measures Supporting the Biodiesel Industry* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds459\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds459_e.htm)>.

In the *EC—Beef Hormones* case, the US cited Article 2 of the TBT against the EC; however, neither the panel nor the Appellate Body found anything in regards to Article 2 of the TBT agreement.<sup>106</sup> In the *EC—Asbestos* case,<sup>107</sup> Canada cited Article 2 of the TBT agreement against the EC. The panel found that the ‘prohibition’ part of the Decree of 24 December 1996 did not fall within the scope of the TBT agreement. However, as Canada did not claim concern because of compatibility with the TBT agreement of the part of the decree relating to exceptions, the panel refrained from reaching any conclusion in this regard.<sup>108</sup> The Appellate Body reversed the panel’s findings, saying that the TBT agreement does not apply to the prohibitions of these products and found that the TBT agreement applies to the measure viewed as an integrated whole. The Appellate Body concluded that it was unable to examine Canada’s claims that the measure was inconsistent with the TBT agreement.<sup>109</sup> In the *EC—Biotech* case, the US cited TBT Articles 2, 2.1, 2.2, 2.8, 2.9, 2.11, 2.12, 5, 5.1, 5.2, 5.6 and 5.8 against the EC. However, the panel did not find any inconsistency with the TBT agreement.<sup>110</sup>

*(b) TBT Regulations in Bangladesh*

The Ministry of Commerce acts as a National Notification Authority for TBT notifications concerning standards, technical regulations and conformity assessment procedures, where BSTI is working as the national standards body. The regulations governing its activities are:

- *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*

<sup>106</sup> WTO, *Brazil—Measures Affecting Imports of Retreaded Tyres* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds332\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds332_e.htm)>.

<sup>107</sup> *European Communities—Measures Affecting Asbestos and Asbestos-Containing Products*, WTO Doc WT/DS135/AB/R, AB-2000-11(2001) [133-40].

<sup>108</sup> Ibid

<sup>109</sup> Ibid

<sup>110</sup> WTO, *European Communities—Measures Affecting the Approval and Marketing of Biotech Products* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds291\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds291_e.htm)>.



- *Product Labelling Policy, 2006*
- *Packaged Commodities Rules, 2007.*

### *(c) Development of Standards*

The Bangladesh standards are developed by considering its national perspective, manufacturing needs, industrial development, health and welfare of the public and promotion of export. They are based on international standards, which include product specification, test methods, system standards, guidelines and code of practices. Up until 2010, BSTI had developed 3,300 standards for the food and agricultural sector (648), chemical sector (630), jute and textile sector (685), electrical and electronic sector (461) and other engineering sector (866).<sup>111</sup> The development of national standards is essential for both national and international consumers, as it will improve overall market access. However, current progress is below expectations because of a lack of technology and capacity of staff involved.

### *(d) Product Certification*

As a leading national certification body, BSTI issued approximately 14,500 licences covering more than 170 products. The product certification scheme is developed in line with the ISO Guide 65.<sup>112</sup> As of now,<sup>113</sup> BSTI has brought 155 products under the mandatory certification system.<sup>114</sup> Out of which 64 products from the Food and Agriculture sector; 40 products from the Chemical sector; 11 from Textile and Jute sector; 25 from Electrical and Electronic sector and 15 from other Engineering sector.<sup>115</sup> Accordingly, 39 imported products are also brought under the mandatory certification system.<sup>116</sup>

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<sup>111</sup> Bangladesh Standards and Testing Institute Annual Report, 2010, (Ministry of Industries, Government of Bangladesh, 2010) 7

<sup>112</sup> Ibid

<sup>113</sup> Now being 30 June 2013.

<sup>114</sup> See <[www.bsti.gov.bd](http://www.bsti.gov.bd)>.

<sup>115</sup> Ibid

<sup>116</sup> Ibid

#### *(e) Management System Certification*

Considering the increasing trends of entry into various innovative dimensions in the international arena, BSTI has taken the task of management system certification, which includes a quality management system, environmental management system and food safety management system.<sup>117</sup>

#### *(f) Testing Laboratories*

Measurement and testing always play a key role in standardisation and quality assurance activities. For quality assurance of products, there is a need to assess the conformity of the requirements of the standards and, as such, BSTI set up laboratories at its inception. Bangladesh needs to have technological support from developed countries in setting up new laboratories and also needs proper training for operational staff so they can work properly with new technology.

To establish acceptability and develop market access of Bangladesh products and services in the global market and to create confidence in consumers, a policy on packaging and labelling requirements has been framed and published as the *Packaged Commodities Rules, 2007*. It specifies that the manufacturer name and address, date of production and expiry, list of ingredients, list of additives, net weight shall be marked legibly on the package.<sup>118</sup>

Bangladesh exporters have experienced various kinds of TBT-related barriers. For example, testing requirements and compliance with Indian standards are considered the most formidable NTBs. The testing laboratories of India are located far away from the import points in West Bengal and North-East India and it takes 15–20 days to obtain results.<sup>119</sup> Moreover, India's packaging requirements, as per *Standards of Weights and Measures Rules, 1977*, labelling requirements for jute bags, requirements of certificate regarding the content of non-halogenated hydrocarbon to jute products and testing requirements for soap are some

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<sup>117</sup> Ibid

<sup>118</sup> *Packaged Commodities Rules, 2007*.

<sup>119</sup> Ibid

of the barriers faced by Bangladesh exporters.<sup>120</sup> The market access barriers that are due to TBT regulations are discussed in the relevant chapters with a view to identify gaps and provide guidelines to overcome the negative effects and ensure sustainable development.

#### *4 The WTO Agreement on Agriculture*

The objective of the AOA is to establish a fair and market-oriented agricultural trading system and to commit to achieving specific binding commitments in each of the three pillars: market access, domestic support and export competition.<sup>121</sup> Members have committed to the idea that the reform process should be initiated through negotiations in an equitable way among all members, taking into consideration special and differential treatment for developing countries and possible negative effects of implementation of the reform programme for LDCs and net food importing countries.<sup>122</sup>

Many developing countries have an advantage in agricultural products compared to developed countries; however, subsidised exports of surplus agricultural production from developed countries depress prices on the international market. Poorer countries cannot afford the subsidy for export and this reduces the comparative and competitive advantage from the world market.<sup>123</sup> Thus, agricultural subsidy causes barriers to LDC market access.

In its preamble, the AOA reiterates members' commitment to reform agriculture in a manner that protects the environment. Under the agreement, domestic support measures with minimal effect on trade (green box policies) are allowed and are excluded from reduction commitments, which are listed in Annex 2 of the agreement. Among them are expenditures under environmental programmes, provided that they meet certain conditions.

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<sup>120</sup> Ibid

<sup>121</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') 33.

<sup>122</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') 33.

<sup>123</sup> Alam, above n 32, 61.

Again, the exemption enables governments to capture ‘positive environmental externalities’.<sup>124</sup>

Agriculture plays a vital role in providing livelihood to a large proportion of the population of Bangladesh, as more than 60 per cent of the total work force is engaged in this sector.<sup>125</sup> The rules governing agricultural trade are strengthened, which will lead to improved predictability and stability for importing and exporting countries alike. The WTO definition excludes fish and fish products and jute (among crops) but includes certain tree products, such as cigarettes, that are processed from agricultural products.<sup>126</sup> Research analyses the provision of the domestic support provided by developed countries regarding the exemption from the reduction commitment in a way that protects the environment and how this provision is creating barriers for Bangladesh’s agricultural product market access.

Domestic regulations of Bangladesh that have market access implications on agricultural products are as follows:

- *The New Agriculture Extension Policy, 1996*
- *National Agriculture Policy, 1999*
- *The Agricultural Census Act, 1958*
- *The Agricultural Debtors Act, 1935*
- *The Agricultural Labour (Minimum Wages) Ordinance, 1984*
- *The Agricultural Produce (Grading and Marking) Act, 1937*
- *The Agricultural Produce Cess Act, 1940*
- *The Agricultural and Sanitary Improvement Act, 1920*
- *The Irrigation Act, 1876*
- *The Seed Ordinance, 1977*
- *The Agriculture Produce Markets Regulation Act, 1964*
- *The Bangladesh Irrigation Water Rate Ordinance, 1983*

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<sup>124</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A (‘Agreement on Agriculture’) annex 2, 48.

<sup>125</sup> Mustafizur Rahman et al, *WTO and Bangladesh Trade Policy* (Centre For Policy Dialogue, 1<sup>st</sup> ed, 2008) 38.

<sup>126</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A (‘Agreement on Agriculture’) annex 1, 47.

- *The Agriculture Pest Ordinance, 1962*
- *The Agriculture Development Corporation Ordinance, 1961*
- *The Jute Regulation Act, 1940*
- *The Jute Ordinance, 1962*
- *The Agricultural Produce (Grading and Marketing) Act, 1937*
- *The Agricultural and Sanitary Improvement Act, 1920*
- *The National Livestock Policy, 2007*
- *The Animal Slaughter (Restriction) and Meat Control Act, 1957*
- *The Bangladesh Veterinary Practitioners Ordinance, 1998.*<sup>127</sup>

The above mentioned laws are discussed in Chapter 4 to provide guidelines for reform with a view to improve agricultural product market access.

#### *5 The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights*

Innovations, ideas and creations are necessary for development and to encourage innovation and investment for innovation. For this reason, the protection of intellectual property (IP) is included in the WTO. The objective of the TRIPS agreement is to encourage creativity and innovation, encourage investment and technology transfer, ensure fair competition and protect consumers. There are approximately nine categories of IP rights from which the 'patent' category is relevant to this research. The WTO TRIPS agreement refers to the environment explicitly in Section 5, which deals with patents. It states (Articles 27.2 and 27.3) that members can make certain inventions ineligible for patenting to protect human, animal or plant life or health, to avoid serious harm to the environment. A member can exclude an invention from patentability if it believes the invention has to be prevented (within its territory) for these and certain other objectives. In addition, plants and animals other than microorganisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes can be made ineligible. Microorganisms have to be eligible for patenting. Invented plant varieties have to be also eligible for protection either by patenting,

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<sup>127</sup> Government of the People's Republic of Bangladesh, *Laws of Bangladesh* <<http://bdlaws.minlaw.gov.bd/>>

or by an effective system specially created for the purpose (“sui generis”), or a combination of the two. Otherwise, plants and animals do not have to be eligible for patenting.<sup>128</sup>

These provisions are designed to address environmental concerns related to IP protection. The TRIPS agreement allows members to refuse to patent inventions that may endanger the environment (provided their commercial exploitation is prohibited as a necessary condition for the protection of the environment). For ethical or other reasons, they can also exclude plants or animals from patentability, subject to the conditions described above. These issues are discussed in Chapter 6 during the discussion of the TRIPS agreement.

The pharmaceutical sector of Bangladesh is much more developed compared to other developing countries and LDCs. The deadline for LDCs to protect IP rights was initially granted a transition period of 11 years up to 1 January 2006, then extended up to July 2013 for 7.5 years and then extended further until 1 July 2021.<sup>129</sup> For pharmaceutical patents, it has been extended to 1 January 2016 to copy patented medicine for domestic consumption and export purposes.<sup>130</sup>

Life forms have been included as subject matter for IP protection in Article 27.5.3(b).<sup>131</sup> Therefore, the TRIPS agreement has implications for biodiversity conservation and the environment. The ecological effects of the TRIPS agreement are related to changes of species interactions and also the socio-cultural context of conservation through ‘increased use of chemicals and biotechnology patents’, which are creating genetically engineered herbicide tolerant crops, and the risks of ‘biological pollution’ as patented genetically engineered organisms are released into the environment.<sup>132</sup> Patent protection is guaranteed

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<sup>128</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C (‘Agreement on Trade-Related Aspects of Intellectual Property Rights’) art 27, 332–3.

<sup>129</sup> WTO, *The Least Developed Get Eight Years more Leeway on Protecting Intellectual Property* <[http://www.wto.org/english/news\\_e/news13\\_e/trip\\_11jun13\\_e.htm](http://www.wto.org/english/news_e/news13_e/trip_11jun13_e.htm)>.

<sup>130</sup> *Doha Work Programme*, WTO Doc WT/MIN(05)/DEC (22 December 2005, adopted 18 December 2005) (Ministerial Declaration).

<sup>131</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C (‘Agreement on Trade-Related Aspects of Intellectual Property Rights’) art 27.5.3(b), 333.

<sup>132</sup> Vandana Shiva, *TRIPs and the Environment*, Third World Network <<http://twinside.org.sg/title/trips-ch.htm>>.

under the TRIPS agreement, which will encourage biotechnological interventions and accelerate the release of genetically engineered organisms in the environment. Most agricultural applications of biotechnology focus on increased use of agrochemicals. The effect of these applications will be higher in developing countries because of their higher levels of livelihood dependent on diversity.<sup>133</sup> Moreover, the promotion of genetic engineering through biotechnology patents will also introduce a new kind of biological pollution, resulting from ‘converting the phyto genetic tree of DNA into an interspecies network’.

The modalities for protecting traditional knowledge (TK) are still emerging and evolving and the issues relating to protecting, recognising and rewarding biological resources are very complex.<sup>134</sup> These conventional forms of IP rights are inadequate to protect indigenous knowledge because they are based on protection of individuals, whereas protection of TK is collective. Further, informal knowledge presents other difficulties in being recognised for the purpose of IP protection. Thus, TRIPS fails to protect TK and has been criticised as a knowledge blockade for developing countries.<sup>135</sup> Moreover, it encourages multinational companies to enter and learn the local knowledge of developing countries and to patent it as their own.<sup>136</sup> Thus, it is becoming difficult for developing countries to use their knowledge for their own purposes.

In Chapter 6, this research analyses the provision of the excluding patentability clause through which developed countries can restrict market access in a way that protects the environment and how this provision is creating barriers for Bangladesh market access. It also analyses Bangladesh domestic regulations on IP laws, particularly the *Merchandise Marks Act, 1889*, *Bangladesh Patent Act, 2012* and other relevant regulations, and provides guidelines for reform with a view to improve overall market access. The existing IP rights and laws in Bangladesh are not adequate to preserve biological diversity, herbal medicines and knowledge, heritage and culture and domestic natural resources.

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<sup>133</sup> Ibid

<sup>134</sup> *Protection of Biodiversity and Traditional Knowledge—the Indian Experience*, WTO Doc WT/CTE/W/156 (14 July 2000).

<sup>135</sup> Alam, above 32, 91.

<sup>136</sup> Ibid

## 6 *The WTO Agreement on Subsidies and Countervailing Measures*

The SCM agreement, which applies to non-agricultural products, is designed to regulate the use of subsidies. The agreement establishes three categories of subsidies: prohibited, actionable and non-actionable.<sup>137</sup> Non-actionable subsidies can be either non-specific subsidies or specific subsidies involving assistance to industrial research and pre-competitive development activity, assistance to disadvantaged regions or certain types of assistance for adapting existing facilities to new ERs imposed by law and/or regulations.<sup>138</sup>

Under the agreement, non-actionable subsidies are generally allowed. Originally, among the non-actionable subsidies that were provided for under Article 8 were subsidies used to promote the adaptation of existing facilities to new ERs (Article 8.2C). This was intended to allow members to capture 'positive environmental externalities' when they arose.<sup>139</sup> Unfortunately, this provision lapsed after five years and the WTO failed to reinstitute this safe harbour. As a result, TREM subsidies are now potentially outlawed by the WTO, including those that may be called for in other WTO agreements.<sup>140</sup> Subsidies related to the AOA are discussed in Chapter 4 and fisheries subsidies are discussed in Chapter 5 with a view to identify the market access implications as trade barriers for LDCs in general and Bangladesh in particular.

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<sup>137</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Subsidies and Countervailing Measures') 231–274.

<sup>138</sup> Ibid

<sup>139</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Subsidies and Countervailing Measures') art 8.2(C), 241.

<sup>140</sup> For example, Article 66.2 of the TRIPS agreement directs developed country WTO members to provide incentives to enterprises and institutions in their territories for the purpose of promoting technology transfer to LDC members.



## *D Current Developments on Trade and Environment Issues in the WTO and the Ways Forward*

WTO members agreed to launch negotiations on the relationship between existing WTO rules and STOs set out in the MEA in the Fourth Ministerial Conference in November 2001 in Doha, Qatar, known as the DDA.<sup>141</sup> The Doha Ministerial Declaration<sup>142</sup> mandated negotiations on different issues from which agriculture, NAMA, WTO rules (SCMs, including fisheries subsidies), trade and environment, TRIPs<sup>143</sup> and public health and special and differential treatment are relevant to this research.<sup>144</sup> Ministers instructed the CTE to pursue work within its current terms of reference with a particular attention to:

- (i) the effect of environmental measures on market access, especially in relation to developing countries, in particular the least-developed among them, and those situations in which the elimination or reduction of trade restrictions and distortions would benefit trade, the environment and development;
- (ii) the relevant provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights; and
- (iii) labeling requirements for environmental purposes.<sup>145</sup>

The Sixth WTO Ministerial Conference was held in Hong Kong from 13 to 18 December 2005 against the backdrop of the Cancun setback in 2003 and increasing consciousness among developing countries about their rights and obligations in the WTS.<sup>146</sup> The Hong Kong Ministerial Conference achieved limited success, which is discussed in Chapters 4, 5, 6 and 7 during the discussion on agricultural and NAMA negotiations. It mainly provided some guidelines for the modalities on agriculture and NAMA and decided to conclude the

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<sup>141</sup> WTO, *Doha Round* <[http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm#development](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm#development)>.

<sup>142</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration).

<sup>143</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') 320–53.

<sup>144</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration).

<sup>145</sup> *Ibid* [31].

<sup>146</sup> *Doha Work Programme*, WTO Doc WT/MIN(05)/DEC (22 December 2005, adopted 18 December 2005) (Ministerial Declaration).

Doha Round by the end of 2006. In reality, all dead lines set in the Hong Kong Ministerial Declaration were missed.

In the Seventh Ministerial Conference in Geneva, ministers reaffirmed the need to conclude the Doha Round in 2010. LDC-specific issues were underlined as needing particular attention, including DFQF market access, cotton and the LDC waiver for services.<sup>147</sup> The contribution the WTO can make by removing barriers to trade in environmental goods and services was widely endorsed. There were also warnings against green protectionism. Concern was voiced about the effect of private standards on trade, especially for developing countries.<sup>148</sup> Subsequently, the Eighth Ministerial Conference<sup>149</sup> in Geneva from 15 to 17 December 2011 again suggested the conclusion of the Doha Round as soon as possible. The Ninth Ministerial Meeting is scheduled to be held in Bali, Indonesia, from 3 to 6 December 2013.<sup>150</sup>

Director-General Roberto Azevêdo, in his inaugural speech to the WTO General Council on 9 September 2013, said that his full priority would be to ensure that they have a successfully negotiated outcome in the ninth Ministerial Conference.<sup>151</sup> He urges for credible results in the upcoming WTO Ministerial Meeting in Bali, Indonesia 3-6 December 2013.<sup>152</sup> He reiterated to strengthen the implementation and monitoring functions of the WTO to maintain vigilance against protectionism that is one of the most important aspects of WTO work.<sup>153</sup> World Trade Report 2012 emphasizes the regulatory measures such as technical barriers to trade (TBT) and sanitary and phytosanitary (SPS) measures in goods and domestic regulations in services raise a new and pressing challenges for international cooperation in the 21<sup>st</sup> century. In this context, this thesis is topical in

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<sup>147</sup> WTO, *Seventh WTO Ministerial Conference*

<[http://www.wto.org/english/thewto\\_e/minist\\_e/min09\\_e/min09\\_e.htm](http://www.wto.org/english/thewto_e/minist_e/min09_e/min09_e.htm)>.

<sup>148</sup> Ibid

<sup>149</sup> WTO, *Eighth WTO Ministerial Conference*

<[http://www.wto.org/english/thewto\\_e/minist\\_e/min11\\_e/min11\\_e.htm](http://www.wto.org/english/thewto_e/minist_e/min11_e/min11_e.htm)>.

<sup>150</sup> WTO, *Ninth WTO Ministerial Conference*

<[http://www.wto.org/english/thewto\\_e/minist\\_e/mc9\\_e/mc9\\_e.htm](http://www.wto.org/english/thewto_e/minist_e/mc9_e/mc9_e.htm)>

<sup>151</sup> WTO Director General Roberto Azevêdo launches “rolling set of meetings” aimed at delivering success in Bali in his inaugural speech to the WTO General Council on 9 September 2013, see at

<[http://www.wto.org/english/news\\_e/news13\\_e/gc\\_09sep13\\_e.htm](http://www.wto.org/english/news_e/news13_e/gc_09sep13_e.htm)>

<sup>152</sup> Ibid

<sup>153</sup> Ibid

articulating LDC s market access challenges. This thesis is the first that deals with Bangladesh market access implications under environmental requirements with a view to examine its domestic regulations.

In the formal meeting of the SPS committee on 30–31 March 2011, members took the first step on private standards in food safety and animal and plant health.<sup>154</sup> Some members raised concerns about private standards in food safety and animal and plant health<sup>155</sup> and others saw benefits in private standards.<sup>156</sup> Ultimately, the SPS committee agreed on five actions.<sup>157</sup> Members are still exploring how to implement the next course of action in which they would exchange information on private standards and build up their understanding of the relationship between international and government standards.<sup>158</sup>

There are differences among member countries relating to priorities, ambition levels and specific interests in particular areas. Developed countries are more interested in opening up markets for industrial goods in developing countries and developing countries are more interested in opening up markets for agricultural products in developed countries. Developing countries and LDCs have common interests in either specific issues or in the issue of specific coalitions, like G11, G20, G77 and G90.<sup>159</sup>

The WTO supports sustainable development and the environment through its specialised committees, like the CTE, and bodies like the TBT committee.<sup>160</sup> As a forum for dialogue on trade and the environment, the committee works as an incubator for ideas on how to move the discussion forwards. Generally, issues are raised in the CTE and then become

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<sup>154</sup> WTO, *Members Take First Steps on Private Standards in Food Safety, Animal–Plant Health* <[http://www.wto.org/english/news\\_e/news11\\_e/sps\\_30mar11\\_e.htm](http://www.wto.org/english/news_e/news11_e/sps_30mar11_e.htm)>.

<sup>155</sup> Ibid; Private standards are not always based on science; they deviate from international standards or from official governmental requirements (for example, for maximum residue limits). In most cases, they pose disproportionate burdens on small- and medium-sized producers and exporters in developing countries.

<sup>156</sup> Ibid; Private standards help suppliers comply with national and international standards when they prescribe how those standards should be met. They promote best practices and improved productivity; give brands a better reputation and help suppliers have access to markets and credit; address emerging risks in a rapid manner, filling gaps, and make it easier for international standards to eventually be adopted.

<sup>157</sup> Ibid

<sup>158</sup> Ibid

<sup>159</sup> Rahman et al, above n 125.

<sup>160</sup> Ibid

fully-fledged negotiations, for example, on fisheries subsidies and on the relationship between the WTO and MEAs. Other WTO bodies, for example, the TBT agreement, deal with regulations, standards, testing and certification procedures where governments share information on actions they are taking and discuss how some environmental regulations may affect trade.<sup>161</sup>

The current Doha Round of negotiations provides members with an opportunity to accomplish efficient allocation of resources on a global scale through the continued reduction of obstacles to trade. The round is also an opportunity to chase win-win-win results for trade, development and the environment. Environmental issues have featured explicitly in the Doha Round in the context of a MTN and the overarching objective is to enhance the mutual supportiveness of trade and environment.<sup>162</sup> Members are working to liberalise trade in goods and services that can benefit the environment and are discussing ways to maintain a harmonious co-existence between WTO rules and the STOs in various agreements that have been negotiated multilaterally to protect the environment. Other parts of the Doha negotiations (aspects of agriculture negotiations and also disciplines on fisheries subsidies) are also relevant to the environment.<sup>163</sup>

However, developed countries are already in a better position in regards to understanding, interpretation and implementing WTO rules compared to developing countries because of their financial and technological advancement.<sup>164</sup> Moreover, the introduction and interpretation of the WTO's green measures in setting up domestic standards of exportable products for developing countries that are higher than international standards create controversy between developed and developing countries. This raises a number of disputes in the DSB of the WTO.<sup>165</sup> Participation in the DSB also depends on the financial capacity of member countries. Developing countries, particularly LDCs have difficulty accessing the

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<sup>161</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') 135.

<sup>162</sup> WTO, *Doha Round* <[http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm#development](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm#development)>

<sup>163</sup> Ibid

<sup>164</sup> Alam, above n 32, 97.

<sup>165</sup> WTO, *Dispute Settlement: Disputes by Agreement* <[http://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_agreements\\_index\\_e.htm?id=A19#selected\\_agreement](http://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm?id=A19#selected_agreement)>

DSB because of their inadequate financial resources, which increases their fear of disguised restriction in the international trade. However, a number of studies suggest that exports from developing countries and LDCs are negatively and notably affected because of ERs, particularly SPS and TBT measures.<sup>166</sup>

## *E Conclusions*

International trade liberalisation and environmental protection are inseparably linked and mutually supportive of the objective of economic progress. However, their international profiles often misrepresent these two agendas as mutually exclusive. The maximisation of world trade and the minimisation of protectionism are the overriding goals of the WTO/MTS. The proper functioning of the multilateral trade liberalisation warrants a system where all members are able to participate meaningfully and find their interests reflected equitably.

This chapter examined the ER-related agreements and provisions of the GATT/WTO and their implications on LDC market access in general and Bangladesh in particular. It also examined the work of the WTO CTE and the SPS and TBT committees and their concerns regarding LDC market access barriers in regards to ERs. It observed that GATT Article XX, together with SPS and TBT agreements, deals with ERs in terms of risk assessment, scientific evidence, quality, technical regulations, standards, symbols, packaging, marking, labelling, eco-labelling and PPMs. While analysing GATT/WTO cases, it observed that these requirements were used by different countries under different circumstances to protect human, animal and plant life or health. However, most of them were used as protectionist measures by developed and advanced developing countries to protect their domestic industries. Moreover, there was no consistency between the panel and Appellate Body reports regarding the interpretation of such requirement-related provisions of these agreements. In regards to standards, the TBT agreement states that members may set their

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<sup>166</sup>Uttam Kumar Deb, 'Non-Tariff Barriers in Agricultural Trade: Issues and Implications for Least Developed Countries' (2007) 12 *Asia-Pacific Research and Training Network on Trade*, 2; Brenton Paul and Miriam Manchin, Making EU Trade Agreements work: The Role of Rules of origin, *The World Economy*, (2003) 26(5), 755; Fahmida Khatun, Fish Trade Liberalisation in Bangladesh : Implications of SPS Measures and Eco-Labelling for the Export Oriented Shrimp Sector, *CPD Research Monograph* (2006) 1, 6.

standards higher than international standards, which has created concerns among developing countries and LDCs. These requirements are tested in the sector-specific chapters (Chapters 4, 5, 6 and 7).

This chapter also outlined the SPS and TBT-related domestic regulations of Bangladesh that have market access implications under environmental measures. Some of the regulations are discussed in this chapter and others are discussed in the sector-specific chapters. In analysing the domestic regulations, it was observed that Bangladesh has been facing regulatory-related barriers in terms of a lack of a coordinated approach, a lack of updating compliance-related issues, a lack of institutional and individual capacity of stakeholders, a lack of finance and a lack of technology. As such, the country argued for total reform of domestic regulations and management systems based upon proper need assessment and undertake necessary actions to remove or eradicate barriers to achieve the Millennium Developmental Goals. Bangladesh, as an LDC, cannot expect to derive meaningful benefit from global trade liberalisation until the architecture of existing agreements are changed to make them more LDC friendly and unless special and developmental treatment commitments made by development partners are legally binding. The following chapter discusses the market access challenges of agricultural products in Bangladesh under environmental concerns.

#### IV ENVIRONMENTAL CONCERNS: MARKET ACCESS CHALLENGES AND OPPORTUNITIES OF BANGLADESH AGRICULTURAL PRODUCTS\*

##### *A Introduction*

Although trade liberalisation has been recognised as an important element of the sound economic policy and GATT has been successful in opening global trade in manufacturing, expanding this process to the agricultural sector has proved difficult to achieve.<sup>1</sup> Difficult questions arise because of the complexity of the issues that come with the diverse interests of developed and developing countries and LDCs in the areas of market access, domestic support and export competition. The new round of agricultural negotiations under the WTO has produced a highly contentious agenda.<sup>2</sup> A study concluded that trade liberalisation for developing countries is crucial in the sustainable economic development process.<sup>3</sup> This chapter analyses the market access implications of Bangladesh agricultural products because of environmental concerns derived from PPMs, standards, eco-labelling, packaging and GIs for the safety of human, animal and plant life and health.

Access to agricultural products in protected domestic markets remains a troublesome problem of global economic integration.<sup>4</sup> Cairns Group<sup>5</sup> outlined that:

agriculture was effectively excluded for the first four decades of the GATT's existence which enabled rich developed economies to protect and subsidize their farmers with dire consequences for other agricultural trading nations.<sup>6</sup>

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\*A part of this chapter was presented as 'WTO's Environmental Requirements: Agricultural Market Access Challenges of Bangladesh as an LDC' in the seminar presentation of Legal Research 903 (Coursework Unit for PhD) on 09 November 2011 at the Macquarie University, Australia.

<sup>1</sup> Ingco D Merlinnda and Alan L Winters (eds), *Agriculture and the New Trade Agenda* (Cambridge University Press, 1<sup>st</sup> ed, 2004) 34.

<sup>2</sup> WTO, *Agriculture Negotiations: Chairperson's Texts 2008* <[http://www.wto.org/english/tratop\\_e/agric\\_e/chair\\_texts08\\_e.htm](http://www.wto.org/english/tratop_e/agric_e/chair_texts08_e.htm)>.

<sup>3</sup> Anju J Mathew and Santiago Fernandez de Cordoba, 'The Green Dilemma about Liberalisation of Trade in Environmental Goods' (2009) 43.2 *Journal of World Trade* 379.

<sup>4</sup> Merlinnda and Winters, above n 1, 34.

<sup>5</sup> The Cairns Group is a unique coalition of 19 developed and developing agricultural exporting countries with a commitment to achieving free trade in agriculture. The group has been an influential voice in the agricultural trade reform debate since its inception in 1986.

Alam<sup>7</sup> pointed out that ‘while agriculture is important from an economic perspective, its environmental consequences can be equally as serious’. For example, fertilisers and pesticides that are used generally for agriculture cultivation pollute the ground water. The contaminated ground water can then destroy plant and animal species through irrigation, ultimately, causing soil, water and air pollution. In Bangladesh, arsenic<sup>8</sup> accumulates in the food chain in high concentrations, which is dangerous for human and animal life or health.<sup>9</sup> However, critically, if any food is contaminated by arsenic or any other element, pests or disease, the importing country may restrict the importation of these products for their safety. This is covered under the WTO SPS agreement and GATT 1947 Article XX(b). The possibility of such contamination has created concerns for domestic and international consumers and, ultimately, has affected international trade markets. However, as developing countries have an interest in agriculture, it has become an area of concern for all. Hence, ERs and their implications for the economic development of LDCs are chosen for discussion in this thesis.

The initiation of the process for a global AOA, one of the ongoing agendas of the WTO, was considered a major achievement of the Uruguay Round. Commitments to liberalise trade, particularly trade in tropical agricultural products, are of interest to many South Asian countries where agriculture, on average, still accounts for approximately one-third of GDP.<sup>10</sup> Many developing countries and some LDCs have an advantage in agricultural products compared to developed countries. However, the price of the international market depresses this advantage because of subsidised exports of surplus agricultural production from developed countries.<sup>11</sup> LDCs cannot afford subsidy for export as they do not have adequate money to spend in this sector, using it instead to fulfil their basic needs. LDCs

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<sup>6</sup> The Cairns Group, *Background on the Cairns Group and the WTO Doha Round* <[http:// CairnsGroup.org/Pages/wto\\_negotiations.aspx](http:// CairnsGroup.org/Pages/wto_negotiations.aspx)>.

<sup>7</sup> Shawkat Alam, *Sustainable Development and Free Trade, Institutional Approaches* (Routledge, 1<sup>st</sup> ed, 2008) 84.

<sup>8</sup> Arsenic is a heavy metal that affects human and animal life or health in quantities higher than .005 mm/litre of water.

<sup>9</sup> S M Imamul Huq et al, 'Arsenic Contamination in Food-chain: Transfer of Arsenic into Food Materials through Groundwater Irrigation' (2006) 24(3) *Journal of Health, Population and Nutrition* 305–16.

<sup>10</sup> Mustafizur Rahman, 'Market Access Implications of SPS and TBT: Bangladesh Perspective' (Research Report #0215, CUTS Centre for International Trade, Economics & Environment, 2002) 8.

<sup>11</sup> Ibid 29.



have been reducing their comparative and competitive advantage in the world market because of a lack of financial stability.<sup>12</sup>

Agriculture is one of the main drivers of Bangladesh economic growth and its contribution to GDP stood at 19.41 per cent in the 2011 to 2012 financial year and is estimated to be at 18.70 per cent in the 2012 to 2013 financial year.<sup>13</sup> Approximately 47.5 per cent of the total labour force of the country is engaged within the agricultural sector.<sup>14</sup> In the 2012 to 2013 financial year, Bangladesh earned US\$535.74 million by exporting agricultural products. This is 1.98 per cent of total export earnings (US\$27018.26 million) for that period.<sup>15</sup> Bangladesh,<sup>16</sup> along with other LDCs, has been demanding exclusion from any kind of reduction commitment, as they have significant importance in the agricultural sector from the perspective of food security, poverty alleviation, rural development and rural employment. This is because the country provides main food items like rice and wheat, which reduce poverty and ensure development in rural areas by generating employment. The agricultural sector accounts for about one-fourth of Bangladesh's GDP.<sup>17</sup> Rahman<sup>18</sup> argued that the employment opportunities provided by the agricultural sector and its multiplier affect the Bangladesh economy. As this affects the lives and livelihood of its people, the sector's importance cannot be overemphasised. He also added that market access for agricultural commodities is important for Bangladesh in ongoing negotiations with the WTO for two reasons. Firstly, deeper cuts in agro-tariffs of developed countries

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<sup>12</sup> Ibid 30.

<sup>13</sup> Ministry of Finance, *Bangladesh Economic Review* (2013). <[http://www.min.gov.bd/en/budget/13\\_14/ber/bn/Chapter-07%20\\_Bangla\\_%202013.pdf](http://www.min.gov.bd/en/budget/13_14/ber/bn/Chapter-07%20_Bangla_%202013.pdf)> 91.

<sup>14</sup> Ibid

<sup>15</sup> EPB statistics (2012–2013), available at <<http://www.epb.gov.bd>>.

<sup>16</sup> Bangladesh was known as the country of golden fibre because of its jute, which was the economic engine of the country. Its share of the world export market peaked in the Second World War and the late 1940s at 80 per cent. Even in the early 1970s, jute accounted for 70 per cent of its export earnings. However, polypropylene products began to be substituted for jute products worldwide and the jute industry started to decline. Bangladesh grows very significant quantities of rice, tea, potato, mango, onion and mustard. According to the FAO of the UN, Bangladesh is one of world's largest producers of rice (4th), potato (11th), mango (9th), pineapple (16th), tropical fruit (5th), onion (16th), banana (17th), jute (2nd) and tea (11th).

<sup>17</sup> Ministry of Finance, above n 13.

<sup>18</sup> Mustafizur Rahman et al, *WTO and Bangladesh Trade Policy* (Centre For Policy Dialogue, 1<sup>st</sup> ed, 2008) 50–51.

could enhance market access for the country's agro-products and, secondly, to safeguard the interests of the country's crucially important rural and agrarian sectors.<sup>19</sup>

Livestock is an important sub sector of agriculture and it has a direct contribution of approximately three per cent to the agricultural GDP and provides 15 per cent of total employment in the economy.<sup>20</sup> The livestock subsector includes poultry and offers important employment and livelihood opportunities, particularly for the rural poor where approximately 75 per cent of people rely on livestock to some extent for their livelihood. In Bangladesh, approximately eight per cent of total protein for human consumption comes from livestock in the form of milk, meat and eggs. Hides and the skin of cattle, buffaloes, goats and sheep are valuable export items, ranked third in earnings after RMGs and shrimp. Despite highest cattle densities being in Bangladesh, 145 large ruminants/km<sup>2</sup> compared with 90 for India, 30 for Ethiopia and 20 for Brazil, current production of milk, meat and eggs are inadequate to meet the current requirement and deficits are 85.9 per cent, 77.4 per cent and 73.1 per cent, respectively.<sup>21</sup> This illustrates the urgency to increase the production of milk, meat and eggs. The Bangladesh Poverty Reduction Strategy Paper<sup>22</sup> stresses the importance of the livestock sub sector in sustaining the acceleration of poverty reduction in the country. Thus, the dynamic potential of this emerging subsector requires critical policy attention.

The AOA is primarily responsible for dealing with market access of agricultural products.<sup>23</sup> However, there is controversy in regards to interpretation and use of some of its provisions, which necessitates further reform through ongoing Doha negotiations.<sup>24</sup> For example, Article 6.1 of the AOA explicitly provides the opportunity for excluding domestic support measures with minimal effect on trade from reduction commitments listed in Annex 2 of the agreement. This provision has provided flexibility to developed countries in the case of

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<sup>19</sup> Ibid

<sup>20</sup> *National Livestock Policy, 2007.*

<sup>21</sup> Ibid

<sup>22</sup> IMF, 'Bangladesh: Poverty Reduction Strategy Paper' (IMF Country Report No 05/410, IMF, November 2005).

<sup>23</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') preamble.

<sup>24</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration).

reduction commitments so that they may provide domestic support in the name of environmental programmes.<sup>25</sup> These subsidies greatly influence developed countries' production costs, meaning that they are lower than developing countries. This provision has created debate between developed and developing countries regarding market access of their product interest, which is discussed in detail throughout this chapter.

In relation to aggregate measure of support (AMS),<sup>26</sup> Bangladesh supports the provisions contained in Article 6.2 of the AOA relating to investment and input subsidies and demanding the exclusion of product-specific support provided to low-income and resource-poor farmers from AMS calculations. Current AMS support (at 10 per cent of Agriculture-GDP) for developed countries has seriously undermined the market access of LDCs to the extent that Bangladesh is demanding that AMS is brought down, preferably to five per cent. Moreover, Bangladesh is supporting proposals for the elimination of Article 13 (the due-restraint clause known as the peace clause), which protects green box<sup>27</sup> and blue box<sup>28</sup> subsidies from challenges.<sup>29</sup> These provisions are discussed in detail in the relevant sections of this chapter.

The aforementioned provisions of the AOA, together with the provisions of the SPS and TBT agreements, have pushed major challenges onto agricultural market access and, hence, their implications are analysed in the context of developing countries and, particularly, in the context of the Bangladesh agricultural trade. Simultaneously, the domestic regulations and policies of Bangladesh that have a direct or an indirect contribution to agriculture trade are analysed to ensure these regulations are more responsive to international rules and regulations to ensure potential growth in the Bangladesh agricultural sector.

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<sup>25</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') annex 2, 48–53.

<sup>26</sup> Aggregate Measure of Support is known as AMS.

<sup>27</sup> Green box subsidies are discussed in the following section.

<sup>28</sup> Blue box subsidies are discussed in the following section.

<sup>29</sup> Rahman, above n 10, 24.

## *B Trade in Agriculture and Market Access Challenges because of Environmental Requirements*

### *1 How the WTO Rules Agriculture?*

Agricultural tariffs and price supports are the last bastion of US and European protectionism.<sup>30</sup> While all other areas of commerce have embraced change and welcomed open-market international commerce, agriculture has remained the single holdout.<sup>31</sup> According to Lowenfeld:

If one wanted to bring international trade in agriculture into a system roughly comparable with other components of the international economy, it is evident from the preceding section that one would have to address market access, export subsidies and domestic supports to the extent they lead to over-production.<sup>32</sup>

He also pointed out that the AOA provides all three devices under a kind of international discipline.<sup>33</sup> The Uruguay Round Agreement on Agriculture (URAA) instituted a major reform of the world agricultural trading system to address trade distortions in the above mentioned three policy domains: market access, domestic support and export subsidies.<sup>34</sup> New rules and quantitative guidelines were agreed in all domains and a framework created for moving agricultural support towards less trade-distorting forms. However, the agriculture policy reform under the URAA has not been significant to date and only limited progress has been made since 1995 in reducing agricultural protection and market insulation.<sup>35</sup> Thus, the new round provides an important opportunity for deepening the process of agricultural reform and trade liberalisation.

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<sup>30</sup> John Francis Hays, *Global Agricultural Price Supports the Political and Economic Forces that Drive Unsustainable Agricultural Protectionism Policy* (PhD Thesis, The University of Southern Mississippi, 2010) <[http://aquila.usm.edu/theses\\_dissertations/1050](http://aquila.usm.edu/theses_dissertations/1050)>.

<sup>31</sup> Ibid

<sup>32</sup> Andreas F. Lowenfeld, *International Economic Law*, International Economic Law Series (Oxford University Press, 2<sup>nd</sup> ed, 2008) 320.

<sup>33</sup> Ibid 321.

<sup>34</sup> Merlininda and Winters, above n 1, 17.

<sup>35</sup> Ibid

### *(a) Market Access*

Market access for food or agricultural products is conditioned by a number of factors reflecting marketing cost, tariffs, cost of complying standards and government regulations.<sup>36</sup> According to Article 4 of the AOA, market access concessions contained in schedules relate to bindings and reduction of tariffs and other market access commitments, as specified therein. All member countries of the WTO are required to replace all types of NTBs with tariff barriers and reduce the levels of tariffs under a time-bound programme. On market access, negotiations should be more straightforward than in the Uruguay Round because tariffication has already made border protection more transparent.<sup>37</sup> The other concern is tariff-rate quotas (TRQ), which ideally should be eliminated or, if this is not feasible, market access should be expanded by liberalising all three TRQ parameters. A study<sup>38</sup> conducted on EU and WTO approaches to distinguish between market access barriers and legitimate national regulation argued that applications of exceptions to fundamental rules concern free movement and market access. Josling<sup>39</sup> argued that non-tariff import measures are more diverse and less transparent. From these, SPS measures are the most important because of their significant contribution to providing barriers to entry into foreign markets, as discussed in detail in Chapter 3. Market access barriers that are due to ERs will be analysed and discussed further throughout the chapter. The issues of domestic support and export subsidies are discussed in the following sections, given that they have an indirect effect on market access under environmental concerns.

### *(b) Domestic Support*

Article 6 of the AOA specifies that domestic support squeezes out imports or leads to export subsidies and low-priced dumping in the world market by encouraging

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<sup>36</sup> Tim Josling and Donna Roberts, 'Measuring the Impact of SPS Standards on Market Access' (Report, OECD and International Food and Agriculture Trade Policy Council, 13 September 2011) 1.

<sup>37</sup> Ibid

<sup>38</sup> Emily Ried, 'Regulatory Autonomy in the EU and WTO: Defining and Defending Its Limits' (2010) 44.4 *Journal of World Trade* 877.

<sup>39</sup> Josling and Roberts, above n 36.

overproduction domestically. These supports are provided in the names of different boxes, as detailed below.

*(i) Amber Box*

The colour of this box means to slow down. Domestic policies that have a direct effect on production and trade have to be cut back, calculating how much support is provided per year for the agricultural sector through total AMS in the base year of 1986–1988. Developed countries agreed to reduce these by 20 per cent over six years, beginning in 1995. Developing countries agreed to a 13 per cent reduction over 10 years and LDCs do not need to cut any of these policies.

*(ii) Green Box*

Measures with minimal effect on trade can be used freely and are labelled as green box measures. These include government services, such as research, disease control, infrastructure and food security. These also include payments made directly to farmers that do not stimulate production, such as certain forms of direct income support, assistance to help farmers in restructuring agriculture and direct payments under environmental and regional assistance programmes.

*(iii) Blue Box*

Certain direct payments to farmers are also permitted where farmers are required to limit production. These are known as blue box measures and include certain government assistance programmes to encourage agricultural and rural development in developing countries and other small-scale supportive measures, known as *de minimis*, when compared with the total value of product or products supported (five per cent or less for developed countries and 10 per cent or less for developing countries).

According to Article 6.4(a), members shall not be required to include in the calculation of total AMS and shall not be required to reduce the product-specific domestic support<sup>40</sup> and non-product-specific domestic support<sup>41</sup> where such support does not exceed five per cent of that member's total agricultural production,<sup>42</sup> whereas, for developing countries, the *de minimis* percentage shall be 10 per cent.<sup>43</sup> In domestic support, Dimitris<sup>44</sup> argued that a significant reduction of trade distortions would require addressing the various weaknesses in the AMS discipline and strengthening the eligibility criteria for exempt policies to ensure that only the trade-distorting programmes are excluded; eliminating the peace clause and reviewing the role of special and differential treatment for developing countries. For developing countries, such as India, the provisions of Article 6.4(a), (i) and (ii) only serve to restrict the flexibility of use of domestic support measures by countries that provide support below the *de minimis* level. India has argued that the operation of the provision of Article 6.4(a), (i) and (ii) should be suspended until the domestic support levels of all countries come down below *de minimis* levels.<sup>45</sup>

In relation to AMS, Bangladesh can gain by supporting the provisions contained in Article 6.2 of the AOA relating to investment and input subsidies and should argue that the product-specific support provided to low-income and resource-poor farmers should be excluded from AMS calculation.

The AOA text remains incomplete and contains many brackets, such as in special safeguard mechanisms (SSM), preference erosion and tropical products, which need to be addressed properly in ongoing negotiations. Modalities for export competition and domestic support have more technical issues (TRQs, SSM) outstanding, which need to be addressed. The

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<sup>40</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 6.4(a), (i).

<sup>41</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 6.4(a), (ii).

<sup>42</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 6.4(a).

<sup>43</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 6.4(b).

<sup>44</sup> Dimitris Diakosavvas, 'The Uruguay Round Agreement on Agriculture' in Merlininda D Ingo and Alan L Winters (eds) *Agriculture and New Trade Agenda* (Cambridge University Press, 1<sup>st</sup> ed, 2004).

<sup>45</sup> Ibid

number of tiers, their thresholds and a comparatively deeper cut in higher tariff is beneficial for Bangladesh. However, Bangladesh needs to negotiate for the exclusion of its interest products from the sensitive list. Moreover, the current initiative taken by the TNC regarding the revised draft modalities on agriculture negotiation should be carried out in light of developmental needs of developing countries, particularly LDCs where countries like Bangladesh can benefit because of their comparative advantage in agriculture.

*(c) Export Subsidies*

Article 8 of the AOA prohibits export subsidies on agricultural products unless the subsidies are specified in the member's list commitments. Taking averages for 1986–1990 as the base level, developed countries agreed to cut the values of their export subsidies by 36 per cent over six years beginning in 1995 (24 per cent over 10 years for developing countries). Developed countries also agreed to reduce quantities of subsidised export by 21 per cent over the next six years beginning in 1995 (14 per cent over the next 10 years for developing countries). LDCs do not need to make any cuts. During the implementation period, developing countries are allowed, under certain conditions, to use subsidies to reduce the cost of marketing and transporting exports. The URAA disciplines on export subsidies have been more effective than on tariffs or domestic support; however, further reduction in distortion in trade could be achieved through proper strengthening. Dimitris<sup>46</sup> argued that the coverage of export subsidies should be broadened to hold all policies that have the potential to distort export competition, such as aspects of the parasitical trade agencies, revenue pooling arrangements, international food aid, export credits, export taxes and export restraints. In addition, the rules concerning the unused export subsidy, the definition of export subsidy and the issue of cross-subsidisation among markets should be tightened.<sup>47</sup> Therefore, the needs of net food importing countries should be considered before diminishing export subsidies. Hence, special provision should be adopted to compensate net food importing countries, like Bangladesh.

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<sup>46</sup> Ibid

<sup>47</sup> Merlinnda and Winters, above n 1, 18.



Article 13 of the AOA, known as the peace clause, has provided exemption under certain conditions that members shall be exempt from the imposition of countervailing duties and other actions based on Paragraph I of Article XVI of the GATT 1994 or Articles 5 and 6 of the Subsidies Agreement.<sup>48</sup> The peace clause has received serious criticism on market access for agro-products. It has been dubbed a reverse special and differential, as it provides developed countries with a safeguard against countervailing duties with respect to amber measures.<sup>49</sup> Developing countries are in favour of the abolition of Article 13 and Bangladesh supports them.

There is a major limitation in analysing the performance of agricultural trade in connection with the WTO because of the definition of agriculture itself. The WTO definition is different from the conventional definition. Conventionally, all crops, livestock and primary diary processing and fisheries and forestry activities are included in agriculture. However, the WTO definition excludes fish and fish products and jute (among crops); however, it includes certain tree products, such as sorbitol, manitol, essential oils, glue and other such items. It also includes some industrial items, such as cigarettes that are processed from agricultural products.<sup>50</sup> Given this, fish and fish product market access is discussed separately (see Chapter 5) in accordance with NAMA negotiations. The export performance of Bangladesh agricultural products for the period July to June 2013 is shown in Table 4.1 (US\$535.74 million from total export of US\$27018.26 million).

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<sup>48</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 13(a), (b) and (c) 43–44.

<sup>49</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 13, 43–44.

<sup>50</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') annex 1, 47.

**Table 4.1: Export Performance of Bangladesh Agricultural Products**

<b>Agriculture Products (Chapter 04-24)</b>	<b>535.74</b>
a) Tea (0902)	2.44
b) Vegetables (07)	110.34
c) Tobacco (24)	60.18
d) Cut Flower (06)	41.43
e) Fruits (08)	71.89
f) Spices (0910)	21.13
g) Dry Food (19)	45.24
h) Others	183.09

Source: EPB Statistics, 2013

## *2 Specific Provisions of Agreement on Agriculture      Dealing with Environmental Requirements*

In its preamble, the agreement seeks members' commitment to protect the environment.<sup>51</sup> Annex 2 of the AOA provides the opportunity to provide domestic support in the name of expenditure under an environmental programme if certain conditions are met. These support measures are known as green box policies, which are excluded from the reduction commitment. For example, the government may provide any payment to its farmers as domestic support for the sole purpose of protecting and promoting the environment. However, these exemptions are full of conditions, including that they should have no or, at most, minimal trade-distorting effects or effects on production.<sup>52</sup> Again, the exemption enables governments to capture 'positive environmental externalities'.

Reduction in domestic support provided by developed and developing countries is likely to increase the price of food in the international market. Therefore, it will affect the price for consumers of net food importing countries, like Bangladesh. Reduction in domestic support

<sup>51</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') 33.

<sup>52</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') annex 2, 48.

in cotton is likely to increase the cotton price globally, which may affect Bangladesh's RMG sector. Conversely, a reduction in applied and bound tariff rates will provide greater market access for Bangladesh products in both developed and developing countries. The export of bovine meat, sheep meat, poultry, roots and tubers, raw sugar, tropical oilseeds and bananas may increase if the applied and bound tariffs rates are reduced. A study conducted by Nielsen<sup>53</sup> on green farm subsidies concluded that WTO law responds poorly to situations involving trade-distorting farm subsidies. This provision is providing an upper hand to developed countries in providing domestic support in the name of an environmental programme and reducing the cost of agricultural products, which indirectly provides market access barriers for developing countries, particularly for LDCs like Bangladesh, since they have a comparative advantage in agriculture. Developing countries have asked that this provision not be excluded from the reduction commitment. Developing countries are attempting to bring this issue to the negotiation table under the green box subsidy and to include this type of subsidy in the reduction commitment, which is being used as a protectionist measure.

### *3 WTO's Other Agreements Dealing with Environmental Requirements for Agricultural Market Access*

#### *(a) Sanitary and Phytosanitary Barriers to Agricultural Trade*

Although access for agricultural products to the protected domestic market is a major problem in the world economy, with the conclusion of the Uruguay Round negotiations, a cohesive multilateral framework has emerged to discipline the agricultural sector, which WTO member countries now use to protect and provide support.<sup>54</sup> The SPS agreement is one of the new frameworks that provide an international policy regime for trade when there

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<sup>53</sup> Laura Nielsen, 'Green Farm Subsidies Sponsoring Eco Labeling: Is the Separation of Market Access and Subsidies Regulation in WTO Law Sustainable?' (2009) 43(6) *Journal of World Trade* 1193.

<sup>54</sup> Merlininda and Winters, above n 1, 329. Laura Nielsen, 'Green Farm Subsidies Sponsoring Eco Labeling: Is the Separation of Market Access and Subsidies Regulation in WTO Law Sustainable?' (2009) 43(6) *Journal of World Trade* 1193.

<sup>54</sup> Merlininda and Winters, above n 1, 329.

is risk to human, animal and plant life or health.<sup>55</sup> Order et al.<sup>56</sup> have expressed that this agreement will bring agricultural products into the trade regulatory regime by expanding the scope of the GATT. To this extent, they state that:

all nations maintain complex regulatory regimes governing the production, processing and sales of agricultural commodities and foodstuff. The SPS Agreement was intended as a bulwark against the widely perceived failure of the GATT to prevent the misuse of such measures for protectionist purposes.<sup>57</sup>

The SPS agreement sought to impose commitments on transparency, risk-assessment-based decisions, equivalence and harmonisation to define their own standards of protection, while facilitating the international market.<sup>58</sup> Order et al.<sup>59</sup> found that only limited progress has been made under equivalence and harmonisation of standards, stating:

The developing countries have reaped some benefits as the SPS Agreement has opened new markets. However, once international rules delineate SPS regulations, private and public investments are required to ensure that exported commodities meet the specified health and safety standards.<sup>60</sup>

Agricultural producers have to be innovative to take advantage of new opportunities. In parallel, the domestic rule making authorities, together with the implementation agencies, should provide utmost support to the producers to enable them to successfully market their products. To achieve further benefit, Bangladesh, together with other LDCs, should take steps to discipline their SPS measures in accordance with their need to cope with new trade opportunities.

#### *(i) Transparency*

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<sup>55</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') preamble.

<sup>56</sup> David Order, Tim Josling and Don Roberts, 'Sanitary and Phytosanitary Barriers to Agricultural Trade: Progress, Prospects and Implications for Developing Countries' in Merlinda Dingaco and Alan L. Winters (eds) *Agriculture and the New Trade Agenda* (Cambridge University Press, 2004) 329.

<sup>57</sup> Ibid

<sup>58</sup> Discussed in Chapter 3.

<sup>59</sup> Order, Josling and Roberts, above n 57.

<sup>60</sup> Ibid

Governments create or modify SPS regulations to reflect scientific and technological innovation in production, processing, detection and eradication methods. Annex B of the SPS agreement requires countries to notify trading partners to ensure compliance with the SPS agreement's transparency provisions.<sup>61</sup> Transparency requirements are particularly important because exporters often complained about the market access barriers of SPS measures before the Uruguay Round.<sup>62</sup> Although transparency measures do not stop the abuse of SPS measures, they provide an effective measure for compliance and complaints.

Transparency is achieved by notification of proposed changes in regulations that affect trade. A report<sup>63</sup> that focused on the period between June 2007 and August 2009 indicated that 57 per cent of notifications had not used international standards. When compared across country income groups, the lowest proportional adoption of international standards occurs in high income countries (22 per cent), with upper-middle income countries being average (45 per cent) and lower-middle income countries being the greatest (76 per cent).<sup>64</sup>

Recent growth in the use of private standards as benchmarks in the global food trade might be a partial cause of lower adoption of international standards in high income countries. Business-led initiatives, such as the Global Food Safety Initiative, currently recognise seven major food safety schemes<sup>65</sup> and are gaining ground. Major international retailers, food service chains and manufacturers, such as Ahold, Wal-Mart, Carrefour, Coca Cola, McDonalds and Nestle, are now using these benchmarks.<sup>66</sup>

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<sup>61</sup> Niaz Ahmed Khan and Athaur Rahman Belal, 'The Politics of the Bangladesh Environment Protection Act' (1999) 8 *Environment Politics* Annex B 311.

<sup>62</sup> The Uruguay Round of Multilateral Negotiations started on 20 September 1986 on the Ministerial Declaration in Punta del Este, Uruguay, and continued until 15 April 1994 before coming to a final decision to form the WTO at Marrakesh, Morocco, on 12–15 April 1994.

<sup>63</sup> WTO: *Overview Regarding the Level of Implementation of the Transparency Provisions of the SPS Agreement*, WTO Doc G/SPS/ GEN/804/Rev.2 (2009c) (Note by the Secretariat) available at <[www.wto.org](http://www.wto.org)>.

<sup>64</sup> Ibid

<sup>65</sup> These schemes include the British Retail Consortium Global Food Standard Version 5, the Dutch HACCP Option B, Food Safety System Certification, Global Red Meat Standard, International Food Standard Version 5 GLOBALGAP (Worldwide Good Agricultural Practice) and FMI's Safe Quality Food 2000 Level 2.

<sup>66</sup> Josling and Roberts, above n 36, 5.

In Bangladesh, BSTI is the only national standards body entrusted with the responsibility of formulating national standards for industrial, food and chemical products, keeping in view regional and international standards.<sup>67</sup> BSTI is responsible for the quality control of products that comply with specific national standards made by technical committees that are formed by BSTI and is also responsible for the implementation of the metric system and to oversee the accuracy of weights and measures in the country. It became the member of ISO in 1974. At present, BSTI is the member, affiliate member, contact point and nodal point of different international and regional organisations.<sup>68</sup> The institution's task is to prepare standards for all articles, products, methods and services. The institution can bring any product under its compulsory certification marking after approval of the government. A regulation has already been notified by a special regulatory order named BSTI Regulation 1989 for this purpose. BSTI marks cannot be used under any circumstances by others without approval in advance from BSTI. Only the standards approved and passed by the institution are called Bangladesh standards. As a rule, the Bangladesh standards are voluntary. A list of 155 products is brought under the Mandatory Certification Mark Scheme from which 64 are food and agriculture related.<sup>69</sup>

#### *(ii) Risk Management Based on Scientific Risk Assessment*

Risk management based on scientific risk assessment is regulated by the SPS agreement, which stipulates the basic rights and obligations of members to ensure that every SPS measure is 'based on scientific principles and is not maintained without sufficient scientific evidence'.<sup>70</sup> It also deals with the assessment of risk and determination of the appropriate

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<sup>67</sup> BSTI, *List of 155 Products Brought Under Mandatory Certification Marks Scheme* < [http://bsti.gov.bd/cert\\_mark\\_productList.html](http://bsti.gov.bd/cert_mark_productList.html)>.

<sup>68</sup> These organisations include the International Organization for Legal Metrology, Code of FAO/WHO, International Electrotechnical Commission, Asia Pacific Metrology Programme, Asian Forum for Information Technology, ISO Information Network and Standing Group for Standardization, Metrology, Testing and Quality.

<sup>69</sup> BSTI, above n 67, see the product list.

<sup>70</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 2.

level of SPS protection and states that members must base SPS measures on scientific risk assessment.<sup>71</sup>

In the recent WTO *Australia—Apples* case,<sup>72</sup> New Zealand challenged the import risk analysis of Australia, which imposed a number of requirements with which New Zealand must comply for permission to export apples to Australia. The panel found that the measures were not based on a proper risk assessment and, accordingly, were inconsistent with Article 5.1 and 5.2 of the SPS agreement. The panel also concluded that, by implication, these measures were inconsistent with Article 2.2 of the SPS agreement, which requires that SPS measures be based on scientific principles and not be maintained without sufficient scientific evidence.<sup>73</sup> The Appellate Body upheld the panel's finding that the measures at issue, both as a whole and individually, constituted SPS measures within the meaning of Annex A(1) and were covered by the SPS agreement. The Appellate Body also upheld the panel's finding that the measures were not based on a proper risk assessment and, accordingly, were inconsistent with Articles 5.1 and 5.2 of the SPS agreement and that, by implication, those measures were also inconsistent with Article 2.2 of the SPS agreement.<sup>74</sup> As of 8 May 2013, 458 cases have been brought to the WTO, where Bangladesh was a party in only two cases—the complainant in one<sup>75</sup> (under Antidumping Article 2, 3, 5, 6 and 12 and GATT Article I, II, VI and XXIII) and a third party in another<sup>76</sup> (under Rules of Origin Article 2). None of the measures are related to any of the provisions of the SPS agreement. However, as the issue of risk assessment is increasingly demanded as a means of product quality by importing countries, it is necessary to take appropriate steps through the respective authorities for the smooth exportation of Bangladesh agricultural products.

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<sup>71</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 5.

<sup>72</sup> Panel Report, *Australia—Measures Affecting the Importation of Apples from New Zealand*, WTO Doc WT/DS367/R (9 August 2010); Appellate Body Report, *Australia—Measures Affecting the Importation of Apples from New Zealand*, WTO Doc WT/DS367/AB/R (29 November 2010).

<sup>73</sup> Panel Report, *Australia—Measures Affecting the Importation of Apples from New Zealand*, WTO Doc WT/DS367/R (9 August 2010).

<sup>74</sup> Ibid

<sup>75</sup> *India—Anti-Dumping Measure on Batteries from Bangladesh*, WTO Dispute DS306 (28 January 2004).

<sup>76</sup> *United States—Rules of Origin for Textiles and Apparel Products*, WTO Dispute DS243 (20 June 2003).

### *(iii) The Equivalence Obligation*

As mentioned in an earlier chapter, the SPS agreement requires members to accept SPS measures of other members as equivalent, even if these measures differ from their own, if the exporting member shows that its measures achieve the importing member's appropriate level of SPS protection.<sup>77</sup> However, on request, reasonable access shall be given to the importing member for inspection, testing and other relevant procedures and members shall enter into consultations with the aim of achieving bilateral and multilateral agreements on recognition of the equivalence of specified SPS measures.<sup>78</sup>

Equivalence usually applies to process standards that countries can easily compare by attributing the end products. According to Order et al.,<sup>79</sup> a growing proportion of SPS measures are process standards, which are generally an inefficient means of achieving regulatory goals. Process standards continue to emerge as components of risk management programs, particularly in Hazard Analysis and Critical Control Point (HACCP)<sup>80</sup> regulations, which an expanding number of countries mandate for a number of food products. Thus, the equivalence obligation has the potential to yield significant benefits in international markets for food products like cheese, meats, fresh produce and seafood for which process standards are key policy instruments for managing microbiological risk.<sup>81</sup> While the SPS committee has urged members to submit information on their bilateral equivalence agreements and determinations, little progress has been made so far.

In the *Japan—Agricultural Products II*<sup>82</sup> case, the US requested consultations with Japan about the latter's prohibition, under quarantine measures, of imports of certain agricultural products. The US alleged violations of Articles 2, 5 and 8 of the SPS agreement, Article XI of the GATT 1994 and Article 4 of the AO. In addition, the US made a claim for

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<sup>77</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 4.

<sup>78</sup> Order et al, above n 56, 330.

<sup>79</sup> Ibid

<sup>80</sup> HACCP is discussed in Chapter 5.

<sup>81</sup> Order et al, above n 79, 330.

<sup>82</sup> *Japan—Measures Affecting Agricultural Products*, WTO Dispute DS76(19 March 1999).



nullification and impairment of benefits. The panel found that Japan acted inconsistently with Articles 2.2 and 5.6 of the SPS agreement and Annex B and, consequently, Article 7 of the SPS agreement. The Appellate Body upheld the basic finding that Japan's varietal testing of apples, cherries, nectarines and walnuts was inconsistent with the requirements of the SPS agreement.<sup>83</sup> Developing countries have reached few equivalence agreements and have expressed concern regarding the fulfilment of the equivalence criteria.<sup>84</sup> A number of equivalence arrangements between developing and developed countries do exist, particularly for seafood products. Developing countries muted the claims of developed countries and have argued that developed countries often require compliance rather than equivalence of measures.<sup>85</sup> As LDCs are lacking laboratory, inspection and certification infrastructure and the test-related costs are expensive for their exporters, this effectively creates a market access barrier. Bangladesh has faced equivalence-related barriers of its products in India because the BSTI test result was not recognised by the Indian counterpart. However, these issues are now resolved under the South Asian Free Trade Area.<sup>86</sup> Moreover, developing countries should evaluate whether the sixty-day timeframe for providing comments on notified measures is appropriate for their needs or whether it should be modified. New language should be included in Annex B to stress the expectation that comments provided in the drafts should be reflected in the final texts. The WTO Secretariat could be encouraged to set up a database that includes SPS measures implemented by members, as this could have a major effect on developing countries' exports.

The interpretation of equivalency as 'sameness' is depriving Article 4.1 of its function, which recognises that different measures may achieve the same level of SPS protection so that countries can enjoy a certain level of flexibility regarding the kind of measure to adopt. This should be spelled out more clearly in the article. Moreover, considering the lack of recognition of developing countries' conformity assessment certificates, set up of internationally financed regional or sub-regional laboratories, certification bodies and

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<sup>83</sup> Ibid, 315.

<sup>84</sup> Simonetta Zarrilli, 'WTO Sanitary and Phytosanitary Agreement: Issues for Developing Countries' (Working Paper 3, South Centre, Trade-related Agenda, Development and Equity (TRADE), July 1999).

<sup>85</sup> Order et al, above n 59, 339.

<sup>86</sup> See <<http://www.saarc-sec.org/>>.

accreditation institutions should be included in the article and these institutions should be supervised by the Codex, the World Organization for Animal Health (OIE) and the Secretariat of the International Plant Protection Convention (IPPC). Moreover, Article 4 could be expanded to include mutually recognised agreements on conformity assessment.

*(iv) Harmonising SPS Measures*

One of the key principles of the SPS agreement is to urge countries towards greater harmonisation of health and safety standards. Article 3 of the SPS agreement (Harmonisation) urges the widest possible harmonisation of countries' SPS measures based on internationally recognised standards, mainly the Code of Food Safety Measures, the IPPC for plant health measures and the International Office of Epizootics for animal health measures.<sup>87</sup> The potential benefits of harmonisation for exporters are considered more than transparency because the former eliminates the need to comply with different regulations. Consumers may also benefit from harmonisation if regulatory heterogeneity among countries lower prices is eliminated and product choice is expanded. Differences in actual risks, tastes and income levels may make harmonisation inappropriate. Article 3 of the agreement does allow a country to maintain measures that are stricter than international standards and consumers in higher-income countries may be willing and able to pay for a higher level of food safety.

According to Josling, the WTO's promotion of harmonisation has been less successful than its attempts to increase transparency or require that measures be based on risk assessment.<sup>88</sup> During the recent review of the SPS committee, India<sup>89</sup> noted that 'it is still difficult for members to assess the degree of harmonisation of various SPS measures imposed by different members with the relevant international standards'. Developing countries are concerned that adoption of international standards to provide effective market access has not been achieved up until now and expressed dissatisfaction regarding the increasing use of private standards that might nullify expected market gains. MERCOSUR<sup>90</sup> reported

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<sup>87</sup> Ibid

<sup>88</sup> Josling and Roberts, above n 39, 330.

<sup>89</sup> *Third Review of the WTO SPS Agreement: Proposal by India*, WTO Doc G/SPS/W/236 (17 April 2009a).

<sup>90</sup> MERCOSUR refers to the Southern Common Market of Argentina, Brazil, Paraguay and Uruguay.

concerns about private standards ‘based on commercial quality schemes and a non-scientific and market approach’.<sup>91</sup>

Since developing countries are not participating effectively in the standard-setting process and are facing problems in complying with measures based on international standards, reference should be made in the article to the need of international standards to be developed through a fair process, based on consensus and considering the developmental needs of different countries and different geographical regions. The SPS committee should develop a set of rules for international standard setting organisations to which they must adhere.

#### *(v) Special Considerations for Developing Countries*

In addition to the abovementioned mechanisms, the SPS agreement contains special provisions for developing countries. Article 9 of the SPS agreement urges that technical assistance be provided to help developing countries promote production and monitoring systems to meet worldwide health and environmental standards. The dynamics of science, technological innovation and advancement, together with consumer preference, private sector investment and public sector institutional activities, are pressing to keep the agricultural sector competitive and underscore the need for technical assistance to developing countries. Since technical assistance is essential for the fulfilment of SPS obligations, which generally require significant scientific capacity, technical cooperation should be extended to this end. Therefore, Article 9 should make reference to upgrading laboratories, certification bodies and accreditation institutions to strengthen the ability of developing countries to deal with scientific issues. Article 9.2 should be strengthened by making technical cooperation mandatory when new SPS measures are introduced by the importing country that create barriers for developing countries. The credits, donations and grants provided to this end should be based on the individual needs of developing countries to allow them to fulfil the obligations of the agreement and benefit from it.

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<sup>91</sup> *Third Review of the WTO SPS Agreement: Guidelines on the Implementation of Article 13 of the SPS Agreement* (Argentina, Brazil, Paraguay and Uruguay), WTO Doc G/SPS/W/245 (2009b) (Communication from MERCOSUR)(18 March 2010).

Article 10 of the SPS agreement urges that members are encouraged to take account of the special needs of developing countries in specifying their regulations. However, it does not often serve the interest of developing countries to seek relaxation of standards. Developing countries are making efforts to meet these standards but are being hampered by structural and institutional weaknesses in their economies. However, in the case of special and differential treatment on legitimate SPS regulations, any risk resulting from special and differential treatment is borne within the country that grants the exemption. Special and differential provisions should be converted into specific obligations. Therefore, developing countries should be entitled to receive special support from their trade partners and from relevant international organisations in relation to agricultural products of particular export interest to them to ensure that SPS measures do not hamper export of their listed products.

*(b) Technical Barriers to Agricultural Trade*

The TBT agreement is related to international rules to product standards in the trade of goods. Here, only agricultural goods will be discussed in accordance with the objectives of this chapter. The five principles that guide TBT regulations are non-discrimination, harmonisation, least trade restrictive measures, equivalence and transparency, most of which are relevant to the SPS agreement mentioned above. Technical regulations are implemented by governments to attain certain objectives, like prevention of deceptive practices, protection of human, animal and plant health and protection of the environment. Article 5.5 of the TBT agreement encourages countries to participate in various international standard setting organisations and to develop their own national standards. Under the TBT agreement, governments are not bound to use international standards if it is deemed inappropriate because of climatic factors, geographical factors and technological problems.<sup>92</sup> TBT agreements also have special and differential provisions, like the SPS agreement, that ensure compliance would entail commitment of substantive financial resources for the interest of developing countries and LDCs.

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<sup>92</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') art 2.4.

In the *EC—Approval and Marketing of Biotech Products*<sup>93</sup> case, Argentina requested consultations with the EC concerning certain measures taken by the EC and its member states affecting imports of agricultural and food imports from Argentina. According to Argentina, the measures at issue appeared to be inconsistent with the EC's obligations under Articles 2, 5, 7, 8 and 10 and Annexes B and C of the SPS agreement; Article 4 of the AOA; Articles I, III, X and XI of the GATT 1994 and Articles 2, 5 and 12 of the TBT agreement. The panel found that the EC applied a general de facto moratorium on the approval of biotech products between June 1999 and August 2003 —when the panel was established. Before the panel, the EC had denied the existence of such a moratorium categorically. Further, the panel found that, by applying this moratorium, the EC had acted inconsistently with its obligations under Annex C(1)(a), first clause, and Article 8 of the SPS agreement because the de facto moratorium led to undue delays in the completion of EC approval procedures. However, the panel found that the EC acted inconsistently with its obligations under other provisions raised by the applicant, including Articles 5.1, 5.5, 5.6, 2.2 and 2.3 of the SPS agreement.

An analysis<sup>94</sup> regarding the effect of measures notified by importing countries under the SPS and TBT agreements on bilateral trade flows first suggested that SPS and TBT measures have, on the whole, a negative effect on trade in agricultural products. It also showed that OECD exporters are not affected significantly by these measures in their exports to other OECD members. Conversely, exports of developing countries and LDCs to OECD countries are significantly reduced by these regulations. For example, Chinese export sales declined because of product safety incidents in 2007, even reducing sales for firms with no safety problems.<sup>95</sup> Their analysis suggests that much remains to be done to improve the position of developing countries and LDCs in the international agricultural

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<sup>93</sup> *European Communities—Measures Affecting the Approval and Marketing of Biotech Products*, WTO Dispute DS293 (19 March 2010).

<sup>94</sup> Lionel Fontagné and Mondher Mimouni Anne-Célia Disdier, 'The Impact of Regulations on Agricultural Trade: Evidence from SPS and TBT Agreements' (Working Paper No 2007-04, CEPII, 4 February 2007).

<sup>95</sup> Liu Hunnan, William A Kerr and Jill E Hobbs, 'Product Safety, Co-lateral Damage and Trade Policy Responses: Restoring Confidence in China's Exports' (2009) 43.1 *Journal of World Trade* 97.

trade. As stressed by Josling,<sup>96</sup> technical and financial assistance to these countries to help them match the requirements imposed by SPS and TBT measures and increase their participation in international standards organisations should be a priority within the global food system. The issue of TBT infrastructure is mentioned in Chapter 3.

Given the high capacity required to meet SPS and TBT measures, the TBT agreement also needs to provide a stronger emphasis on technical assistance issues (in Article 11) and special and differential treatment for developing countries (in Article 12) to engage the meaningful benefit of the agreement. Moreover, putting in place trade-related standards and domestic capacity to design appropriate standards, enforcing implementation and monitoring compliance and global support for implementation of trade-related standards are major challenges for LDCs. Therefore, LDCs need special provisions for integration into the standard regime, according to individual needs.

#### *C Market Access Challenges of Bangladesh Agricultural Products under Environmental Concerns because of Domestic Regulations*

It is necessary to identify the loopholes in domestic regulations that have implications for Bangladesh agricultural products. The domestic regulations are outlined in three different groups: pure agricultural regulations, livestock regulations and common regulations.

Pure agricultural regulations include:

- *National Agricultural Policy, 1999*
- *The Agricultural Census Act, 1958*
- *The Agricultural Produce (Grading and Marking) Act, 1937*
- *The Agricultural Produce Cess Act, 1940*
- *The Agricultural and Sanitary Improvement Act, 1920*
- *The Irrigation Act, 1876*
- *The Seed Ordinance, 1977*

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<sup>96</sup> D Roberts, D Orden and T Josling, *Food Regulation and Trade: Toward a Safe and Open Global System* (Institute for International Economics, 2004).

- *The Agriculture Produce Markets Regulation Act, 1964*
- *The Bangladesh Irrigation Water Rate Ordinance, 1983*
- *The Agriculture Pest Ordinance, 1962*
- *Agriculture Development Corporation Ordinance, 1961*
- *The Jute Regulation Act, 1940*
- *The Jute Ordinance, 1962.*

Livestock regulations include:

- *National Livestock Policy, 2007*
- *The Animal Slaughter (Restriction) and Meat Control Act, 1957*
- *The Bangladesh Veterinary Practitioners Ordinance, 1998.*

Common regulations include:

- *The Export Policy, 2012–2015*
- *The Sale of Goods Act, 1930*
- *The Essential Commodities Act, 1957*
- *The Food (Special Courts) Act, 1956*
- *Bangladesh Standards and Testing Instituti on Ordinance, 1985, as amended in 2003*
- *The Pure Food Ordinance, 1959, as amended in 2005*
- *The Export Promotion Bureau Ordinance, 1977*
- *The Bangladesh Hotels and Restaurants Ordinance, 1982*
- *The Standards of Weights and Measures Ordinance, 1982*
- *National Forest Policy, 1979*
- *The Forest Act, 1927*
- *Environment Policy of Bangladesh, 1992*
- *The Forest Policy, 1994*
- *The Fisheries Policy, 1998*
- *The Water Policy, 1998*
- *The New Agriculture Extension Policy, 1995*

- *The National Conservation Strategy (NCS) 1991*
- *The National Environmental Management Action Plan (NEMAP), 1995*
- *The Poverty Reduction Strategic Plan (PRSP) 2005*
- *The Environmental Policy, 1992*
- *The Environment Conservation Rules, 1997*
- *The Environment Court Act, 2000*
- *The Bangladesh Environment Conservation Act, 1995*
- *The Environment Conservation Rules, 1997*
- *The Environment Court Act, adopted 2000*
- *National Industry Policy, 2010*
- *National Water Policy, 1999*
- *The Consumer Rights Protection Act, 2009.*<sup>97</sup>

The Bangladesh domestic regulations responsible for agricultural products are discussed under the following subheadings: PPMs, standards, eco-labelling, packaging and environment. In addition, other factors, like research and development, lack of coordinated approach, lack of updated information and implementation challenges are considered during this discussion.

### 1 *Process and Production Methods*

When analysing domestic regulations under PPMs, it is observed that neither the *New Agriculture Extension Policy, 1996*<sup>98</sup> nor the *National Agriculture Policy, 1999*<sup>99</sup> discuss the PPMs of agricultural products that have implications on market access because of environmental concerns. The same situation prevails in the case of the *Jute Regulation Act, 1940*,<sup>100</sup> which was enacted to provide for the regulation of growing jute, however, did not mention anything regarding the quality and standard of jute. Generally, quality jute is produced in a particular area or particular quality of land that correlates with its PPMs. To

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<sup>97</sup> Government of the People's Republic of Bangladesh, *Laws of Bangladesh* <<http://bdlaws.minlaw.gov.bd/>>

<sup>98</sup> *The New Agriculture Extension Policy, 1996.*

<sup>99</sup> *National Agriculture Policy, 1999.*

<sup>100</sup> *Jute Regulation Act, 1940.*



ensure compliance in regards to international standards and to improve the exportation of jute, the act needs to address PPM-related standards issues in light of international rules.

In the case of the *Jute Ordinance, 1962*,<sup>101</sup> the regulation does not mention, in detail, how these could be measured or stipulate PPMs to obtain quality jute products in accordance with Section 1 (Technical Regulation) and 2 (Standard) of Annex 1 of the TBT agreement. Moreover, the *National Jute Policy, 2002* was adopted with the objective of the production of raw jute, development of a commercially viable jute industry sector in the country and promotion of the export market for both jute and jute products. However, despite the implementation of this policy, PPMs are not elucidated.

The *National Livestock Policy, 2007*<sup>102</sup> was adopted with the objective of the promotion of sustainable improvements in productivity of milk, meat and egg production, including processing, value addition, market development and export of livestock products and by-products. It identifies its challenges<sup>103</sup> as ‘shortage of quality inputs, inadequate services and physical infrastructure, institutional weaknesses in terms of weak regulatory framework and enforcement, limited skilled manpower and resources, and inadequate research and technological advancement[, which] are all continuing to act as constraints to livestock development’. It also identifies ten critical areas for formulating the National Livestock Development Policy from which dairy development and meat production; poultry development; veterinary services and animal health; feeds and fodder management; breeds development; hides and skins; marketing of livestock products; international trade management; access to credit and insurance and institutional development for research and extension are clearly mentioned in the policy.<sup>104</sup> However, it fails to provide proper guidance in regards to PPMs that are necessary for increasing market access.

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<sup>101</sup> *The Jute Ordinance, 1962*.

<sup>102</sup> *National Livestock Policy, 2007*

<sup>103</sup> Ibid

<sup>104</sup> Ibid

The *Animals Slaughter (Restriction) and Meat Control Act, 1957*<sup>105</sup> was enacted to provide for restriction on the slaughter of certain animals and for control of consumption of meat, whereas Section 5 deals with the restriction on slaughter of animals. This act only provides some restrictions and control on slaughtering of animals and consumption of their meats; however, it does not mention anything relevant to the hygiene and standards to be maintained in processing the meat, which is a concern in Bangladesh for both national and international consumers. The PPMs, together with the standards, are the major limitations of this act that need further reform in light of the SPS and TBT agreements.

In Section 5.8.6 of the *Export Policy 2013 –2015*, it states that effort will be made to commercialise the agricultural sector by assisting production, processing and marketing of exportable agricultural products and other related activities that need proper initiatives to implement the policy decision; however, no initiatives have so far been taken.

The *Pure Food Ordinance, 2005* was enacted to provide for better control of the manufacture and sale of food for human consumption.<sup>106</sup> Section 4A outlines the National Food Safety Advisory Council to advise the government regarding matters related to safety of food and to maintain standard and quality control (National and Codex Standard) for food with a view to ensuring its purity, safety and proper nutritional value and to develop the policies and strategies related to food safety and quality control. However, again, no tangible outcome occurred. Compared with other regulations, this is one of the best articulated regulations that clearly discusses the quality, standard and implementation process of the regulation. However, it would be better if it could include the relevant international provisions in each section of the Act.

## 2 Standards

The *New Agriculture Extension Policy, 1996*<sup>107</sup> does not mention international-standards-related matters, which is an important issue for Bangladesh agricultural products. However,

<sup>105</sup> *The Animal Slaughter (Restriction) and Meat Control Act, 1957.*

<sup>106</sup> *The Pure Food Ordinance, 1959.*

<sup>107</sup> *The New Agriculture Extension Policy, 1996.*

an agriculture extension has been incorporated in the *National Agriculture Policy, 1999* with special importance on its role, coverage, approach and quality assurance issues, particularly the SPS measures and quarantine services in accordance with Article 5 of the SPS agreement. The issues of mechanisation of agriculture with modern technology, use of such tools by farmers, their capacity to handle this technology, particularly women involved in this process, and the engagement of a large number of women in the agricultural sector are properly incorporated into the policy.<sup>108</sup> However, it does not clarify how this extension policy can interact effectively with the research findings. Moreover, Section 4(2) of the *Agriculture Census Act, 1958*<sup>109</sup> provides the government with the opportunity to prepare a questionnaire on why it is acceptable to give authority to deviate from the standards. Similarly, the *Agricultural Produce (Grading and Marketing) Act, 1937*<sup>110</sup> did not mention anything in regards to compliance of standards, although packaging has a significant contribution to standards in international trade, as explained in Annex 1 of the TBT agreement.

The objective of the *Agricultural and Sanitary Improvement Act, 1920*<sup>111</sup> is to improve the agricultural and sanitary conditions of certain areas in Bangladesh. This act deals only with the construction of drainage sufficient for production; however, it does not mention anything about how it could improve sanitary conditions and their effect on environment and agricultural productivity. It warrants reform in accordance with the standards mentioned under the SPS agreement.<sup>112</sup>

*The Destructive Insects and Pests Act, 1914*<sup>113</sup> was enacted to prevent the introduction into Bangladesh of any insect, fungus or other pest that is or may be destructive to crops. It is a good initiative to raise the issue of protecting human, animal and plant life or health from pest imports; however, this act is lacking the relevant provisions mentioned in Annex A of

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<sup>108</sup> *National Agriculture Policy, 1999*, 5–18.

<sup>109</sup> *The Agricultural Census Act, 1958*.

<sup>110</sup> *The Agricultural Produce (Grading and Marketing) Act, 1937*.

<sup>111</sup> *The Agricultural and Sanitary Improvement Act, 1920*.

<sup>112</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures').

<sup>113</sup> *The Destructive Insects and Pests Act, 1914*.

the SPS agreement.<sup>114</sup> It does not properly mention how it can ensure product standards and quality that are safe for consumers. Moreover, it needs to mention clearly the context of adopting these measures so that it cannot create unnecessary barriers to trade<sup>115</sup> and can ensure transparency.

*The Seeds Ordinance, 1977* was enacted to provide for regulating the quality of certain seeds for sale and for matters connected therewith.<sup>116</sup> Section 5 of this ordinance mentions quality and Section 6 mentions the standards. This ordinance contains the necessary information, including a specific section for export, for creating a good opportunity for Bangladesh. Next, the *National Seed Policy, 1993*<sup>117</sup> and, subsequently, the *Seed Rules, 1998*<sup>118</sup> were adopted with the objectives to allow private companies to produce seeds of approved varieties, to develop new varieties and to import seeds from abroad. Moreover, a National Seed Board was created to encourage private sector participation in seed development.

The *Agricultural Pests Ordinance, 1962*<sup>119</sup> was adopted to prevent the spread of agricultural pests in Bangladesh. This ordinance has been providing support to the control of pests on agricultural land. It defines agricultural pests, their behaviour, contribution and detrimental effects on agricultural land. It also provides guidelines on how to prevent the negative effects of these pests. Thus, this act has a positive role in mitigating standards that is necessary for both ensuring compliance under WTO regulations, mainly its SPS agreement, and for overall development of the agricultural sector. However, this act does not incorporate the relevant issues of the SPS agreement in regards to its obligation to meet scientific evidence (Article 2.2), risk assessment (Article 5), equivalence (Article 4) and

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<sup>114</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') annex A.

<sup>115</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') preamble.

<sup>116</sup> *The Seeds Ordinance, 1977*.

<sup>117</sup> *National Seed Policy, 1993*.

<sup>118</sup> *Seed Rules, 1998*.

<sup>119</sup> *The Agricultural Pests Ordinance, 1962*.

harmonisation of standards (Article 3) , which are necessary for compliance and , hence, warrant further reform.

The *Jute Ordinance, 1962* was enacted to consolidate and amend the law relating to trade in jute and jute manufacturers.<sup>120</sup> Section 4(a) outlines specifically that governments can lay down and execute policy relating to internal and international trade in jute and jute manufacturers; Section 4(g)(i) mentions quality, standards and the grading of jute and jute manufacturers. However, it does not mention any details that might create ambiguity among stakeholders.

To derive the full benefits of globalisation and trade liberalisation, the *National Livestock Policy, 2007* must develop its export products further to satisfy product standard requirements of importing countries and obtain up-to-date information from different markets. Transboundary animal diseases (TADs), like foot and mouth diseases , are preventing Bangladesh from entering potential markets for livestock products.<sup>121</sup> By taking regional initiatives, Bangladesh can enter into regional agreements to control TADs. Most export-oriented enterprises are small and medium in size with limited capacity to undertake market research, invest in technologies and collect, store and process trade information , which are current challenges.

In addition, other important challenges relate to meeting labour and environmental standards, improving design and packaging and accessing and using up-to-date information on consumer preferences and trends in global markets with potential for significant international trade. Many enterprises have neither the in-house capacity to gather the necessary trade-related information nor the networks to access such information where government can provide support. As a result of these factors, Bangladesh is not fully able to meet the recommended safety and quality standards for livestock products consistent with the SPS guidelines, as regulated by the OIE and the Codex.

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<sup>120</sup> *The Jute Ordinance, 1962*.

<sup>121</sup> J Do menech, *The Global Framework for the Progressive Control of Transboundary Animal Diseases (TADs)* FAO <<http://www.fao.org/docrep/009/a0083e/a0083e0c.htm>>.

The *Bangladesh Environment Conservation Act (ECA), 1995*<sup>122</sup> was enacted to provide for conservation of the environment, improvement of environmental standards and control and mitigation of environmental pollution. The major limitation of this act is its silence on standards, parameters, emission levels and management elements based on which environmental clearance should have been applied and obtained. Moreover, as a member of the international community and as one of the most environmentally vulnerable countries, Bangladesh has become party to many international conventions<sup>123</sup> that are missing in this Act.

The *Environmental Conservation Rules, 1997*<sup>124</sup> were promulgated in furtherance of the objective of the *Environment Conservation Act, 1995*. The environment policy provides that environmentally sound agricultural practices are to be encouraged. The use of natural fertilisers and insecticides is encouraged, as opposed to the use of agro-chemicals. The *National Agriculture Policy, 2010*<sup>125</sup> itself recognises that chemical fertilisers and fertilisers used for increased crop production may lead to environmental pollution, however, does not explain how increased use of high yield variety seeds would not involve increased use of chemical fertilisers and pesticides. The agriculture policy is silent about the need for assessing the effect of the use of agro-chemicals on soil, water bodies, fisheries and overall biodiversity.

The *Export Policy 2013–2015* of Bangladesh<sup>126</sup> was adopted to create an export-oriented market opportunity for Bangladesh products to external destinations by improving quality through ensuring international standards. Section 4.29.7 states that exporting institutions will be encouraged to acquire ISO 9000, as well as environmental-regulation-related ISO 14000 for quality assurance, and Section 4.29.8 states that codes with detail on exportable products will be prepared to use the harmonised code that is being followed by the WTO for Letter of Credit forms related to import and export.

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<sup>122</sup> *The Bangladesh Environment Conservation Act, 1995.*

<sup>123</sup> *The Convention of Biosafety, 1992; Framework Convention and Climate Change; Ramsar Convention on Wetland of International Importance, 1971; Convention on the Control of Wild Flora and Fauna (CITES), 1973; The Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal, 1989.*

<sup>124</sup> *The Environmental Conservation Rules, 1997.*

<sup>125</sup> *National Agriculture Policy, 2010.*

<sup>126</sup> *The Bangladesh Export Policy 2013-15.*

The *Bangladesh Standards and Testing Institution Ordinance, 1985* was enacted to provide for the establishment of an institution for standardisation, testing, metrology, quality control, grading and marking of goods. It is a comprehensive regulation for maintaining standards of all sorts of goods produced for national and international consumers. This ordinance does not illustrate much about the agricultural trade but discusses, in general, all products that warrant further reform.

The *Standards of Weights and Measures Ordinance, 1982*<sup>127</sup> was enacted to establish standards of weights and measures based on the metric system and units of measurements. This ordinance helps to introduce international standards of measurement and weights that have a direct effect on international trade that includes agricultural products.

### 3 Packaging and Labelling

The *Agricultural Produce (Grading and Marking) Act, 1937*<sup>128</sup> was enacted with a view to provide grading and marking of agricultural products. Since packaging has significant contribution as the technical regulation in international trade (as explained in Annex 1 of the TBT agreement), this act does not include packaging- and labelling-related issues for compliance of regulations that have been incorporated in the BSTI *Packaging Rules 2007*. However, Section 5.8.3 of the *Export Policy 2013–2015* outlines that the production of modern and scientific packaging materials necessary for the export of vegetables, foliage and fruits will be encouraged; however, again, there are no initiatives to implement the decision. Section 5.4.7 of this policy states that imported packaging materials will be allowed duty drawback/bond facilities on the Freight on Board price to encourage the export of packet tea.

### 4 Environment

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<sup>127</sup> *Standards of Weights and Measures Ordinance, 1982*.

<sup>128</sup> Ibid

The objectives of the *National Agriculture Policy, 1999*<sup>129</sup> are to create an enabling environment for sustainable growth of agriculture for reducing poverty and ensuring food security through increased crop production and employment generation, as mentioned in the MDGs and South Asian Association for Regional Cooperation (SAARC) Development Goals (SDGs).<sup>130</sup> The threats identified in the *National Agricultural Policy, 1999* are as follows:<sup>131</sup> environmental vulnerability (climate change, flood, drought, storm, salinity, pest and diseases, river erosion) prevails, soil health is declining and cultivable land and water resources are shrinking.

One of the objectives of the *National Forest Policy, 1979*, subsequently modified in 1994,<sup>132</sup> is to strengthen agriculture by extending assistance to those sectors related to forest development, especially by conserving land and water resources. As the forestry subsector plays an important role in the overall development of the agricultural sector, it has a significant contribution to the environment in providing space for flora and fauna. Its contribution to the domestic markets, particularly the wood and furniture market, has the potential to accelerate the export basket for agricultural trade. The current forest policy, together with the environment policy, can provide proper direction to achieve Bangladesh's goals.

The *Forest Act, 1927* was enacted to consolidate the laws relating to forests, the transit of forest produce and the duty imposed on timber and other forest produce.<sup>133</sup> However, it remains silent on timber-related diseases that might have market access implications. The purpose of SPS measures is to protect human or animal life from risks arising from additives, contaminants, toxins or disease-causing organisms in food<sup>134</sup> or from pests,

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<sup>129</sup> Ibid

<sup>130</sup> Ibid 5.

<sup>131</sup> Ibid

<sup>132</sup> *National Forest Policy, 1994.*

<sup>133</sup> *The Forest Act, 1927.*

<sup>134</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') annex A, s 1(b).



diseases or disease-causing organisms<sup>135</sup> or to prevent or limit other damage to a country from the entry, establishment or spread of pests.<sup>136</sup> There has been increasing concern in recent years about the spread of pests, such as the Asian longhorn beetle and the pine wood nematode.<sup>137</sup> Wooden packaging material made of unseasoned (green) wood provides a pathway for the introduction and spread of such pests.<sup>138</sup> The UN FAO Interim Commission on Phytosanitary Measures adopted the International Standard for Phytosanitary Measures (ISPM) 15.<sup>139</sup> According to the standard, Canadian and US plant health inspection agencies require all wood packaging and crating material to be heat-treated or kiln-dried. ISPM 15 is increasingly adopted as a standard worldwide, where costly verification procedures are likely to have a large effect on the use of unprocessed wood for pallets.<sup>140</sup> Tropical producer countries have expressed concern that product standards and technical regulations are restricting the expansion and diversification of the international tropical timber trade, as these measures absorb significant additional costs in meeting the new requirements.<sup>141</sup> A study conducted on the Russian Federation on Quarantine in light of SPS measures argued that plant health is important in terms of securing a country's domestic and international trade in plant and plant products.<sup>142</sup>

In enacting the *Environmental Policy 1992*, the government of Bangladesh actively participated in the evolutionary process of protecting the global environment. The main objective of the policy is to maintain ecological balance and overall development through protection and improvement of the environment. The *National Environmental Policy* was drawn up with the aim of providing protection and sustainable management of the

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<sup>135</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') annex A, s 1(c).

<sup>136</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') annex A, s 1(d).

<sup>137</sup> Unctad, *Unctad Market Information in the Commodities Area* Unctad <<http://unctad.org/infocomm/anglais/timbertrop/ecopolicies.htm>>, viewed at 16 Nov, 2011

<sup>138</sup> Ibid

<sup>139</sup> Guidelines for Regulating Wood Packaging Material in International Trade

<sup>140</sup> UNCTAD, above n 98, at 4

<sup>141</sup> Taylor Russell, Tomaselli Ivan and Wing Hing Lew, "How to Hurdle the Barriers" (ITTO Tropical Forest Update 2005 No 2, <View pdf(189KB)>)

<sup>142</sup> Iri na Kireeva and Robert Black, 'International Trade and Plant Protection Issues: Example of Plant Quarantine Law of the Russian Federation' (2010) 44.3 *Journal of World Trade* 591.

environment. In the case of agriculture, this policy states that environmentally sound agricultural practices are to be encouraged and ensured for attainment of self-sufficiency in food. The use of natural fertilisers and insecticides is encouraged, as opposed to the agro-chemical fertilisers and artificial fertilisers exerting adverse effects on the environment. This policy has introduced a number of salient environmental principles, like the precautionary approach and the environmental impact assessment.

The environmental policy does not conform to the narrow objectives of the export policy.<sup>143</sup> For example, the environment policy stresses the necessity of 'encouraging land use systems compatible with various ecosystems'. This means that the spread of salinity and alkalinity should be prevented from the land. Conversely, the export policy emphasises the rapid expansion of traditional/semi-intensive cultivation of shrimp to increase export.

### *5 Research and Development*

Research and development has been given priority in the *National Agriculture Policy, 1999* and the key complex challenges, including governance of research institutions, research planning and funding, research focus and areas and transfer of technology, have been clearly articulated. However, it does not say anything about how this policy would be implemented. To accelerate pro-poor economic growth, the *National Agriculture Policy, 1999* highlights the need for higher growth in rural areas, development of agriculture and rural non-farm economic activities as one of the four priority areas mentioned in the *PRSP, 2005*.<sup>144</sup> To reduce rural poverty and improve rural livelihoods, it is necessary to recognise and develop the existing agricultural production system into a more dynamic and viable commercial sector. Since agriculture has the potential to reduce the food deficit, as well as the shortage of raw materials, by generating more employment opportunities with reasonable income, emphasis should be given to ameliorate the possibility of receiving benefits from the agricultural sector by improving market access. The major challenges of the *National Agriculture Policy, 1999* are raising productivity and profitability, reducing

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<sup>143</sup> Export Policy, above n, 52

<sup>144</sup> PRSP, 2005, above n 73

instability, increasing resource-use efficiency, ensuring equity, improving quality and meeting demands for diversification and commercialisation of agriculture.<sup>145</sup> The *National Agriculture Policy, 1999* has weaknesses in the areas of marketing, technology of agriculture products to reach into the export market, research and development.<sup>146</sup>

The *Agriculture Census Act, 1958*<sup>147</sup> was enacted to provide for certain matters of taking an agricultural census. However, the information relating to these matters expressed in (a) to (n)<sup>148</sup> does not mention specific methods of assessing and analysing the facts to receive accurate data, which has a significant contribution to national and international aspects of total agricultural production. In Section 11, it does not provide the rights for whomever to have information whenever needed for further development.<sup>149</sup> Accurate data is the prerequisite from which total production is calculated and the need for a particular crop assessed. The probability of receiving inaccurate data by any means might hamper the future planning process and, ultimately, negatively affect agricultural trade because of scarcity of production. For instance, if production is lower than actual need, then the product would be used for local consumption only and, ultimately, the scope of export will be limited.

The objective of the *Agricultural Development Corporation Ordinance, 1961*<sup>150</sup> is to establish an agricultural development corporation for the purpose of increasing agricultural production in Bangladesh. This is known as the Bangladesh Agricultural Development Corporation. Section 13 of Chapter III states that the corporation shall make suitable arrangements on a commercial basis for the procurement, transport, shortage and distribution to agriculturists of essential supplies, such as seed, fertiliser and pesticides. However, it would be better if this support could be linked with the domestic support provisions of Article 8 and export subsidy commitments of Article 9.1(D) and (E) of the AOA.

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<sup>145</sup> *National Agriculture Policy, 1999*, 3.

<sup>146</sup> Ibid

<sup>147</sup> *The Agricultural Census Act, 1958*.

<sup>148</sup> Ibid, art 4(1).

<sup>149</sup> Ibid, art 11.

<sup>150</sup> *Agricultural Development Corporation Ordinance, 1961*.

According to the *Environment Policy of Bangladesh, 1992*, the Department of Environment is responsible for the overall development of environment-related matters; the lack of regulatory and institutional capacity of the environmental policy is still prominent. It lacks essential baseline data on resources and areas of development concern. It also lacks the necessary basic technical expertise to effectively assess and monitor projects for their environmental effect and suffers from a shortage of basic facilities, equipment and logistical support. Moreover, this department is working as a clearing house for all development projects.

Section 3 of the *Export Policy 2013–2015* deals with export diversification, including classification of products and the highest priority sector where agro-products and agro-processed products have been given the highest priority. It also puts emphasis on assistance in product marketing and searching for foreign markets with possible financial benefits for utility services, such as electricity, water and gas, and necessary initiatives to attract FDI. Section 3.7 deals with the Inter-Sector Project for Product Diversification with the objective of facilitating diversification of products, such as bond system, duty draw back and subsidies, which will be reviewed to keep export prices at a competitive level. Section 4.13 deals with reduced airfare for the export of specially privileged products, including fruits and vegetables, and, in subsection 4.13.1, states that Biman Bangladesh Airlines will consider measures for reduced airfare for the export of fruits and vegetables and ornamental plants.

Section 5.5 deals with the jute industry. In subsection 5.5.1, an integrated plan of action will be taken for development and diversification of jute products to enhance the productivity of the jute industry by strengthening research activities and undertaking certain activities, such as BMRE,<sup>151</sup> for some jute factories. In subsection 5.5.2, it states that the obstacles impeding export of jute and jute products to different countries will be identified and necessary remedial measures will be taken to address those. Section 5.8.1 states that contract farming will be encouraged for production of exportable vegetables and, in Section

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<sup>151</sup> BMRE stands for Balancing, Modernisation, Rehabilitation and Expansion.

5.8.16, states that an ‘Agro-Products Business Promotion Council’ will be established to improve and control the quality of agriculture and agricultural products. Subsection 7.1.3 states that initiatives will be taken to develop the necessary physical infrastructure, including construction of an express line, to ensure uninterrupted supply of electricity, gas and water to export-oriented industries on a priority basis. Steps will be taken to fix the cost of electricity, gas and water to be used in the industries at a reasonable rate, including subsidy.

The *Export Promotion Bureau Ordinance, 1977*<sup>152</sup> can explore and examine the potentials of export-oriented agricultural products and ensure quality control of all exporters. It also provides training, studies, surveys, experiments or technical research and contributes towards the costs of any such studies, surveys, experiments or technical research made by any other agency. However, it does not mention how the research would be carried out. Moreover, nothing is mentioned about the integrated approach that is necessary to boost up the export of agricultural products.

## 6 Lack of Coordinated or Integrated Approach

The *New Agriculture Extension Policy, 1996*<sup>153</sup> was adopted to encourage the various partners and agencies within the national agricultural extension system to provide efficient and effective services that complement and reinforce each other in an effort to increase the efficiency and productivity of agriculture in Bangladesh. The important features of this policy were adopted mainly to coordinate the existing policies and ensure cooperation among the different agencies during the implementation. Although it tries to integrate all stakeholders under one umbrella, this policy could not reach its target because of a lack of interconnectivity among existing policies and implementing authorities.

The *National Agriculture Policy, 1999* has weaknesses in the areas of coordination among public and private universities and research organisations and diversification of agricultural

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<sup>152</sup> *The Export Promotion Bureau Ordinance, 1977.*

<sup>153</sup> *The New Agriculture Extension Policy, 1996.*

products.<sup>154</sup> These weaknesses should be dealt with using the opportunities at hand, particularly the agricultural sector, which has the capacity to absorb the labour force and to generate income and has enough scope for reducing yield gaps through proper initiatives.<sup>155</sup> However, *The Seeds Ordinance, 1977*, together with the *National Seed Policy, 1993* and the *Seed Rules, 1998*, is not integrated with other agricultural policies and regulations that are necessary to achieve its target. The lack of initiatives in the *Jute Ordinance, 1962* in taking an integrated approach to deal with PPMs and standards is a major limitation, which needs proper attention from policy makers and exporters.

In the *National Livestock Policy, 2007*, the main problems stem from inadequate veterinary services, a lack of skilled human resources, a lack of diagnostic facilities, a lack of financial support, a lack of disease surveillance and monitoring of animal health, a lack of updated food legislation and need for an improved national food export inspection and certification programme. These issues should be considered during the implementation of policies and integrated in a coordinated way so that all relevant fields are covered without missing any important factors. The livestock policy needs to be integrated with the agricultural policy because it is an integral part of it and has a significant contribution to overall agricultural development in light of international agricultural trade. Moreover, the following regulations have a direct contribution to improving the livestock sector for both national and international consumption. In the *Export Policy 2013–2015*, there is a need for an integrated approach to the entire exporting sector to find the shortcomings of each individual sector through constant and continuous support from research institutions with a holistic approach.

## 7 Reform of Domestic Regulations

The existing *National Agricultural Policy* was adopted in April 1999. Since then, some issues and concerns have emerged in the agricultural sector, in some cases, with new dimensions. For example, dwindling agricultural resources, declining biodiversity, climate

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<sup>154</sup> *National Agriculture Policy, 1999*, 4.

<sup>155</sup> *Ibid*

change, increasing frequency and intensity of natural disasters, increasing input prices and soaring food prices require further changes to the agricultural policy. This necessitates the revision of earlier documents to reflect current stakeholders involved in achieving the goals of PRSP, MDGs and SDGs. The *Agricultural Labour (Minimum Wages) Ordinance, 1984* needs to include a section for children to take additional care with food, education and skill. The *Agricultural Produce (Grading and Marking) Act, 1937* is a dated act that needs to be upgraded in line with the BSTI *Packaging Rules, 2007*. The *Agricultural and Sanitary Improvement Act, 1920* is also dated and needs to be updated with current sanitary measures, as mentioned within the SPS agreement.

The *Irrigation Act, 1876*<sup>156</sup> was adopted to make provision for the construction, maintenance and regulation of canals for the supply of water necessary for agricultural production.<sup>157</sup> Although this regulation was enacted to provide irrigation facilities to improve agricultural productivity, this act is not updated with the current provisions of the AOA, which could provide more flexibility in terms of domestic support for agricultural production.<sup>158</sup> This act requires review to reflect current irrigation practices. The *Destructive Insects and Pest Act, 1914* is lacking the relevant provisions mentioned in Annex A of the SPS agreement<sup>159</sup> and, thus, also requires review.

The *Bangladesh Irrigation Water Rate Ordinance, 1983*<sup>160</sup> was adopted to consolidate and amend the law relating to the imposition of water rates for supply, regulation or storage of water for irrigation or drainage. This regulation has been helping farmers in fixing the rates of water for irrigation purposes; however, it does not mention the domestic support policy of the government that could be treated under the *de minimis* support option of the AOA.<sup>161</sup>

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<sup>156</sup> *The Irrigation Act, 1876*.

<sup>157</sup> Ibid

<sup>158</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 6.

<sup>159</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') annex A.

<sup>160</sup> *The Bangladesh Irrigation Water Rate Ordinance, 1983*.

<sup>161</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 4.

This ordinance also warrants reform. The *Agricultural Pests Ordinance, 1962* is an old act that needs to be updated in light of the SPS agreement.

The *Sale of Goods Act, 1930*<sup>162</sup> was enacted to define and amend the law relating to the sale of goods. This act mainly provides the definitions of buyer, delivery, fault, goods, future goods, mercantile agent, seller and specific goods; formalities of the contract; price in a contract; transfer of title; rights of unpaid seller against the goods and breach of contract. This is a basic law for the exportation and importation of goods from one country to another. This is an old act that misses the current issues of international trade, including the expansion of international trade in goods.

## 8 Implementation Challenges

The incorporation of important key words in the *National Agriculture Policy, 1999* shows that it is a well-drafted policy; however, its proper implementation is still a major challenge of Bangladesh, as with the others policies. The issue of capacity building of the implementing authority and their efficiency in delivering services has been articulated in many research finding and statistics throughout the world. Although the *Export Policy, 2013–2015* is a well-drafted policy for facilitating the export growth of Bangladesh products, the desired goal has still not been achieved because of its weaknesses in the implementation mechanism.

The *Pure Food Ordinance, 2005* depends on the capacity of responsible officials who implement the process. Stakeholders who are primarily responsible for inspection and analysis should be given proper training to provide effective service delivery. Proper monitoring is essential for maintaining food quality for both national and international consumers, which can enhance market access.

Although the agricultural sector encompasses the crops, fisheries, livestock and forestry subsectors, separate policies on livestock, fisheries and forestry have been formulated by

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<sup>162</sup> *The Sale of Goods Act, 1930.*



the relevant ministries. The crop sub sector policies and regulations are prepared by the Ministry of Agriculture. Livestock policy and regulations are prepared by the Ministry of Fisheries and Livestock and forestry policy and regulations are prepared by the Ministry of Forest and Environment. Other regulations and policies that are prepared by the respective ministries are discussed in light of market access implications on ERs under several headings.

Agricultural negotiation is important for Bangladesh because of its diverse contribution in the domestic and international arena in the crops, livestock and environment subsectors. Other than the crop subsector, market access for agricultural products also depends on the livestock sector and its products because of its immense importance for Bangladesh, which is because of its various contributions to domestic and international consumers. Market access for agricultural products also depends on forestry products because their contribution is huge in both the domestic and international market. Considering the context of this research, this discussion concentrates on environment-related market access barriers for Bangladesh agriculture products that are due to weakness in domestic regulations. Most of the above mentioned regulations are outdated and focus mainly on organisation structure and formation of committees, their functions and power, rather than considering resolution of market access barriers through research-based institutional recommendations from appropriate authorities.

Moreover, ER issues are new and need to be incorporated into domestic regulations. Bangladesh is currently facing challenges in regards to standards, particularly health safety problems, because of the use of chemicals at higher than normal consumption limits or sometimes restricted poisonous chemicals being present in food items, which is evident in empirical research and statistics.<sup>163</sup> This means that compliance with standards is not only necessary for international consumers to have greater market access but also for domestic consumers to ensure appropriate health and safety measures for the citizens of Bangladesh.

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<sup>163</sup> M M Rahman et al, 'Detection of Formalin and Quality Characteristics of Selected Fish from Wet Markets at Sylhet City in Bangladesh' (2012) 7(2) *Bangladesh Research Publication Journal* 161.

The above analysis put emphasis on the reform of existing domestic laws related to international rules and obligations by considering the overall developmental needs of Bangladesh to ensure quality of life, as well as an increase in market access.

### *D Greater Market Access for Bangladesh Agricultural Products: Ways Forward*

#### *1 Current Agricultural Trade Negotiations*

Negotiations began under Article 20 of the AOA, which instructs WTO members to negotiate to continue reform of agricultural trade, recognising the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform. In the Fourth WTO Ministerial Conference in Doha, ministers recognised that the negotiations on agriculture started in early 2000 under Article 20 of the AOA and were reflected in Articles 13 and 14 of the Doha Declaration, fixing deadlines for meaningful negotiations on agriculture under the WTO regime. According to the Doha Declaration:

Without prejudging the outcome, member governments commit themselves to comprehensive negotiations aimed at: market access; substantial reductions; exports subsidies; reductions of, with a view to phasing out, all forms of these subsidies; domestic support; substantial reductions for supports that distort trade.<sup>164</sup>

Deadlines<sup>165</sup> agreed on in Doha have not been met. On 1 August 2004, WTO members agreed on a framework package (known as the July Package or the August Framework) to keep the Doha Round trade negotiations alive. The Hong Kong Ministerial Declaration<sup>166</sup> adopted in the Sixth WTO Ministerial Conference on 18 December 2005 clearly mentions

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<sup>164</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration).

<sup>165</sup> The agreed time schedule at Doha was as follows:

Formulas and other “Modalities” for countries’ commitments: 31 March 2003

Countries’ comprehensive draft commitments: Fifth Ministerial Conference, 10–14 September 2003 at Cancun.

Stock taking: Fifth Ministerial Conference, 10–14 September 2003 at Cancun.

Deadline: 1 January 2005, part of single undertaking.

<sup>166</sup> *Doha Work Programme*, WTO Doc WT/MIN(05)/DEC (22 December 2005, adopted 18 December 2005) (Ministerial Declaration).

all decisions and proposals related to agriculture . Annex A of the declaration includes the report by the chairman of the special session of the Committee on Agriculture to the TNC . Annex F of the declaration deals with special and differential treatment for LDCs, which has relevance within Bangladesh's agricultural sector. Decisions in favour of LDCs that are mentioned in Paragraph 36 of the Hong Kong Declaration are:

(a) (i) Provide duty-free and quota-free market access on a lasting basis, for all products originating from all LDCs by 2008 or no later than the start of the implementation period in a manner that ensures stability, security and predictability.

(ii) Members facing difficulties at this time to provide market access as set out above shall provide duty-free and quota-free market access for at least 97 per cent of products originating from LDCs, defined at the tariff line level, by 2008 or no later than the start of the implementation period. In addition, these Members shall take steps to progressively achieve compliance with the obligations set out above, taking into account the impact on other developing countries at similar levels of development, and, as appropriate, by incrementally building on the initial list of covered products.

iii) Developing-country Members shall be permitted to phase in their commitments and shall enjoy appropriate flexibility in coverage.

(b) Ensure that preferential rules of origin applicable to imports from LDCs are transparent and simple, and contribute to facilitating market access. Members shall notify the implementation of the schemes adopted under this decision every year to the Committee on Trade and Development. The Committee on Trade and Development shall annually review the steps taken to provide duty-free and quota-free market access to the LDCs and report to the General Council for appropriate action<sup>167</sup>

Bangladesh interest in the Hong Kong Declaration in market access for agricultural commodities and priorities include reducing trade distortion in cotton, ensuring food aid discipline and LDCs being exempt from any reduction commitments regarding tariff ,

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<sup>167</sup> Ibid

domestic support and export subsidy for agricultural products.<sup>168</sup> In Hong Kong, ministers also set a concrete timeline to conclude Doha Round negotiations successfully in 2006 and to submit comprehensive draft schedules based on modalities by no later than 31 July 2006. However, members failed to agree on modalities by July 2006 and agricultural negotiations were suspended for an indefinite period. Agriculture Negotiations Chairperson Ambassador Crawford Falconer circulated a revised draft on modalities on 17 July 2007 and another with some corrections on 1 August 2007 on which the current negotiation is based. These documents reflect progress and will help the chairperson to prepare the next revised draft on modalities. On 8 February 2008, the Committee on Agriculture, in its special session, circulated the revised draft on modalities for agriculture, which has five sections and 13 annexes.<sup>169</sup>

Section I deals with domestic support, where, as an LDC, Bangladesh may benefit or be negatively affected from the decisions on *de minimis*, blue box, green box and cotton issues.<sup>170</sup> Section II deals with market access issues, where Bangladesh has interest in sensitive products, special and differential treatment, LDCs, cotton market access and small and vulnerable economies.<sup>171</sup> Section III deals with export-competition-related issues, where Bangladesh has interest in export subsidy commitments, international food aid and cotton.<sup>172</sup>

## 2 Negotiating Strategy for Bangladesh

<sup>168</sup> *Doha Work Programme*, WTO Doc WT/MIN(05)/DEC (22 December 2005, adopted 18 December 2005) (Ministerial Declaration).

<sup>169</sup> The five sections are domestic support (Section I), market access (Section II), export competition (Section III), monitoring and surveillance (Section IV) and other issues (Section V). Annex A provides product-specific blue box limits for the US (to be finalised). Annex B includes proposed amendments on Annex 2 of the AOA. Annex H provides an indicative list of preference erosion products. Annex I deals with small and vulnerable economies. Annex J is an export credits, export credit guarantees or insurance programme. Annex K deals with agricultural exporting state trading enterprises. Annex L deals with the issue of international food aid.

<sup>170</sup> Revised Draft Modalities for Agriculture, WTO Committee on Agriculture Special Session, WTO Doc W/AG/W/4Rev.1 (08 February 2008) 2.

<sup>171</sup> Ibid 12.

<sup>172</sup> Ibid 26.

In view of the abovementioned current state of negotiations at the WTO, Bangladesh needs to adopt a comprehensive and coordinated strategy for advancing market access of Bangladesh agricultural products. There should be an independent body that will provide recommendations to the government by considering the developmental needs of the country's national demand, export potential and comparative advantage through a well-defined study to develop a long-term strategic plan for agricultural trade policy in light of existing international rules and regulations. In parallel, the government should provide concerned officials with adequate knowledge to deal with the changing phenomena of upcoming issues.

To achieve this goal, coordinated comprehensive action should be taken by the government. These actions should aim to increase the institutional skills and efficiency of the EPB, providing assistance in port authorities, Department of Fisheries, BSTI, Tea Board and different trade bodies; modernising Bangladesh foreign missions abroad by strengthening economic diplomacy; strengthening and expanding the product-based Business Promotion Council activities through joint initiatives in the public and private sectors to encourage production and export of potential goods; introducing automation and e-governance for enhancing work efficiency and ensuring transparency and accountability; increasing production, expanding market and shortening lead time; disseminating latest information to exporters on export markets and technology to facilitate diversification of exports; creating training opportunities and establishing sector-specific training institutes for workers, staff and management personnel to increase productivity; encouraging promotion of export through increased institutional; encouraging the establishment of product-wise design centres for improvement of product designs; assisting producers in using modern technology for production and providing various financial and tax subsidies or incentives, including low-interest loans to exporters.

#### *(a) Duty-free and Quota-free Market Access*

The issue of market access and transforming its potential into reality is a major challenge for Bangladesh. Bangladesh should negotiate on the issue of selecting agricultural

commodities for the exclusion list, comprising three per cent of tariff lines. In this context, two sub-paragraphs (146e and f) of the revised draft, which deal with the issue of DFQF market access, are important. Bangladesh may propose to add the words ‘commercially meaningful’ DFQF market access in Sub-paragraph (e) and to end the issue within the Doha implementation period and may also seek market access in developing countries like China, Brazil and India so that they may achieve greater access in these markets.

*(b) Proactive Engagement in Negotiations*

As an LDC, Bangladesh should pursue current negotiations with efforts to obtain mutually beneficial situations, particularly in the special and differential provisions, enabling clause, transfer of technology and assistance in terms of capacity building for the relevant officials of the stakeholders under aid for trade programme, including providing facilities for development in light of the developmental needs of Bangladesh. The assistance should come under the auspices of ensuring compliance of SPS requirements to improve the market access of agricultural products.

*(c) Actions at the Domestic Level*

Bangladesh should take action in raising investment and support levels for agriculture and establishing SPS complaint facilities and a certification system for exporting and importing agro-commodities and enacting laws for the preservation of the *Biodiversity and Community Knowledge Protection Act of Bangladesh, 1998*.

### *3 Domestic Policy Reform*

Since Bangladesh is a signatory of a number of international organisations and committed to progressive development through implementing the adopted rules and regulations in a fair and transparent way to achieve MDGs, it is essential to deal with trade-related domestic rules, regulations and policies using an integrated approach. As discussed earlier, there should be a master policy for trade in light of WTO rules that should be considered in preparing sector-specific regulations. The authority responsible for overseeing the master

trade policy should monitor and upgrade regulations on a continuous basis, depending on the current and future demands of Bangladesh for national, regional and international trade.

In the case of agricultural trade, the agricultural policy, livestock policy, forest policy, environment policy and other relevant policies mentioned above should be integrated with the export policy of Bangladesh. The agricultural policy should incorporate all essential elements that can ensure sufficient agricultural production to provide agricultural products for local consumption and a substantial portion to foreign markets through comparative advantage. Therefore, it is necessary to ensure that products meet international standards.

Although product standards vary from country to country and even from company to company, it is necessary to negotiate effectively for equivalence and raising the standards of Bangladesh products in light of standard-setting organisations. Bangladesh may negotiate for transfer of technology and assistance for upgrading its standards in light of its developmental needs.

A lack of inter-sectoral coordination and inconsistency with other policies are the major drawbacks of Bangladesh's agricultural trade policy. The natural resource sectors of the environment, such as water, fish and forests, are the worst sufferers in this context. Inconsistency with other policies should be removed through increasing coherence and coordination among interested parties.

A lack of regulatory and institutional capacity has been a critical issue in dealing with the domestic regulations of Bangladesh and it is observed that people engaged in the implementation process should be trained in line with the objectives of MDGs to obtain meaningful benefit.

Although there are different laws that deal with the environment, these have some limitations because they are old laws that need to incorporate changes and current issues to be more acquainted with international laws.

*E MarketAccess implications of Bangladesh  
agricultural products under ERs*

It has been observed that Bangladesh agricultural products are facing challenges in market access under environmental requirements for mainly three reasons. First, the international regulations- the AoA-its provisions on market access, domestic subsidy in the form of different boxes (amber, green and blue) {addressed in subsections B1(b)(i-iii)} and its specific provisions (Annex 2 of the AoA) (addressed in subsection B2) that give the opportunity to provide domestic support in the name of environmental program; Sanitary and Phytosanitary barriers to trade which comes as transparency, risk management based on scientific risk assessment, equivalence, harmonising of SPS measures and the special provisions for the developing countries that comes from the SPS Agreement{addressed in subsection B3(i-v)}; and the technical barriers to agricultural trade in terms of labelling and packaging {addressed in subsection B3(b)}. Although Bangladesh has made some progress in terms of SPS and TBT related measures (addressed in chapter III) but still need for further development to bring it to the international standard with the financial and technological assistance from the developed partners. Moreover, Bangladesh needs to negotiate with its partners to make necessary ammenmends in the international rules/provisions {addressed in subsections D1, 2(a) (b)} to have more access to the international markets.

Second, the domestic regulations of Bangladesh are mostly backdated, even new regulations have lacking to incorporate PPMs, standards, eco-labelling, packaging and environmental issues properly that have ERs consequences {addressed in subsections C (1-4)}.

Finally, Bangladesh has problems in implementation of the domestic and international regulations for raising the standard of agricultural products due to lack of intersectoral coordination, inadequate technical and financial assistance and lack of adequate knowledge of the stakeholders/ officials responsible for that{addressed in subsections C(6-8) and D3}.



## *F Conclusions*

This chapter emphasised that agricultural market access is vastly important because agriculture is a vital sector for Bangladesh because of its comparative advantage in production with its intensive labour force. Agricultural market access is facing a severe challenge in regards to WTO's ERs, together with inadequate Bangladesh domestic regulations that are responsible for providing guidelines to increase the export basket. It has been observed that agriculture was kept out of the free trade ideology because of its sensitive character for developed countries' rural livelihood, food security and aesthetic beauty. This chapter clearly demonstrated that Bangladesh agricultural products market access is facing barriers mainly due to some of the provisions of WTO's Agreement on Agriculture, SPS and TBT Agreements.

The AOA was analysed with a view to identify gaps between developed and developing countries in the areas of domestic support, market access and export subsidy, narrowing down into ERs. It has been observed that Annex 2 of the AOA might be used as a protectionist measure, which is an argument for re-examination and it being brought under reduction commitment so that Bangladesh can benefit from its comparative advantage. In regards to AMS, Bangladesh can gain by supporting the provisions of Article 6.2 in regards to investment and input subsidies. This chapter argued for exclusion from AMS calculations in the case of product-specific support. Moreover, Bangladesh should argue for the abolition of Article 13, known as the peace clause, which is often used by developed countries as reversed special and differential treatment.

In regards to SPS measures of agricultural trade, this chapter argued for proper functioning of Article 4.1 that recognises a certain level of flexibility in adopting SPS measures and, considering the lack of recognition of developing countries, argued for inclusion of a conformity assessment certificate and the setup of international finance laboratories, certification bodies and accreditation institutions in the article. Moreover, it argued for Article 9.2 to be strengthened and technical cooperation to be mandatory at the time of introducing new SPS measures in developed countries. Finally, it argued for converting special and differential provisions into specific obligations. In regards to the TBT

agreement, this chapter argued for emphasis on technical assistance issues (Article 11) and special and differential treatment for developing countries (Article 12) and the creation of trade-related standards, domestic capacity to design appropriate standards and global support for implementation of trade-related compliances.

Additionally, domestic policies relevant to Bangladesh agricultural trade were analysed with a view to identifying loopholes, compatibility, contradictions and gaps within the policies, especially in the perspective of changing situations. Many of the old policies have lost relevance in a time of new challenges in different sectors and within subsectors. The common problem in domestic regulations is that necessity, basis, ways and implications of research for future development are not clearly mentioned. The objectives of these ordinances remain unattended because of a lack of proper initiatives. This chapter also found that a lack of adequate and updated current domestic policies in light of international rules, together with implementation and coordination problems, is preventing further market access opportunities for Bangladesh agricultural products. To this end, the government of Bangladesh should take immediate step to update its domestic policies responsible for agricultural market access in light of the international rules and step up its negotiators to negotiate for removing all the inconsistencies and other domestic regulatory and management barriers. As the following chapter highlights, the market access implications of fish and fish products in Bangladesh are also subject to environmental concerns.

## **V ENVIRONMENTAL CONCERNS: MARKET ACCESS CHALLENGES AND OPPORTUNITIES FOR BANGLADESH FISH AND FISH PRODUCTS\***

### *A Introduction*

The market access of fish and fish products are dealt with under the (NAMA) negotiation in the WTO. NAMA<sup>1</sup> refers to all goods not covered by the A O A, including manufacturing products, fuels, mining products, fish and fish products and forestry products. Here, the market access implications of Bangladesh fish and fish products because of ERs are tested in this chapter. The importance of Bangladesh foreign currency earnings from export of goods, particularly from fish and fish products, has seen a material rise over the last decades<sup>2</sup> and it stands as the fourth most important sector of Bangladesh. Fish is the principal source of animal protein in Bangladesh food.<sup>3</sup> Thus, it is necessary to recognise the importance of fish for socioeconomic development goals, such as increasing nutrition, employment opportunities, foreign currency earnings and the establishment of different industrial organisations.

It is understood that many of the potential gains expected from the various provisions agreed in the WTO may be offset by the real risk emanating from the other agreements, like the SPS and TBT agreements. As mentioned in Chapter 3, the SPS agreement was negotiated with the intention of enabling member countries to ensure the safety of their human, animal and plant life. It is also necessary to mention that the non-compliance of such standards may have serious implications for human, animal and plant life, health and hygiene. Likewise, the TBT agreement permits the formulation and implementation of

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\*This chapter was presented at the Environmental Health 2013 Conference in Boston on 3–6 March 2013 as 'Environment Related Health Concerns: Market Access Challenges for Bangladesh Fish and Fish Products'.

<sup>1</sup> NAMA refers to non-agricultural market access.

<sup>2</sup> Mustafizur Rahman, 'Market Access Implications of SPS and TBT: Bangladesh Perspective' (Research Report # 0215, CUTS Centre for International Trade, Economics & Environment, 2002) 10.

<sup>3</sup> Increased rates of child mortality have occurred because of deficiencies in balanced protein. However, there is an acute shortage of food in the country and expansion of livestock production is limited because of a lack of space. For this reason, dependency on fish for animal protein-rich food will increase day by day.

regulations to, inter alia, protect the health of human beings, animals and plants for national security requirements, as well as to prevent deceptive trade practices.

However, the rapid rise in the number of disputes in international trade on fish and fish products, subsidies to the fishery sectors, links with the environment and debate in international forums, including the WTO's CTE, has created concern about its market access. The growing concern is that the evolving interpretation of concepts relating to the various SPS and TBT measures serves the interest of developed countries and is detrimental to the interests of developing countries, including LDCs.<sup>4</sup> Bangladesh is an example of a market constrained by the effects of SPS and TBT measures. In the recent past, Bangladesh's export sector has suffered in the areas of fish and fish products because of its inability to comply with SPS and TBT measures, as discussed in the following sections. Specifically, the issue of concern is the need to upgrade and update the domestic regulations of Bangladesh related to SPS and TBT measures in light of international rules. This is necessary to ensure compliance. The small-scale nature of business in Bangladesh and low technological capacities at the enterprise level are also difficulties for Bangladesh's market access for fish and fish products. In the above context, this chapter focuses on identifying the problems emanating from the provisions of the SPS and TBT agreements that greatly influence market access for Bangladesh fish and fish products.

### *B International Instruments of Environmental Requirements and Their Market Access Challenges in Bangladesh Fish and Fish Products*

About 90 per cent of global trade in goods relates to trade in industrial goods. Hence, negotiation to liberalise trade in manufactured goods under NAMA<sup>5</sup> negotiation is of critical importance under the multilateral trading regime.<sup>6</sup> At Doha, ministers agreed to initiate negotiations to further liberalise trade on non-agricultural goods. To this end, the

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<sup>4</sup> Rahman, above n 2.

<sup>5</sup> The objectives of NAMA negotiations are to lower NTBs, to convert NTBs into tariff-rate equivalence and to reduce final tariff rates in a phased manner through negotiations.<sup>5</sup> The tariff barriers include<sup>5</sup> tariff escalation, tariff peaks and tariff dispersion.

<sup>6</sup> Mustafizur Rahman et al, *WTO and Bangladesh Trade Policy* (Centre For Policy Dialogue, 1<sup>st</sup> ed, 2008) 61.

NGMA was created at the first meeting of the TNC in early 2002.<sup>7</sup> The original mandate<sup>8</sup> for tariff negotiation was articulated in the GATT 1947.

The Doha Ministerial Declaration stipulated that NTBs are to be tariffed and then reduced, particularly on products of export interest to developing countries,<sup>9</sup> with negotiations taking into account the special needs and interests of developing countries and LDCs, including through less than full reciprocity in reduction commitments.<sup>10</sup> The Doha decision adopted the framework for modalities for negotiations on non-agricultural products.<sup>11</sup> At present, NAMA negotiations are focusing on the following five areas from which flexibilities for developing countries, sectoral initiatives and preferences and erosion of preferences are relevant to this research. Bangladesh objectives in the NAMA negotiations are to maintain its LDC position without taking on any obligations under NAMA negotiations, to bind as few products as possible, active DFQF access for its industrial goods and to address the issue of preference erosion. The Doha Ministerial Declaration recognises that integration of LDCs into the MTS requires meaningful market access,<sup>12</sup> support for diversification of their production and export base,<sup>13</sup> trade-related technical assistance and capacity building support.<sup>14</sup> Although the revised February 2008 draft is an improvement on the 2007 draft, it needs to be improved further in light of the Maseru Declaration<sup>15</sup> to fully reflect LDC's concerns and interests.

There is no official definition of an NTB. However, in general terms, an NTB refers to any measure other than a tariff that protects domestic industry. Many NTMs are based on a legitimate goal (such as the protection of human health) and can be introduced in a WTO-

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<sup>7</sup> WTO, *Doha Round* <[http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm#development](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm#development)>.

<sup>8</sup> *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 194 (entered into force in 1 January 1948) art XXVIIIbis, 464–65.

<sup>9</sup> Doha Development Agenda at WTO, *Doha Round* <[http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm#development](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm#development)> [50].

<sup>10</sup> Ibid [31](iii).

<sup>11</sup> Ibid annex B.

<sup>12</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [16].

<sup>13</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [27].

<sup>14</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [38]–[40].

<sup>15</sup> *Maseru Declaration on LDC Trade Ministers' Meeting, Maseru, Lesotho, 27-28 February 2008*.

consistent manner. The SPS and TBT agreements aim to allow government to take due care of these legitimate goals, while minimising the effect on trade and avoiding the temptation to use them as disguised protectionism.

The negotiation group has been identifying, categorising and examining various NTBs. Many are being resolved bilaterally, while others are being addressed on a sectoral basis. Some are also part of other existing multilateral NTB agreements. Results on NTBs are also expected from other negotiating groups, like trade facilitation. NAMA also allows for sectoral negotiations, which indicates an opening up of certain sectors above WTO-mandated MFN rates—an approach much more radical for increasing market access. Such a liberalised regime will be implemented only if countries are interested in participating in the multilateral negotiations to decide on issues such as product coverage, elimination or harmonisation, phasing out and critical mass. Although LDCs participate in sectoral negotiations voluntarily, this has varying effects on their interests, for example, African LDCs are against sectoral negotiations because of preference erosion.

Trade in fish and fish products is excluded from the AOA of the Uruguay Round and these are, instead, subject to WTO rules that apply to non-agricultural products. Trade in fish and fish products was not one of the mandated subjects for the MTN that began in 1999. However, the rapid rise in the number of disputes on fishery products, subsidies to the fishery sectors and links with the environment is being intensely debated in international forums, including WTO's CTE.<sup>16</sup>

Negotiation has started on fisheries subsidies and a proposed draft text on fisheries subsidies is contained in the suggested new Annex VIII of the SCM agreement. Under this amendment, LDCs would be exempt from certain enforcement mechanisms, with other developing members having substantial flexibility, especially for subsidies to subsistence-type fishing in their territorial waters. In December 2008, the chairman issued revised

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<sup>16</sup> WTO, *The Committee on Trade and Environment ('regular' CTE)* <[http://www.wto.org/english/tratop\\_e/envir\\_e/wrk\\_committee\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/wrk_committee_e.htm)>.

texts.<sup>17</sup> For fisheries subsidies, these texts were accompanied by a roadmap of detailed questions for further discussion concerning the main issues in fisheries subsidy negotiations. By the end of 2009, the group had completed this review and had begun to consider new substantive proposals submitted by delegations.<sup>18</sup> Bangladesh, as an LDC member, should negotiate this issue in accordance with the Maseru Declaration (as outlined in Chapter 3) of the LDC Trade Minister.<sup>19</sup>

### 1 *The Codex Standards for Fish Trade*

Codex standards are considered a vital component in promoting food control systems designed to protect consumer health and are related to the SPS and TBT agreements of the WTO. The Codex recommended the adoption of HACCP<sup>20</sup> as an instrument for food safety management in 1993 because of consumer and importing country concern about trade of contaminated fish.<sup>21</sup> In Bangladesh, the risk (in terms of assessment through scientific evidence, technological and financial incapability and the inability of experienced staff) has emerged from the SPS agreement and subsequent standardisation of PPMs using HACCP methods. HACCP is applied generally in the processing method to ensure quality production and reduce risk; however, farms still need to adopt HACCP in their production methods. Processing, being a large investment, has already adopted these methods; however, it is difficult for farms to adopt the same level of standard because of their incapability.<sup>22</sup>

<sup>17</sup> WTO, *Introduction to Fisheries Subsidies in the WTO* <[http://www.wto.org/english/tratop\\_e/rules\\_neg\\_e/fish\\_e/fish\\_intro\\_e.htm](http://www.wto.org/english/tratop_e/rules_neg_e/fish_e/fish_intro_e.htm)>.

<sup>18</sup> Ibid

<sup>19</sup> *Maseru Declaration on LDC Trade Ministers' Meeting, Maseru, Lesotho, 27-28 February 2008.*

<sup>20</sup> HACCP is defined by the UN/FAO Codex Recommended International Code of Practice, General Principles of Food Hygiene, CAC/RCP-1, Rev 3-1997 and by the US FDA in 9 CFR 417. Good manufacturing practices and sanitation standard operating procedures are defined by US FDA in 9 CFR 416 and 21 CFR 110, respectively. HACCP was originally developed by NASA to prevent any hazards that could cause illness or injury during space flights. During the 1970s and 1980s, a number of industries applied the HACCP system. From this experience, it was concluded that the HACCP system was good for preventing microbiological, chemical and physical hazards and, therefore, it was recommended by the Codex, a code of good standards for all nations, developed by FAO.

<sup>21</sup> C L Delgado et al, *Fish to 2020, Supply and Demand in Changing Global Markets* (International Food Policy Research Institute, 2003).

<sup>22</sup> A K E namul Haque, 'Sanitary and Phytosanitary Barriers to Trade and its Impact on the Environment' *Trade Knowledge Paper*, April 2004 (International Institute for Sustainable Development, 2004) iv.

## *2 Sanitary and Phytosanitary Barriers to Fish Trade*

The objective of negotiating an agreement on SPS measures was to safeguard consumer interest in member countries, while ensuring that such measures would not create unnecessary obstacles to international trade.<sup>23</sup> It put in place a set of basic rules that would address food safety and animal and plant health issues and would serve as a guideline for both producers and exporters. Article 2.2 of the agreement states that governments '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 evidence'.<sup>24</sup> Article 3.4 stipulates that countries will play a proactive role in international organisations to promote the harmonisation of SPS measures on an international basis. Article 4 of the SPS agreement requires the countries to accept the SPS measures of exporting countries as equivalent if they achieve the same level of SPS protection. The SPS agreement recognises international standards, guidelines and recommendations of three intergovernmental organisations. Article 5 of the SPS agreement allows governments in member countries to go for more stringent regulations, if such measures are based on adequate risk assessment.<sup>25</sup>

Although the SPS agreement can serve to improve public health, the main motivation for this treaty was to prevent the use of unnecessary health measures that impede foreign exporters. The SPS agreement creates controversy by placing the WTO in a position to tell government regulators to remove measures that regulators claim necessary for health reasons.<sup>26</sup> The idea behind the agreement was that food safety and related disputes should be settled by science-based rules; however, although scientists may be able to answer some scientific questions, they cannot bridge differences in values that often underlie health-

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<sup>23</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') preamble.

<sup>24</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 2.2.

<sup>25</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') art 5.

<sup>26</sup> Steve Charnovitz, 'Improving the Agreement on Sanitary and Phytosanitary Standards' in Gary P Sampson and W Bradnee Chambers (eds) *Trade, Environment, and the Millennium* (United Nations University Press, 1999) 171.



related conflicts between countries.<sup>27</sup> In the *Australia—Salmon*<sup>28</sup> case, the Appellate Body judged that the purpose of Australia's ban on fresh salmon imports was regulatory protectionism rather than regulatory protection because the potential disease-related costs associated with other fish imported by Australia exceeded those for salmon.

The EU ban on import of shrimp from Bangladesh in 1997, imposed on the grounds of health, safety and hygiene, is an example of many of the concerns related to SPS measures.<sup>29</sup> The ban originated from concerns about standards in areas related to health safeguards, quality control, infrastructure and hygiene in processing units and a lack of trust in the efficiency of controlling measures carried out by designated authorities in Bangladesh, mainly the Department of Fisheries.<sup>30</sup> The export of shrimp did not meet the stringent provisions of EU's HACCP regulations. Shrimp processed for global markets has to comply with the international standards specified by the Code of Practice to meet buyer specifications, as well as to meet the importing countries' requirements.<sup>31</sup> However, Bangladesh has long experienced difficulties with meeting these high safety standards and quality requirements because of a lack of resources and monitoring compliance at the factory level. Article 9 of the SPS agreement states that technical assistance is essential for the fulfilment of the obligation of this agreement and the agreement puts emphasis on technical cooperation to this end. Therefore, Article 9 should make explicit reference to upgrading laboratories, certification bodies and accreditation institutions to strengthen the ability of developing countries to deal with scientific issues. Article 9.2 should be strengthened by making technical cooperation mandatory when new SPS measures are introduced by the importing country to prevent barriers being created for developing countries.

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<sup>27</sup> David A Wirth, 'The Role of Science in the Uruguay Round and NAFTA Trade Disciplines' (1994) 27 *Cornell International Law Journal* 817, 835–36, 845.

<sup>28</sup> *Australia—Measures Affecting Importation of Salmon*, WTO Dispute DS18 (5 October 1995).

<sup>29</sup> EEC Commission Decision, 97/513/EC of 30 July, 1997, Concerning Certain Protective Measures with Regard to Certain Fishery Products originated in Bangladesh, *Official Journal of the European Communities*, (1997) 46,214.

<sup>30</sup> Rahman, above n 2.

<sup>31</sup> Fahmida Khatun, *Fish Trade Liberalisation in Bangladesh* (Centre For Policy Dialogue, 2006) 40.

Bangladesh experienced short-term and medium-term effects from the actions taken by the EU. According to Khatun,<sup>32</sup> the qualitative effect on the rural economy and on livelihood was more appealing than any quantitative macroeconomic effect. The factories had to be renovated and processing methods improved, which constituted short-term effects. In addition to this, various economic and social problems were faced by farmers, transporters, processing factories, male processing workers and female processing workers, which constituted medium-term effects.<sup>33</sup>

A study<sup>34</sup> conducted by Cato and Santos estimated that the negative effect of the EU ban on Bangladesh was to the value of US\$65.1 million. Subsequently, the government of Bangladesh and shrimp entrepreneurs made substantial investment to ensure HACCP compliance in the export-oriented shrimp sector. Special credit programmes were designed and support of a number of global organisations was sought. Cato and Santos also estimated that the total cost of upgrading the facilities and equipment and training staff and workers to achieve acceptable sanitary and technical standards was approximately US\$18 million and the annual cost of maintaining the HACCP programme was estimated to be US\$2.4 million. With support from FAO, Bangladesh took the initiative of upgrading the process to match HACCP requirements, implementing quality control measures, ensuring HACCP compliance monitoring and providing training to relevant staff.<sup>35</sup>

Export of shrimp to the EU began to increase when the ban was gradually lifted and Bangladesh plants were allowed to export in a phased manner. Shrimp exports to the EU had decreased from US\$128.9 million in the 1996-97 financial year to US\$48.2 million in the 1997-98 financial year.<sup>36</sup> Shrimp export increased to US\$89.3 million in the 1998-99 financial year and to US\$124.9 in the 1999-2000 financial year.<sup>37</sup> Obviously, the Bangladesh shrimp industry was able to address the emergency situation and could recover

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<sup>32</sup> Ibid 41.

<sup>33</sup> Ibid 42.

<sup>34</sup> J C Cato and C A Lima Dos Santos (eds), 'Costs to Upgrade the Bangladesh Frozen Shrimp Processing Sector to Adequate Technical and Sanitary Standards and to Maintain a HACCP programme' in L Unnevehr (ed) *The Economics of HACCP: New Studies of Costs and Benefits* (Eagan Press, 2000).

<sup>35</sup> Khatun, above n 31, 45.

<sup>36</sup> EPB, *Bangladesh* <<http://www.epb.gov.bd>>.

<sup>37</sup> Ibid

a large part of the loss. However, the momentum was lost and Bangladesh shrimp export has still to attain the pre-crisis level of the 1996-97 financial year.

Even with high profitability and great export potential, shrimp culture brings a number of problems and risks for the environment. Environmental effects in terms of soil salinisation, reduction in agriculture production, decrease in cattle production and destruction of mangrove forests have been a concern of environmentalists, local inhabitants and policy makers.<sup>38</sup> Shrimp cultivation is also said to have a negative effect on biodiversity.<sup>39</sup> The shrimp fries<sup>40</sup> are collected from open water and, during this collection, other fish species are destroyed. Although the government of Bangladesh imposed a ban on the collection of shrimp fries from open water, it is not strictly implemented. Agriculture farmers lost the opportunity to produce multiple crops on their land, as they cannot use chemical fertilisers or pesticides. Fishing performed by engine boats pollutes the water by burning diesel that is harmful for marine resources. The special and differential provisions expressed in Article 10 of the SPS agreement should be converted into specific obligations. Therefore, developing countries should be entitled to receive special support from their trade partners.

### *3 Technical Barriers to Fish Trade*

The TBT agreement relates to the international rules that are acceptable to product standards in trade in goods. The agreement concerns procedures for conformity assessment with respect to those standards. The principles that guide TBT regulations under the negotiated mandate are non-discrimination, harmonisation, least trade restrictive measures, equivalence and transparency. The spirit of the agreement, as articulated in Article 2.4, is that, whenever appropriate and feasible, countries should use international standards in formulating their respective technical regulations and also in developing voluntary national standards. The TBT agreement allows countries to adopt conformity assessment procedures that do not essentially draw on internationally accepted guidelines. The conformity assessment procedures include registration, inspection, laboratory accreditation,

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<sup>38</sup> Khatun, above n 31, 45.

<sup>39</sup> Ibid

<sup>40</sup> Ibid

independent audit and quality registration schemes. Technical regulations are implemented by governments to attain a number of objectives: prevention of deceptive practices, prediction of human and animal health and protection of the environment.

Labelling provides information for everyone on the health and environmental effects of products. Eco-labels are seals of approval given to a product that are supposed to have less effect on the environment than functionally and competitively similar products.<sup>41</sup> In the context of fish exports, labels are used to distinguish fish that are caught using sustainable methods from fish that are not. Eco-labelling was an important item on the CTE agenda<sup>42</sup> and was given the mandate to steer the debate on the issue of eco-labelling through Paragraph 32 of the Doha Declaration.<sup>43</sup> ISO has taken initiatives to develop international standards within the ISO 14000 series for eco-labelling.<sup>44</sup> Eco-labelling is seen as an important tool in gaining access to green markets. It offers an opportunity to add value to existing products, reach further into existing markets and maintain market share in a competitive market.<sup>45</sup>

The global market for shrimp is becoming increasingly demanding in terms of ERs at both the producers' and consumers' end. Maintenance of requisite standards is becoming a key factor in global marketing of shrimp products. Although it is voluntary in nature, its introduction to shrimp exports is necessary, as most developed countries have adopted eco-labelling schemes. Thus, inability and unwillingness to comply may lead to erosion of market share. However, it involves costly process and technology modifications to ensure the product environment is environmentally friendly. However, there are challenges in implementing these measures, including incapacity to obtain certification and inability to internalise the social cost associated with WTO rules.

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<sup>41</sup> OECD, 'Environmental Labelling OECD Countries', (Paris, France, 1991).

<sup>42</sup> Agenda of the CTE available at < [www.wto.org](http://www.wto.org) >.

<sup>43</sup> *Doha Development Agenda*, [32].

<sup>44</sup> ISO, *ISO 14000 —Environmental Management* <<http://www.iso.org/iso/home/standards/management-standards/iso14000.htm>>.

<sup>45</sup> UNCTAD, 'Eco-labelling and Market Opportunities for Environmentally Friendly Products' (UNCTAD, 1994) 21.

In Bangladesh, eco-labelling has not yet been implemented. If environmentally sustainable shrimp production practice can be ensured, it is believed that the country will benefit both environmentally and economically. Based on a review of international and national standards, as well as an understanding of the economic, social and environmental issues facing the Bangladesh shrimp industry, the Shrimp Seal of Quality (SSOQ)<sup>46</sup> has prepared the code of conduct pertaining to food safety, traceability, environmental sustainability and human rights in the Bangladesh shrimp industry. These codes or standards will apply to all participants in the shrimp production chain, including shrimp hatcheries, farms, transport companies and processing plants that are certified by SSOQ. These standards facilitate the Bangladesh shrimp industry to progress towards safe, traceable, environmentally sustainable and ethical production.

In regards to food safety and quality assurance, internationally banned antibiotics, drugs, food additives and other chemical compounds, as listed in SSOQ's Allowable Levels of Chemicals and Compounds, shall not be used.<sup>47</sup> Harvesting, handling and transportation of shrimp shall be in a manner that prevents contamination and deterioration. Shrimp processing plants shall prepare, implement and keep records of HACCP plans per HACCP, good manufacturing practices and sanitation standard operating procedure requirements.<sup>48</sup> SSOQ level does not allow Shrimp to modify or adulterate through the addition of undeclared materials. Labelling and packaging must comply with the laws and regulations of the importing country.<sup>49</sup> In regards to traceability, shrimp operators should keep records of trace inputs during operation, they must be SSOQ-certified operators and certified processed farms should be kept separately from uncertified farms.<sup>50</sup> To protect environmental sustainability, shrimp operations must not divert or obstruct public water flows and mangrove forests should not be used for the new shrimp farm development. All water must meet SSOQ-effluent standards; solid wastes shall be disposed of in an environmentally sustainable manner and chemicals, fuels and feed shall be stored, used and

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<sup>46</sup> SSOQ, 'Shrimp Seal of Quality (SSOQ) Certification Standards' (Final draft for comment, SSOQ, 15 March 2004).

<sup>47</sup> Ibid annex 1, 4.

<sup>48</sup> Ibid 2.

<sup>49</sup> Ibid

<sup>50</sup> Ibid

disposed of in a manner to prevent contamination.<sup>51</sup> Certification under these standards is voluntary and they have no legal status. Even if shrimp operators fail to follow the standards, no penalty can be applied and compliance does not offer any exemption from legal or regulatory requirements under Bangladesh law that warrants urgent reform.

Therefore, as mentioned in the TBT agreement, developed countries should provide technical assistance (Article 11) and special and differential treatment for developing countries (Article 12) to ensure they receive meaningful benefit from the agreement. Moreover, LDCs, like Bangladesh, need special provisions for integration into the standard regime.

#### *C Domestic Regulations of Bangladesh: Market Access Challenges of Bangladesh Fish Trade under Environmental Concern*

There are many obstacles to the development of the fisheries sector, such as conservation of fisheries resources, various natural calamities and human-made problems, a lack of proper management, a lack of technically skilled manpower and a lack of funds. Despite this, the domestic regulations of Bangladesh play an important role in obtaining greater market access for its fish and fish products. Domestic regulations that are directly related to fish and fish products include:

- *National Fisheries Policy, 1998*
- *The Private Fisheries Protection Act, 1889*
- *The East Pakistan Government Fisheries (Protection) Ordinance, 1959*
- *The Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983*
- *The Marine Fisheries Ordinance, 1983*
- *The Marine Fisheries Rules, 1983*
- *The Fisheries Research Institute Ordinance, 1984.*

Other policies relevant to fisheries trade include:

- *National Water Policy, 1999*

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<sup>51</sup> Ibid

- *Environmental Policy, 1992*
- *The New Agriculture Extension Policy, 1996*
- *The Export Policy 2013–2015.*

The abovementioned policies and regulations are discussed under environmental concerns that derive from PPMs, standards, labelling, packaging and other relevant barrier-related categories.

### 1 *Process and Production Methods*

As outlined in Chapter 2, PPMs have created concern in Bangladesh about compliance, which has an important role in managing quality food products in fish and fish products. The *Protection and Conservation of Fish Act, 1950*,<sup>52</sup> which was enacted with the objective of protecting and preserving fish, does not mention PPMs, other than protection from the *current jal* (a special fishing net that has different mesh sizes).

The *Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983*<sup>53</sup> remains silent in relation to the quality- and standard-related Codex PPMs, which are essential for improving the standards and quality of the fish sector and related bans. This ordinance also lacks attention to HACCP, eco-labelling rules and the SSOQ.<sup>54</sup> In the case of the *Marine Fisheries Ordinance, 1983*,<sup>55</sup> it could expedite export growth and the PPMs of marine fisheries in maintaining international standards. Section 6 (b) of the *Fisheries Research Institute Ordinance, 1984* urges assistance in development of more efficient and economic methods for fish production, management, processing and marketing.

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<sup>52</sup> *The Protection and Conservation of Fish Act, 1950.*

<sup>53</sup> *The Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983.*

<sup>54</sup> SSOQ has prepared a code of conduct pertaining to food safety, traceability, environmental sustainability and human rights in the Bangladesh shrimp industry. It monitors and verifies implementation of recommended practices that are recommended by SSOQ for improving productivity.

<sup>55</sup> *The Marine Fisheries Ordinance, 1983.*

## 2 Standards

The *National Fisheries Policy* was adopted in 1998<sup>56</sup> and, by this time, many changes had taken place in the international rules, particularly in terms of standards and quality measures related to SPS and TBT measures. The *Protection and Conservation of Fish Act, 1950*<sup>57</sup> was enacted to provide protection and conservation of fish in Bangladesh. The important feature<sup>58</sup> of this act is its primary attention to protecting and regulating fish caught through using current *jals*,<sup>59</sup> including offence and penalty provisions. This act should include the protection of fish habitats, such as ensuring quality water where fish are produced, as well as ensuring the safety of consumers, as mentioned in the SPS agreement. Moreover, fish caught by the current *jai* depend on the size of the net. The net sizes are not taken into consideration in controlling fishing. Poor fishermen who are solely dependent on the current *jai* and do not have any other source of income are not considered in the act.

The *East Pakistan Government Fisheries (Protection) Ordinance, 1959*<sup>60</sup> was enacted to protect fisheries areas in Bangladesh from unauthorised fishing. This ordinance shows that it was enacted to control unauthorised fishing in fishing areas; however, it does not specify the ways and means by which it can be stopped permanently. The *Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983*<sup>61</sup> was enacted to provide inspection and quality control of fish and fish products. The important sections of this ordinance are as follows: Section 2 provides definitions of fish and fish products, fresh fish, processing and quality control; Section 4 deals with inspection to ensure compliance with the provisions of the ordinance; Section 5 deals with the export of fish, which must not be decomposed, unwholesome or contaminated with pathogenic organisms; Section 6 deals with the handling of fish and fish products within a disease-free environment and Section 7 deals with the operation of fish processing and packing plants and their establishment.

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<sup>56</sup> *National Fisheries Policy, 1998.*

<sup>57</sup> *The Protection and Conservation of Fish Act, 1950.*

<sup>58</sup> *Ibid* ss 2, 4, 4A, 5, 6.

<sup>59</sup> Current *jai* refers to a special net to catch fish.

<sup>60</sup> *The East Pakistan Government Fisheries (Protection) Ordinance, 1959.*

<sup>61</sup> *The Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983.*



This Act substitutes the *Protection and Conservation of Fish Act*, 1950. It is a basic ordinance regarding the handling, inspection and processing of fish and fish products and has a positive effect and contributes to improving qualitative changes in the sector.

### 3 Eco-labelling and Packaging

As mentioned earlier, Bangladesh will benefit if it can adopt environmentally sustainable shrimp production. However, the domestic regulations enacted for quality fish and fish products, namely *Protection and Conservation of Fish*, 1950 and the *Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983*, do not mention eco-labelling. As mentioned, the SSOQ<sup>62</sup> has prepared a code of conduct pertaining to food safety, traceability, environmental sustainability and human rights in the Bangladesh shrimp industry based on a review of international and national standards. This code now applies to all participants in the shrimp production chain that are certified by SSOQ. Enam ul et al.<sup>63</sup> found that labelling rules, packaging and marketing requirements are major problems for market access in the shrimp industry.

### 4 Environment

The *Protection and Conservation of Fish Act, 1950* does not mention the environment; however, it has implications for the environment in several ways. For example, fishing farms reduce crop production through erosion of soil fertility and loss of biodiversity during the fish catching process and through the use of various fertilisers.

As introduced in Chapter 4, the *National Environment Policy, 1992*<sup>64</sup> was adopted with the aim of maintaining the ecological balance and overall progress and development of the country through protection and improvement of the environment. In Section 3.8, it states that:

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<sup>62</sup> SSOQ, above n 46.

<sup>63</sup> Enam ul Haque, Azreen Karim and Wahid Abdullah, 'Market Access Issues: EU–Bangladesh Trade Regime: A Case Study on Market Access—Myths and Realities' (Draft report, International Institute for Sustainable Development, 2005) 7.

<sup>64</sup> *National Environment Policy, 1992*.

Proper environment for the fishery development will be ensured; Protect the water resources for fisheries development; Ensure that fisheries development projects do not hamper the mangrove and ecosystem; Ensure alternate arrangement if any projects regarding water development, flood control and irrigation goes in against the fisheries development.<sup>65</sup>

This policy outlines the necessary arrangement for fisheries development; however, it does not mention how this policy could contribute to overall fisheries development. This shortcoming should be addressed and needs updated information regarding the standards of fish and fish products, which could help to increase fish production and export. Conversely, the *Marine Fisheries Ordinance, 1983*<sup>66</sup> does not refer to any environment-related laws of Bangladesh that could contribute more in terms of conservation and development of marine fisheries.

## 5 Research and Development

The objectives<sup>67</sup> of the *National Fisheries Policy, 1992* is to enhance fisheries production, alleviate poverty by creating self-employment opportunities and improving socioeconomic conditions for fishermen, fulfil the demand for animal protein, achieve economic growth through foreign currency earnings from fish and fisheries product export, maintain ecological balance, conserve biodiversity, ensure public health and provide recreational facilities.

The *National Fisheries Policy, 1992* has incorporated many issues, as outlined in Section 5,<sup>68</sup> to increase the volume of fish production and to improve the socioeconomic conditions of the people engaged in this sector by mitigating national demand and through foreign currency earnings. However, this policy cannot work alone. It lacks proper links to other relevant policies and regulations in Bangladesh that deal with the fisheries sector, for

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<sup>65</sup> Ibid s 3.8.

<sup>66</sup> *The Marine Fisheries Ordinance, 1983*.

<sup>67</sup> *National Fisheries Policy, 1998* s 3.

<sup>68</sup> Ibid s 5.

example, the *Water Policy*, *Environment Policy*, *Agriculture Policy* and *National Food Policy*, which are discussed in this chapter. Although this policy mentions the analysis of previous surveys, it does not mention any authorities that could conduct this analysis. This policy lacks research-based institutional support, which is fundamental for the overall growth of this sector to achieve greater market access.

The *Marine Fisheries Ordinance, 1983*<sup>69</sup> was enacted to make provisions for the management, conservation and development of the marine fisheries of Bangladesh. This ordinance mainly deals with local and foreign fishing vessels, their offences, legal procedures and the declaration of marine reserve for conservation.

The *National Water Policy, 1999*<sup>70</sup> was adopted with the aim to provide direction to all agencies working within the water sector, and institutions that relate to the water sector in one form or another, for achievement of specified objectives. The fishery-relevant part of this policy is discussed in Section 4.9 of the policy, where it states that fisheries are integral aspects of economic development in Bangladesh and strongly linked to advancement of target groups, poverty alleviation, nutrition and employment generation. Thus, availability of water for fisheries is important from the perspective of sustenance, as well as commercial ventures. The relevant sections for fisheries show that this policy keeps a space for fisheries development, however, does not mention, specifically, how this policy can enhance the growth of fish and fisheries products.

## 6 Integrated or Coordinated Approach

Since the fisheries sector is interrelated with other sectors, like agriculture and livestock, and its growth depends on the development of other sectors, all sectors should be integrated or coordinated with the *National Fisheries Policy, 1998*; however, nothing is mentioned in the policy, other than forming a national council.<sup>71</sup>

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<sup>69</sup> *The Marine Fisheries Ordinance, 1983.*

<sup>70</sup> *National Water Policy, 1999.*

<sup>71</sup> *Ibid* s 12.2.

The *New Agriculture Extension Policy, 1996*<sup>72</sup> was adopted to encourage the various partners and agencies within the national agricultural extension system to provide efficient and effective services that complement and reinforce each other in an effort to increase the efficiency and productivity of agriculture in Bangladesh. The important features of this policy<sup>73</sup> were adopted mainly to coordinate existing policies and ensure cooperation among the various agencies during implementation. Although it tries to integrate all stakeholders under one umbrella, this policy is not able to reach its target because of a lack of interconnectivity among existing policies and implementing authorities. Moreover, international-standards-related policy options that can guide policy makers to achieve their target are missing.

Section 6(a) of the *Fisheries Research Institute Ordinance, 1984*<sup>74</sup> states that the institute shall carry out and coordinate fisheries research in Bangladesh. The relevant sections of the *National Water Policy, 1999* for fisheries<sup>75</sup> shows that this policy keeps a space for fisheries development, however, does not mention, specifically, how this policy can enhance the growth of fish and fisheries products using an integrated approach with other relevant policies of Bangladesh.

## 7 Lack of Upgradation

The *Private Fisheries Protection Act, 1889*<sup>76</sup> was enacted for the protection of fishing rights in private waters. This act consists of only six sections (Section 2 provides interpretation of fish, which includes shellfish and turtles; Section 3 provides the penalties;

<sup>72</sup> *The New Agriculture Extension Policy, 1996.*

<sup>73</sup> These features are as follows:

- “integrated extension support to farmers—advice and information provided to farmers must take an integrated farming systems perspective. Extension agencies with differing expertise must collaborate if they are to provide whole farm advice
- co-ordinate extension activities—co-ordination underlines all components of the NAEP. Extension services provided by different agencies must be coordinated at all levels to optimise the use of resources. This can be achieved by sharing information and expertise between the agencies involved.
- integrated environmental support—the NAEP supports extension programmers seeking to encourage farmers to apply sustainable and environmentally friendly agricultural practices. Efforts should be made to support and learn from farmers, as well as from the formal research system.”

<sup>74</sup> *The Fisheries Research Institute Ordinance, 1984.*

<sup>75</sup> *National Water Policy, 1999* s 4.9.

<sup>76</sup> *The Private Fisheries Protection Act, 1889.*

Section 4.1 deals with the forfeiture of fixed engine; Section 4.2 deals with the removal of fixed engine; Section 5 deals with the commitment of offence and Section 6 deals with offences as cognisable offences). This act shows that it only provides the rights of private fisheries where others' access is barred. It protects the rights of private fisheries and ensures that nobody is allowed to fish on private property. Through this, it encourages private entrepreneurs to introduce new fishery farms that can increase fish production. However, this is an old act and lacks up-to-date information in regards to quality and standard of fish produced on private farms. Moreover, this act does not mention how private fisheries can contribute to the national economy.

The *Protection and Conservation of Fish Act, 1950* is also an old act that warrants reform in line with current national and international rules to ensure compliance of standards.

The *East Pakistan Government Fisheries (Protection) Ordinance, 1959* is an old ordinance and has gaps within the current rule and obligations of national and international fish protection activities.

## 8 Challenges Associated with the Regulation of Fish Trade and Other Relevant Policies

The abovementioned domestic policies and regulations of Bangladesh have been analysed with a view to identifying the shortcomings that are creating barriers in gaining greater market access for Bangladesh fish and fish products. Other than the *National Fishery Policy, 1998*, all policies were adopted during or before the GATT regime and, as such, do not reflect current information regarding fish regulations or practices. The domestic policies and regulations not directly related to the fish trade can make a significant contribution when an integrated approach is taken. However, like other policies, these regulations have not kept up with updated information in their respective sectors. Moreover, Bangladesh has lagged behind in terms of resources, well-trained staff and technology, which are pressing needs for improvement. Current financial assistance is not enough to comply with international standards within a short period. ERs are becoming increasingly stringent and unattainable to comply with the demands of importing countries.

## *D Bangladesh Negotiation Strategies for Fishery Market Access*

### *1 Coordinated Approach*

The production and export of fish and fish products involves various activities and its management has many issues, which means that the development of this sector depends on coordinated actions from various organisations, including ministries, departments, agencies, the private sector, NGOs and research institutes. For this reason, Bangladesh needs to adopt a comprehensive and coordinated strategy for advancing market access of Bangladesh fish and fish products. A complete assessment of the sector needs to be made to achieve a full overview of production, yield, capacity use, production methods, effort level and economic contribution. As previously mentioned, there should be an independent body that will provide recommendations to the government by considering the developmental needs of national demand, export potential and comparative advantage through a well-defined study to develop a long-term strategic plan for agricultural trade policy in light of existing international rules and regulations. In parallel, the government should provide concerned officials with adequate knowledge to deal with the changing phenomena of upcoming issues.

To achieve this goal, Government should take coordinated approach that can increase institutional and individual skills of the concerned authority particularly - EPB, Port Authorities, Department of Fisheries, BSTI, different trade bodies; Bangladesh foreign missions abroad and strengthening and expanding the product-based Business Promotion Council activities through joint initiatives of public and private sectors.

### *2 Duty-free and Quota-free Market Access*

Bangladesh may propose to add the words ‘commercially meaningful’ DFQF market access in Sub-paragraph (e) and to end the issue within the Doha implementation period and may also seek market access in developing countries like China, Brazil and India so that they may achieve greater access in these markets.

### *3 Proactive Engagement in Negotiations*

Bangladesh should pursue current negotiations particularly in the special and differential provisions, enabling clause, transfer of technology and assistance in terms of capacity building for the relevant officials of the stakeholders under aid for trade programme. The assistance should come under the auspices of ensuring compliance of SPS- and TBT-related requirements to improve market access of fish and fish products.

### *4 Actions at the Domestic Level*

Bangladesh should take action in raising investment and support levels for fish trade, establishing a SPS- and TBT-related compliance and monitoring system for exporting fish and fish products and enacting and updating existing relevant regulations for the preservation of water resources for fish development, considering the loss of biodiversity and environmental degradation caused because of a lack of adequate knowledge. Poor fishermen should be rehabilitated, considering their socio economic condition, to refrain from fishing with the *current jal*. The supplier of the *current jal*, who provides these on credit to poor fishermen, should be brought under this act to stop the fishing of undersized fish.

### *5 Reform in Domestic Policy*

Bangladesh needs to upgrade domestic policies in light of international standards and negotiate properly to gain commercially meaningful market access for Bangladesh fish and fish products in a sustainable manner for development.

As discussed earlier, there should be a master policy for trade in light of WTO rules that should be considered when preparing sector-specific regulations. The authority responsible for overseeing national trade policy should monitor and upgrade regulations on a continuous basis, depending on Bangladesh's current and future demands for national, regional and international trade. In relation to fish trade, policy should incorporate all

essential elements that can promote fish production for local consumption and a substantial portion of this can be exported to foreign markets. Therefore, it is necessary to ensure that products meet international standards.

It is necessary to negotiate effectively for equivalence and raising the standards of Bangladesh products in light of standard-setting organisations. Bangladesh may negotiate for transfer of technology and assistance for upgrading its standards according to its developmental needs.

A lack of inter-sectoral coordination and inconsistency with other policies are the major drawbacks of Bangladesh's fishery policy. The natural resource sectors of the environment, such as water, fish and forests, continually suffer. Inconsistency with other policies should be removed to increase regulatory coherence and coordination among interested parties. A lack of regulatory and institutional capacity has been a critical issue in dealing with the domestic regulations of Bangladesh and it is observed that the people engaged in the implementation process should be trained in light of the regulations of the GATT/WTO to ensure meaningful benefit is obtained.

#### *E Market Access Implications for Bangladesh Fish and Fisheries Products under ERs*

Bangladesh fish and fisheries products market access is mostly affected due to PPMs, standards, packaging and labelling related barriers based upon compliance issues (discussed in subsections B1-3). But, Bangladesh has difficulties in meeting these high safety standards and quality requirements because of lack of resources and monitoring compliance at the factory level which needs urgent remedies.

However, Article 9 of the SPS agreement puts emphasis on technical cooperation to this end but it needs explicit reference to upgrading laboratories, certification bodies and accreditation institutions to strengthen the ability of developing countries to deal with scientific issues. Therefore, Article 9.2 should be strengthened by making technical



cooperation mandatory for the importing countries before introducing new SPS measures to avoid unnecessary barriers to trade.

Furthermore, the domestic regulations are not up to date and consistent with the current international rules and obligations that are necessary to improve the overall standard of the fish and fisheries products both for domestic as well as international consumers (discussed in subsections of C7-8). Bangladesh is also facing problems due to its regulatory and management weaknesses resulting in lack of knowledge in implementation, coordination and monitoring of the compliance issues (discussed in subsections C 6 and D1-5).

### *F Conclusion*

This chapter examined the market access challenges of Bangladesh fish and fish products that are due to the WTO's ERs under NAMA negotiation. Bangladesh fishery market access faces a severe challenge in regards to the WTO's ERs. The WTO agreements, particularly the SPS and TBT agreements, were analysed with a view to identifying the gaps between developed and developing countries in the areas of fish export, narrowing down into international standards requirements. It has been observed that Bangladesh fish and fish products have been facing market access barriers in regards to PP Ms, standards, packaging and labelling-related barriers and, hence, this chapter argued for strengthening of Article 9.2 of the SPS agreement and Article 11 of the TBT agreement by making technical cooperation mandatory for developing countries, including LDCs, when new SPS or TBT measures are introduced by importing countries. Otherwise, neither technical assistance nor technology transfer are sufficient to ensure compliance and are not equitable, as committed by developed partners, to achieve the overall goals.

The domestic policies of Bangladesh fish trade were examined with a view to identifying the loopholes, compatibility problems, contradictions and lacunae within the policies, especially with the perspective of changing situations. Many old policies have lost relevance in the face of new challenges in different sectors and within subsectors. To

ensure market access, quality control of fish at every stage in the export chain, particularly the shrimp sector, is mandatory. Random inspections by government officials and continuous guidance and training on the development of relevant rules and regulations should be regular practice for all plants. EU regulations have forced the shrimp sector to undertake certain measures that have improved processing standards. However, quality control at other points of the production system, such as landing and procurement centres, is equally important for the industry to be competitive in the global market. Although, the government of Bangladesh has taken some initiatives to address the issues raised above to remove the obstacles that have been creating barriers for the market access of its fish and fisheries products but these initiatives are not enough to meet the challenges ahead and to ensure sustainable growth of this sector. The following chapter discusses the market access implications of Bangladesh's pharmaceutical sector.

## VI ENVIRONMENTAL CONCERNS: MARKET ACCESS CHALLENGES AND OPPORTUNITIES FOR BANGLADESH PHARMACEUTICAL PRODUCTS\*

### *A Introduction*

Establishing strong minimum standards for 'IP rights', including patent protection for pharmaceuticals, is one of the aims of the TRIPS agreement.<sup>1</sup> Numerous studies support that patent protection increases the price and, thus, limits current access to medicines.<sup>2</sup> Developing countries and LDCs are concerned about strong patent protection that may be harmful to their emerging pharmaceutical industries and for access to affordable medicines for their citizens.<sup>3</sup> To address these concerns, Articles 65–67<sup>4</sup> of the TRIPS agreement provides an extended period for LDCs and the Doha Declaration<sup>5</sup> further extends the transitional period for LDCs to introduce pharmaceutical patent protection until 1 January 2016. The pharmaceutical sector is one of the highest priority sectors in Bangladesh.<sup>6</sup> The Bangladesh pharmaceutical industry is now heading towards self-sufficiency in meeting local demand and with an annual two-digit growth rate.<sup>7</sup> There are more than 230 small, medium, large and multinational companies operating in Bangladesh, producing around 97

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\*A part of this chapter is accepted for publication as Pradip Royhan, 'Market Access Challenges and Opportunities for Bangladesh Pharmaceutical Products under TRIPS' (2013) *Journal of Intellectual Property Law and Practice* (Forthcoming).

<sup>1</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') preamble, 321.

<sup>2</sup> J Watal, 'Pharmaceutical Patents, Prices and Welfare Losses: Policy Options for India under the WTO TRIPS Agreement' (2000) 23(5) *World Economy* 2000, 733; Inthira Yamabhai and Richard D Smith, 'A Review of the Health and Economic Implications of Patent Protection, with a Specific Focus on Thailand' (2012) 10 *Journal of Health Research Policy and System (HARPS)*; C Fink, 'How Stronger Patent Protection in India Might Affect the Behavior of Transnational Pharmaceutical Industries' (Policy Research Working Paper No 2352, World Bank, May 2000).

<sup>3</sup> Mohammad M Azam and Kristy Richardson, 'Pharmaceutical Patent Protection and Trips Challenges for Bangladesh: An Appraisal of Bangladesh's Patent Office and Department of Drug Administration' (2010) 22(2) *Bond Law Review* 1.

<sup>4</sup> Article 65 denotes the transitional arrangement, Article 66 denotes LDCs and Article 67 denotes technical cooperation of the TRIPS agreement.

<sup>5</sup> *Declaration on the TRIPS Agreement and Public Health*, WTO Doc WT/MIN(01)/DEC/2 (20 November 2001).

<sup>6</sup> Ministry of Finance, *Bangladesh Economic Review 2012* <[http://www.ministryof.gov.bd/en/index.php?option=com\\_content&view=article&id=230&Itemid=1](http://www.ministryof.gov.bd/en/index.php?option=com_content&view=article&id=230&Itemid=1)> 171.

<sup>7</sup> EPB, *Statistics* <[www.epb.gov.bd](http://www.epb.gov.bd)>.

per cent of total demand and for pharmaceuticals.<sup>8</sup> However, Bangladesh needs to ensure its TRIPS compliance within the given period; otherwise, if not extended further, the country would face negative consequences in regards to patent protection and access to affordable medicine. Compliance with the TRIPS patent regime in the Bangladesh pharmaceutical sector does not depend only on consequential negotiations. It mostly depends on domestic regulations and the role of the regulatory agencies responsible for enacting adequate regulations. This chapter examines Bangladesh domestic regulations, as well as international rules, particularly the TRIPS patentability rights, to explore the market access challenges of the Bangladesh pharmaceutical sector.

The TRIPS agreement was concluded at the close of the Uruguay Round of MTNs in 1993<sup>9</sup> with a remarkable expansion of the international framework for IP rights. In the negotiations, developing countries resisted the inclusion of IP.<sup>10</sup> They were motivated by pragmatic concerns that higher levels of IP protection would involve a substantial commitment of insufficient government resources, which would produce a significant net outflow of royalties to foreign rights holders and increased domestic prices.<sup>11</sup> A consensus among developing countries has emerged that the patent rights for pharmaceutical products guaranteed by TRIPS are a substantial barrier to policy formulation for ensuring affordable access to medicine for their people.<sup>12</sup> The monopoly of patent holders in imposing higher prices for essential drugs, particularly HIV/ AIDs and other pandemics, have created concerns for developing countries.<sup>13</sup>

Their concerns were clearly and formally recognised at the Doha Ministerial Conference on the TRIPS agreement and public health,<sup>14</sup> where members agreed that TRIPS can and

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<sup>8</sup> UK Trade and Investment, *Pharmaceutical Sector in Bangladesh* <<http://www.ukti.gov.uk/export/sectors/lifesciences/sectorbriefing/110696.html>>.

<sup>9</sup> The Uruguay Round of Multilateral Trade Negotiations under GATT (1986–1994).

<sup>10</sup> *Meeting of Negotiating Group of 12–14 July 1989*, GATT Doc MTN.GNG/NG11/14 (12 September 1989) (Note by the Secretariat) [79.1].

<sup>11</sup> Tony VanDuzer, 'TRIPS and the Pharmaceutical Industry in Bangladesh: Towards a National Strategy' (Occasional Paper No 24, CPD, 2002).

<sup>12</sup> *Ibid* 3.

<sup>13</sup> *Ibid*

<sup>14</sup> *Declaration on the TRIPS Agreement and Public Health*, WTO Doc WT/MIN(01)/DEC/2 (20 November 2001).

should be interpreted in a manner supportive of members' rights to protect public health and promote access to medicines for all. The international community has not delivered any significant response to the health crisis and it is doubtful that Bangladesh could depend on such a response in the future to improve access to affordable medicines.<sup>15</sup> In this context, this chapter will analyse the opportunity of the development of the pharmaceutical industry in Bangladesh, considering existing and possible new rules on TRIPS. The development of a strong national pharmaceutical industry might be a good option for Bangladesh to ensure secure continuing access to medicines and, at the same time, generate jobs and export earnings.

It is worth noting that Bangladesh is now exporting a wide range of pharmaceutical products to 83 countries<sup>16</sup> in Asia, Africa, Europe and Australia and, in the 2012-13 financial year, the total export was US\$ 60.00 million.<sup>17</sup> It is necessary to evaluate its potential market access opportunities through mitigating existing barriers. To respond to the market access challenges for the Bangladesh pharmaceutical sector, this chapter proceeds with an analysis of IP rights, patent protection of pharmaceutical products, access to medicine for all, patentability exclusion rights because of the WTO's ERs under the TRIPS agreement and the market access barriers that these elements create. This chapter critically evaluates flexibilities within the TRIPS, the Doha Declaration and the waiver decisions from the standpoint of industry and public health interests.

## *B Pertinent Conventions Related to TRIPS*

### *1 Paris Convention for the Protection of Industrial Property, 1883*

The *Paris Convention for the Protection of Industrial Property*<sup>18</sup> was signed on 20 March 1883 and was designed to help people expand their protection on intellectual creations in other countries. The agreement protected IP in the form of industrial property rights, such

<sup>15</sup> F M Abbott, 'The Doha Declaration on the TRIPS Agreement and Public Health: Lightening a Dark Corner at the WTO' (2002) 5 *International Economic Law* 469.

<sup>16</sup> Directorate General of Drug Administration (Ministry of Health and Family Welfare, Government of the Peoples Republic of Bangladesh) (10 December 2012 see *Exporting Countries* at <[http://www.ddabd.org/exporting\\_country.htm](http://www.ddabd.org/exporting_country.htm)>.

<sup>17</sup> EPB Statistics, 2013

<sup>18</sup> *Paris Convention for the Protection of Industrial Property, 1883*.

as inventions (patents), trademarks and industrial designs, utility models, trade names, GIs and repression of unfair competition.<sup>19</sup> The convention provides for the right of priority in the case of patents (and utility models, where they exist), marks and industrial designs.<sup>20</sup> It sets some common rules that all contracting states must follow. However, considering its relevancy to ERs, only patent-related issues are outlined. Patents granted in different contracting states for the same invention are independent of each other.<sup>21</sup> The inventor has the right to be named as such in the patent.<sup>22</sup> According to Article 4 quarter of the Paris Convention:

The grant of a patent may not be refused, and a patent may not be invalidated, on the ground that the sale of the patented product, or of a product obtained by means of the patented process, is subject to restrictions or limitations resulting from the domestic law.<sup>23</sup>

To prevent abuse,<sup>24</sup> each contracting state that takes legislative measures providing for the grant of compulsory licences<sup>25</sup> may do so only with certain limitations. Thus, based on failure to work the patented invention, a compulsory licence may only be granted pursuant to a request filed after three or four years of failure to work or insufficient working of the patented invention and it must be refused if the patentee gives legitimate reasons to justify his or her inaction.<sup>26</sup>

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<sup>19</sup> *Convention Establishing the World Intellectual Property Organization, 1967.*

<sup>20</sup> *Paris Convention for the Protection of Industrial Property, 1883, art 4.*

<sup>21</sup> Ibid art 4bis; the granting of a patent in one contracting state does not oblige the other contracting states to grant a patent. A patent cannot be refused, annulled or terminated in any contracting state on the grounds that it has been refused or annulled or has terminated in any other contracting state.

<sup>22</sup> *Paris Convention for the Protection of Industrial Property, 1883, art 4.*

<sup>23</sup> Ibid.

<sup>24</sup> Abuse might result from the exclusive rights conferred by a patent.

<sup>25</sup> Compulsory licence is a licence not granted by the owner of the patent but by a public authority of the state concerned.

<sup>26</sup> *Paris Convention for the Protection of Industrial Property, 1883 art 5*; forfeiture of a patent may not be provided for, except in cases where the grant of a compulsory licence would not have been sufficient to prevent the abuse. In the latter case, proceedings for forfeiture of a patent may be instituted, but only after the expiration of two years from the grant of the first compulsory licence.

## *2 Convention Establishing the World Intellectual Property Organization, 1967*

The WIPO is a specialised agency of the UN dedicated to developing a balanced and accessible international IP system that rewards creativity, stimulates innovation and contributes to economic development, while safeguarding public interest.<sup>27</sup> The agreement between the UN and WIPO recognises that WIPO is responsible for taking appropriate action in accordance with its basic instrument, treaties for promoting creative intellectual activity and for facilitating the transfer of technology related to industrial property to developing countries to accelerate economic, social and cultural development.<sup>28</sup> Its main function is to promote the development of measures designed to facilitate the efficient protection of IP throughout the world and to harmonise national legislation in this field, to offer its cooperation to states requesting legal and technical assistance in the field of IP and to maintain services facilitating the international protection of IP and, where appropriate, provide for registration in this field and the publication of data concerning registrations. The relevant issues of the WIPO conventions are discussed throughout this chapter.

### *C The TRIPS Agreement and Its Coverage*

Considering the contribution of the TRIPS agreement to economic and social development, its features, basic principles, obligations, technical cooperation, technology transfer, relationship to public health and relationship to the pharmaceutical sector are examined with a view to achieving greater market access, which covers part of the research question.

#### *1 Features of TRIPS*

The TRIPS agreement has three main features: standards, enforcement and dispute settlement, which are briefly outlined in the following sections.

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<sup>27</sup> WIPO, *WIPO Intellectual Property Handbook: Policy, Law and Use* (WIPO, 2<sup>nd</sup> ed, 2004).

<sup>28</sup> *Ibid* 5.

### *(a) Standards*

The TRIPS agreement sets out the minimum standard of protection to be provided by each member in respect to each of the main areas of IP. Each of the main elements of protection (copyright and related rights,<sup>29</sup> trademarks,<sup>30</sup> GIs,<sup>31</sup> industrial designs,<sup>32</sup> patents,<sup>33</sup> layout design of integrated circuits,<sup>34</sup> protection of undisclosed information<sup>35</sup> and control of anti-competitive practices in contractual licences)<sup>36</sup> are well defined in Part II of the TRIPS agreement. From these, patent protection is the core area of discussion in this chapter, as one of the aims of the TRIPS agreement is to establish strong minimum standards in pharmaceutical products as IP rights.<sup>37</sup>

### *(i) Patents*

According to WIPO, a patent is the right granted to an inventor by a state, or by a regional office acting for several states, which allows the inventor to exclude anyone else from commercially exploiting his or her invention for a limited period, generally 20 years. As discussed in the industrial property section, to be patentable, an invention usually needs to

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<sup>29</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 9–14.

<sup>30</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 15–21.

<sup>31</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 22–24.

<sup>32</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 25–26.

<sup>33</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 27–34.

<sup>34</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 35–38.

<sup>35</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 39.

<sup>36</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 40.

<sup>37</sup> Azam and Richardson, above n 3, 1.



meet the requirements of absolute novelty, non-obviousness and industrial applicability. Patents may be granted for all types of processes and products, including those related to the primary sector of production, namely agriculture, fishing or mining. This chapter will focus on how patents are creating market access barriers for Bangladesh pharmaceutical products in regards to the WTO's ERs.

### *(b) Enforcement*

The second main set of provisions deals with domestic procedures and remedies for the enforcement of IP rights and is discussed in Part III of the TRIPS agreement. The agreement lays down certain general principles applicable to all IP rights.<sup>38</sup> It contains provisions on civil and administrative procedure and remedies,<sup>39</sup> provisional measures,<sup>40</sup> special requirements relevant to border measures<sup>41</sup> and criminal procedures<sup>42</sup> with specifications so that right holders can effectively enforce their rights.

### *(c) Dispute Settlement*

The TRIPS agreement has the provisions<sup>43</sup> to solve disputes between WTO members under the WTO dispute settlement procedures. Members are left free to determine the appropriate

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<sup>38</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 41.

<sup>39</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 42–49.

<sup>40</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 50.

<sup>41</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 51–60.

<sup>42</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 61.

<sup>43</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 63–64.

method of implementing the provisions of the agreement within their own legal system and practice.<sup>44</sup>

## 2 TRIPS Basic Principles

The WTO agreement on TRIPS has three basic principles. These are:

- (a) national treatment: equal treatment for foreign and domestic *physical* individuals and companies should be given with regard to IP rights<sup>45</sup>
- (b) MFN treatment: equal treatment for nationals of all trading partners should be given with regard to the protection of IP rights<sup>46</sup>
- (c) balanced protection: intellectual property protection should benefit both producers and users and enhance economic and social welfare. Article 6 of the TRIPS agreement states:

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.<sup>47</sup>

## 3 Obligations for TRIPS Implementation

The TRIPS obligations have great influence on LDC market access and, subsequently, economic growth. The TRIPS agreement allows for a flexible implementation period in light of a member's level of economic development. It is applicable for all WTO members,

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<sup>44</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 1(1).

<sup>45</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 3.

<sup>46</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 4.

<sup>47</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 6.

but the agreement allows<sup>48</sup> delayed implementation: developed countries have until 1 January 1996 for one year, developing countries or transitional economies until 1 January 2000 for five years and LDCs until 1 January 2006, initially for 11 years with the possibility of an extension. This period is extended up to July 2013 for another seven and a half years with the possibility of further extension.<sup>49</sup> On 11 June 2013, WTO members agreed to extend until 1 July 2021, the deadline for LDCs to protect IP under the WTO's TRIPS agreement, with a further extension possible when the time comes.<sup>50</sup> For pharmaceutical patents, it has been extended to 1 January 2016.<sup>51</sup> The TRIPS council will review the legislation of members after the transition periods have expired.<sup>52</sup>

All WTO members have to implement the principles of national treatment and MFN treatment from 1 January 1996<sup>53</sup>. If a developing country does not provide product patent protection in a particular area of technology after TRIPS comes into force, it has up to 10 years to introduce protection.<sup>54</sup> The country must accept the filing of patent applications before the end of the transitional period for pharmaceutical and agricultural chemical products.<sup>55</sup> In addition, countries using transitional periods must ensure that any changes in

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<sup>48</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 65.

<sup>49</sup> WTO, *The Sixth WTO Ministerial Conference* <[http://www.wto.org/english/thewto\\_e/minist\\_e/min05\\_e/min05\\_e.htm](http://www.wto.org/english/thewto_e/minist_e/min05_e/min05_e.htm)>.

<sup>50</sup> WTO, *The Least Developed Get Eight Years more Leeway on Protecting Intellectual Property* (2013) <[http://www.wto.org/english/news\\_e/news13\\_e/trip\\_11jun13\\_e.htm](http://www.wto.org/english/news_e/news13_e/trip_11jun13_e.htm)>.

<sup>51</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) 3.

<sup>52</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 71.

<sup>53</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 65.1.

<sup>54</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 65.4.

<sup>55</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 70.8.

their laws, regulations and practices made during the transition period do not result in a lesser degree of consistency with the provisions of the agreement.<sup>56</sup>

#### *4 Technical Cooperation and Technology Transfer under TRIPs*

The TRIPS agreement instructs developed countries specifically to extend technical cooperation and technology transfer to developing countries and LDCs, which is one of the core areas of this research.

##### *(a) Technical Cooperation*

The preamble<sup>57</sup> of the agreement between the WIPO and the WTO urges the establishment of a mutually supportive relationship with a view to establishing appropriate arrangements for cooperation between them. This cooperation agreement states that the International Bureau of WIPO and the WTO Secretariat shall enhance cooperation in their legal technical assistance and technical cooperation activities relating to the TRIPS agreement for developing countries.<sup>58</sup>

##### *(b) Technology Transfer*

Technology transfer was first tabled in 1961 by some developing countries to ascertain the role of international treaties in promoting IP rights in developing countries.<sup>59</sup> This has increasingly gained prominence because developing countries felt both the need to revise international treaties dealing with IP and to ensure that there is a specific framework on

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<sup>56</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 65.5.

<sup>57</sup> *WTO-WIPO Cooperation Agreement*, WO/GA/24/5 Rev. Annex (Geneva, 22 December, 1995) available at <[http://www.wto.org/english/tratop\\_e/trips\\_e/wtowip\\_e.htm](http://www.wto.org/english/tratop_e/trips_e/wtowip_e.htm)>.

<sup>58</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 4, art 66.

<sup>59</sup> Padmashree Gehl Sampath and Pedro Roffe, 'Unpacking the International Technology Transfer Debate: Fifty Years and Beyond' (2012) 36 *ICTSD Programme on Innovation, Technology and Intellectual Property* 1.

technology transfer that promotes access to existing technologies.<sup>60</sup> The world has been witnessing a widening technological divide not only between the technologically developed and developing world but also among developing countries themselves<sup>61</sup> with technological divergence among developing countries increasing with time.<sup>62</sup> Although some countries have been relatively successful, there are still many developing countries for which technological marginalisation is a recurrent reality.<sup>63</sup> Sampath and Roffe<sup>64</sup> argue that critical links between technology transfer, IP rights and economic development are threefold and need to be internalised into the existing political economy of technology transfer. Firstly, they find that the private sector does not have automatic incentives to transfer technology to developing countries. As a result, national coordination and actions should be taken within the countries for technological learning and absorptive capacity.<sup>65</sup> Secondly, any effort to unpack the current IP system for technology transfer needs to address the conceptualisation, measurement and assessment of technology transfer and how developed countries can fulfil their obligations. Thirdly, there is a critical link between international trade and technological development, as countries tend to benefit from IP rights when they engage in more international trade.

Developing countries consider technology transfer part of the bargain in which they have agreed to protect IP rights.<sup>66</sup> The TRIPS agreement requires developed countries' governments to provide incentives for their companies to transfer technology to LDCs.<sup>67</sup>

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<sup>60</sup> Ibid

<sup>61</sup> UNCTAD, 'Technology and Innovation Report 2012: Innovation, Technology and South-South Collaboration' (United Nations Publication UNCTAD/TIR/2012, UNCTAD, 2012).

<sup>62</sup> Ibid

<sup>63</sup> Sampath and Roffe, above n 87, 2.

<sup>64</sup> Ibid

<sup>65</sup> Ibid

<sup>66</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 67.

<sup>67</sup> Ibid art 66.

## 5 The TRIPS Agreement in Relation to Public Health

In the Doha Declaration, ministers stressed that the TRIPS agreement should support public health by promoting access to existing medicines and also the creation of new medicines.<sup>68</sup>

Article 4 of the Declaration of TRIPS and Public Health states:

We affirm that the Agreement can and should be interpreted and implemented in a manner supportive of WTO members' right to protect public health and, in particular, to promote access to medicines for all.<sup>69</sup>

It emphasises that the TRIPS agreement does not and should not prevent member governments from acting to protect public health and using the agreement's flexibilities.<sup>70</sup>

The declaration instructed the TRIPS council<sup>71</sup> to find a solution to the problems countries may face in making use of compulsory licensing, if they have too little or no pharmaceutical manufacturing capacity and report to the General Council by end of 2002, which was achieved in August 2003.<sup>72</sup> It also reiterated the commitment of developed country members<sup>73</sup> to provide incentives to their enterprises and institutions to promote and encourage technology transfer to LDC members pursuant to Article 66.2. This declaration extended the deadlines for LDCs to apply provisions on pharmaceutical patents until January 2016.<sup>74</sup>

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<sup>68</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [17].

<sup>69</sup> *Declaration on the TRIPS Agreement and Public Health*, WTO Doc WT/MIN(01)/DEC/2 (20 November 2001).

<sup>70</sup> *Ibid* art 5.

<sup>71</sup> *Ibid* art 6.

<sup>72</sup> WTO, *Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health*, WTO Doc WT/L/540 and Corr.1 (1 September 2003) (Decision).

<sup>73</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights'), art 7; the ministers also recognised that LDC members will not be obliged, with respect to pharmaceutical products, to implement or apply Sections 5 and 7 of Part II of the TRIPS agreement or to enforce rights provided for under these sections until 1 January 2016 without prejudice to the right of LDC members to seek other extensions to the transition periods, as provided for in Article 66.1 of the TRIPS agreement.

<sup>74</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art.7.

## 6 TRIPS Agreement in Relation to Pharmaceuticals

The TRIPS standard of patent rights protection, together with its effective enforcement mechanism, is widely applicable to pharmaceutical products and processes.<sup>75</sup> The TRIPS agreement enlists pharmaceutical products as patentable for 20 years from the date of the patent application by the inventor and requires pharmaceutical inventions to meet the criteria of novelty, inventive step and industrial applicability.<sup>76</sup> It asks members to provide national treatment<sup>77</sup> and MFN treatment<sup>78</sup> before their entry is enforced under the agreement. It obliges members to offer patents without discrimination, depending on the place of invention, field of technology and whether it uses imported or locally produced products.<sup>79</sup> The TRIPS agreement requires that WTO members protect undisclosed tests or other data against unfair commercial use.<sup>80</sup> It also requires that pharmaceutical patents confer exclusive rights to prevent third parties from non-consensually using patented pharmaceutical processes and from 'making, using, offering for sale, selling, or importing for these purposes' patented pharmaceutical products and the products of patented processes.<sup>81</sup> It requires countries in transition to establish a mailbox by which patent application can be filed from 1 January 1995.<sup>82</sup> As a result, if the products in the mailbox

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<sup>75</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 27.1, art 70.8.

<sup>76</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 27.2.

<sup>77</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 3.

<sup>78</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 4.

<sup>79</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 27.1.

<sup>80</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 39.3.

<sup>81</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 28.

<sup>82</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 70.9; Jillian Clare Cohen-Kohler, Lisa Forman and Nathaniel Lipkus, 'Addressing Legal and Political Barriers

applications are granted a patent in any member country and the products obtain marketing approval in any member country, then exclusive marketing rights (EMRs) need to be granted until 1 January 2016 by a country before granting or rejecting the product patent in that country.<sup>83</sup>

These are the minimum standards for the pharmaceutical patents but they appear to have major implications for developing countries and LDCs. Obligations arising from national and MFN treatment in relation to the flexibility that countries currently enjoy in fulfilling local working requirements for patents<sup>84</sup> and patents for pharmaceuticals affect countries that fulfil developmental needs with strong domestic, generic producing industries and countries that do not have domestic production but import and use generic substitutes from export-oriented generic suppliers.<sup>85</sup> This affects compulsory licensing that helps LDCs to meet their developmental needs when protected products are not produced locally and, consequently, bear the risk of rising prices.<sup>86</sup> Moreover, the requirement of twenty-year patent provisions on EMRs and data protection of TRIPS creates extended barriers to market entry for generics. It creates negative consequences on drug costs. A study showed that:

Over time, patents are a major factor in sustaining high drug prices; the appearance of generic competition results in prices of these drugs being much closer to the marginal production costs than to the prices chosen by brand name companies.<sup>87</sup>

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to Global Pharmaceutical Access: Options for Reducing the Impact of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the Imposition of the TRIPS-plus Standards' (2008) 3(3) *Health Economics, Policy and Law* 229, 231.

<sup>83</sup> Biswajit Dhar and K M Gopakumar, 'Post-2005 TRIPS Scenario in Patent Protection in the Pharmaceutical Sector: The Case of the Generic Pharmaceutical Industry in India' (UNCTAD/ICTSD Project on Intellectual Property Rights and Sustainable Development, International Centre for Trade and Sustainable Development, Geneva, November 2006).

<sup>84</sup> UNCTAD-ICTSD, *Patents: Non-Voluntary Uses (Compulsory Licenses)* (2005) 450–4.

<sup>85</sup> F M Scherer and J Watal, 'Post-TRIPS Options for Access to Patented Medicines in Developing Countries' (Working paper WG4:1, WHO, Commission on Macroeconomics and Health, June 2001).

<sup>86</sup> Bryan Mercurio and Mitali Tyagi, 'Treaty Interpretation in WTO Dispute Settlement: The Outstanding Question of the Legality of Local Working Requirements' (2010) 19 *Minnesota Journal of International Law* 275

<sup>87</sup> R E Caves, M D Whinston and M A Hurwitz, 'Patent Expiration, Entry and Competition in the US Pharmaceutical Industry' (Brookings Paper on Economic Activity: Microeconomics, 1991).



Another study<sup>88</sup> on China also showed that the minimum standards for protection of IP rights in pharmaceuticals affect the capacity of generic producers and address issues of health. On 1 January 2016, after the expiry of the deadline, the Bangladesh pharmaceutical sector will face the TRIPS reality (to manufacture and market copies of new patented medicines) unless the original manufacturers do not apply for any patent protection and for existing copies of the remaining drugs and unless automatic compulsory licensing is adopted.<sup>89</sup>

#### *D Market Access Challenges of Bangladesh Pharmaceutical Products under TRIPS Flexibilities*

The pharmaceutical sector is the second highest contributor to the national exchequer, and it is the largest white-collar intensive employment sector in Bangladesh.<sup>90</sup> Ninety-five per cent of the total demand in Bangladesh is being met by local manufacturing. The remaining five per cent constitutes import of many specialised products, like vaccines, anti-cancer products and hormone drugs.<sup>91</sup> The pharmaceutical market in Bangladesh is mostly dominated by local players, where nine out of 10 top players are local and one is a multinational corporation (MNC).<sup>92</sup> In Bangladesh, the top 10 companies represent 64 per cent and the top 20 companies represent 82 per cent of the total pharmaceutical market.<sup>93</sup>

Considering the thriving local pharmaceutical industry and export growth over recent years, Bangladesh can produce generic versions of patented medicines that can serve the needs of other LDCs with no or low pharmaceutical capacity by supplying cheap generic medicines.<sup>94</sup> However, the ability to produce generic pharmaceuticals depends on the

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<sup>88</sup> Peng Jiang, 'Fighting the AIDs Epidemic: China's Option under the WTO TRIPS Agreement' (2002) 13 *Albany Law Journal of Science & Technology* 235.

<sup>89</sup> Mohammad Abu Yusuf, 'TRIPS Agreement for Pharmaceuticals: Hopes and Concerns for Developing Countries' (2006) 34(3) *Cost and Management* 45, 51.

<sup>90</sup> Ministry of Finance, *Bangladesh Economic Review* (Bangladesh Government Press, 2010).

<sup>91</sup> Azam and Richardson, above n 3, 6.

<sup>92</sup> Sanofi-Aventis, *IMS Health* <<http://www.imshealth.com/portal/site/ims>>.

<sup>93</sup> Ibid

<sup>94</sup> Anne St Martin, *The Impact of Trade Related Aspects of Intellectual Property Rights (TRIPS) on Access to Essential Medicines in the Developing World* (Project Report, Worcester Polytechnic Institute, 1 May 2006) 5.

country's legal and regulatory environment, where government policies and regulatory agencies have a significant effect on pharmaceutical innovation. The TRIPs agreement is the representation of the global system of regulations governing the ownership and flow of knowledge, technology and other intellectual assets.<sup>95</sup> It was a victory of multinational companies who aimed to raise international IP standards and boost IP protection in developing countries.<sup>96</sup> As Deere argues:

Developing countries protested that the Agreement would consolidate corporate monopolies over the ownership of ideas, exacerbate the north-south technology gap, and perversely speed the transfer of capital from developing to developed countries.<sup>97</sup>

Several flexibilities have been incorporated in the TRIPS agreement in the form of the exception clause to minimise the pharmaceutical challenges arising from it, which allow affected countries to balance public health against patent rights. These flexibilities have implications on the production and market access of Bangladesh pharmaceutical products. Some of these flexibilities are related to the ERs that are discussed in the following sections.

### *1 Flexible Standard of Patentability*

The TRIPS agreement allows member countries to determine the appropriate method to implement and frame their national patent laws in meeting their own interests.<sup>98</sup> It gives member countries the option to set a flexible standard of patentability. The TRIPS agreement does not have provision for offering patents for new uses of known products (second uses). Through this patenting discretion, the agreement appears to be flexible

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<sup>95</sup> Deere Carolyn, *The Implementation Game—The TRIPS Agreement and the Global Politics of Intellectual Property Reform in Developing Countries* (Oxford University Press, 2009) 1.

<sup>96</sup> Ibid

<sup>97</sup> Ibid

<sup>98</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 1.

regarding access to medicines.<sup>99</sup> However, in Bangladesh, the discovery of new uses of known substances can qualify an invention, although it may be of little beneficial value. Section 2(I) of the *Bangladesh Patent Act, 2012*<sup>100</sup> implies such recognition of patent ever-greening by including the expression ‘an improvement’ within the ambit of ‘invention’. This act lists the items that cannot be patented,<sup>101</sup> which is an improvement from the previous *Patents and Designs Act, 1911*.<sup>102</sup>

Bangladesh can exclude the patenting of new uses of drugs on the grounds of the ‘ever-greening’ of patents in pharmaceutical products that are of little improved therapeutic value and do not enhance efficacy. In some countries, such efforts proved beneficial for generic manufacturers, allowing them to retain the old license of the product and, thus, pay nothing for new uses of the same product.<sup>103</sup> For instance, the *[Thailand] Patent Act, 1979* does not allow claim to a new use of an old drug or claim to a new therapeutic application of a known drug.<sup>104</sup> The *Bangladesh Patent Act, 2012* already possesses post-grant opposition.<sup>105</sup> However, such opposition is always difficult to invoke, as it has to undergo time-consuming and expensive legal battles. Therefore, as a precaution, Bangladesh can introduce pre-grant opposition of patents in clear terms and conditions with the intent to encourage early challenges to inventions that should not be patented on the grounds of public interest. Such a precautionary step is already codified in some developing countries, including India and China, to prevent the patenting of bio-products (such as *neem* and turmeric), which are now protecting public health interests.<sup>106</sup>

## 2 Compulsory Licensing

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<sup>99</sup> Exclusions from Patentable Subject Matter and Exceptions and Limitations to the Rights’ WIPO Doc SCP/13/3 (4 February 2009) (*Standing Committee on the Law of Patents, Thirteenth Session, Geneva, 23 to 27 March 2009*).

<sup>100</sup> *Bangladesh Patent Law, 2012*.

<sup>101</sup> Ibid art 3, 4.

<sup>102</sup> *The Patents and Design Act, 1911*.

<sup>103</sup> Cynthia M Ho, ‘A New World Order for Addressing Patent Rights and Public Health’ (2007) 82(3) *Chicago Kent Law Review* 1511.

<sup>104</sup> *[Thailand] Patent Act, 1979* ss 3, 5, 9.

<sup>105</sup> *Bangladesh Patent Law, 2012* s 10(11).

<sup>106</sup> D K Nauriyal, ‘TRIPS-Compliant New Patents Act and Indian Pharmaceutical Sector: Directions in Strategy and R&D’ (2006) (Special Issue China and India) *Indian Journal of Economics and Business* 189.

Articles 30 and 31 of the TRIPS agreement provide exceptions to the private right of patents by providing the options for compulsory licensing. These provisions authorize member countries to freely frame the substantive grounds for issuing compulsory licences.<sup>107</sup> They also give developing country members bargaining power to negotiate price concessions for patented drugs or to issue licences for copying if negotiations fail.<sup>108</sup> However, this bargaining power is only pertinent to countries with the capacity to produce generic drugs under compulsory licences issued to government laboratories or private generic producers and the countries that do not have domestic manufacturing capacity; this provision appears to be pointless.<sup>109</sup> To build a like negotiating power, the Doha Declaration is supplemented by the waiver decision, which permits issuing countries to import generics produced under compulsory licences in other countries.<sup>110</sup>

Article 30 of the TRIPS agreement provides certain limited exceptions to patent rights.<sup>111</sup> However, such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking into account the legitimate interests of third parties.<sup>112</sup> Although some authors outlined that this article can be interpreted as a means to resolve the issue of compulsory licensing for countries that do not have adequate manufacturing capacity and to authorize generic exports,<sup>113</sup> the decision in the *Canada—Patent Protection of Pharmaceutical Products* case<sup>114</sup> does not suggest that Article 30 permits such exports.

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<sup>107</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 31.

<sup>108</sup> Ibid; Aditi Bagchi, 'Compulsory Licensing and the Duty of Good Faith in TRIPS' (2003) 55 *Stanford Law Review* 1529.

<sup>109</sup> Chris Dent et al, 'Research Use of Patented Knowledge: A Review' (STI Working Paper 2006/2, OECD, 2006).

<sup>110</sup> Kevin P Gallagher, 'Understanding Developing Country Resistance to the Doha Round' (2008) 15(1) *Review of International Political Economy* 62, 70.

<sup>111</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 30.

<sup>112</sup> Ibid

<sup>113</sup> Bradley Cond on and Tapen Sinha, 'Global Diseases, Global Patents and Differential Treatment in WTO Law: Criteria for Suspending Patent Obligations in Developing Countries' (2005) 26 *Northwestern Journal of International Law and Business* 1, 5–8.

<sup>114</sup> Panel Report, *Canada—Patent Protection of Pharmaceutical Products*, WTO Doc WT/DS114/R (17 March 2000, adopted on April 7 2000).

Article 31 authorises a government to issue a compulsory licence in favour of the government or a third party to produce generic drugs without the consent of the patent holder in cases of unsuccessful negotiations and in terms of certain reasonable commercial terms.<sup>115</sup> It relaxes the negotiation requirements in cases of national emergency, extreme urgency or non-commercial public use.<sup>116</sup> It also waives the negotiation requirement where the member country predominantly serves the domestic market and the use remedies anti-competitive practices.<sup>117</sup> Therefore, it appears that the TRIPS agreement gives the government the right to issue compulsory licensing to manufacture drugs on virtually any grounds.<sup>118</sup> This makes a government's position stronger in price negotiations with patent holders, as it authorises the government to grant a compulsory licence to produce drugs instead of purchasing them from the patent owner.<sup>119</sup>

However, the compulsory licensing provision creates some difficulties in innovation.<sup>120,121</sup> For example, the prerequisites under Article 31(f) and (h), which states that generics manufactured under compulsory licences should be supplied predominantly in the domestic market or would serve a non-commercial public use, are unclear and open to contention.<sup>122</sup> Such provisions neither specify whether products manufactured under compulsory licensing can be exported to other countries experiencing emergencies nor make a list of non-commercial public uses.<sup>123</sup> Again, the prerequisite under Article 31(h) that states the country issuing the compulsory license pays adequate remuneration to the patent holder is not defined.<sup>124</sup> This non-definition of the term 'adequate remuneration' makes patent owners uncertain when claiming compensation if a government avoids such negotiations.<sup>125</sup> However, some authors argued that the emptiness of such a provision gives patent owners

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<sup>115</sup> Condon and Sinha, above n 111, 6–14.

<sup>116</sup> Ibid

<sup>117</sup> Ibid

<sup>118</sup> Jerome H Reichman, 'Comment: Compulsory Licensing of Patented Pharmaceutical Inventions: Evaluating the Options' (2009) 37(2) *Journal of Law, Medicine & Ethics* 247.

<sup>119</sup> Condon and Sinha, above n 113, 6–14.

<sup>120</sup> Innovation means the introduction of a new idea, method or device.

<sup>121</sup> Condon and Sinha, above n 117, 4–6.

<sup>122</sup> Ibid

<sup>123</sup> Ibid

<sup>124</sup> Ibid

<sup>125</sup> Ibid

the privilege to decide the price through negotiations, which is an advantage.<sup>126</sup> Moreover, the incapability of a huge number of developing countries and LDCs to manufacture generic drugs significantly disadvantages their bargaining point unless they can import generic drugs from another country that has issued a compulsory licence on their behalf.<sup>127</sup> The complication arising from compulsory licensing causes hardship in developing countries and LDCs alike, which is followed by disputes lodged in the TRIPS council and national courts.<sup>128</sup>

Bangladesh needs to put together its provisions on compulsory licensing in regards to security exceptions or public interests and necessities. It needs to insert provisions in the act to export medicines produced under compulsory licences to other TRIPS-compliant countries that do not have the manufacturing capacity or to WTO non-member countries. It also needs to specify the amount of remuneration to be paid and the date it comes into effect. India and Thailand have enacted such provisions.<sup>129</sup> However, neither of them has made the system straightforward, transparent or speedy by establishing a quasi-judicial and independent administrative system for the implementation of compulsory licensing, as suggested by the Commission on Intellectual Property Rights.<sup>130</sup> Neither have they fixed a rate of adequate remuneration.<sup>131</sup> To overcome such difficulties, member countries finally found a solution at the Fourth Ministerial Conference of the WTO held in Doha in 2001.<sup>132</sup>

### 3 Doha Declaration

<sup>126</sup> Ibid; Carlos M Correa, 'Public Health and Intellectual Property' (2002) 2(3) *Global Social Policy* 261; Dilip K Das, 'Intellectual Property Rights and the Doha Round' (2005) 8(1) *Journal of World Intellectual Property* 33, 48; Antony Taubman, 'Rethinking TRIPS: "Adequate Remuneration" for Non-Voluntary Patent Licensing' (2008) 11 *Journal of International Economic Law* 927.

<sup>127</sup> Siddhartha Rao, 'Closing the Global Drug Gap: A Pragmatic Approach to the Access to Medicines Problem' (2008) 3 *Journal of Legal Technology Risk Management* 1; Luigi Ciccio, 'Patenting Drugs from 1st January 2005: Implications and Problems' (2004) 2(2) *Health Policy and Development* 136.

<sup>128</sup> Susan K Sell, 'TRIPS-Plus Free Trade Agreements and Access to Medicines' (2007) 28(1) *Liverpool Law Review* 41; M Rafiqul Islam, 'The Generic Drug Deal of the WTO from Doha to Cancun: A Peripheral Response to a Perennial Conundrum' (2004) 7(5) *Journal of World Intellectual Property* 675.

<sup>129</sup> Shamnad Basheer, 'India's New Patent Regime: Aiding "Access" or Abetting "Genericide"?' (2007) 9(2) *International Journal of Biotechnology* 122.

<sup>130</sup> Phil Thorpe, 'Study on the Implementation of the TRIPS Agreement by Developing Countries' (Study Paper 7, Commission on Intellectual Property Rights, London, 2002).

<sup>131</sup> Ibid

<sup>132</sup> Ibid

As mentioned, developed and developing countries reached a remarkable conclusion at the Doha Conference.<sup>133</sup> The declaration states:

We agree that the TRIPS Agreement does not and should not prevent Members from taking measures to protect public health. Accordingly, while reiterating our commitments to the TRIPS Agreement, we affirm that the Agreement can and should be interpreted and implemented in a manner supportive of WTO Members' rights to protect public health and in particular to promote access to medicines for all.<sup>134</sup>

In this [public health /access to medicines] connection, we reaffirm the right of WTO Members to use, to the full, the provisions in the TRIPS Agreement, which provide flexibility for this purpose.<sup>135</sup>

This statement provides clear information about the use of flexibility contained in the TRIPS agreement to advance the interests of public health. In the first paragraph of the declaration, members recognise the gravity of public health issues affecting many developing countries and LDCs, particularly those resulting from HIV/AIDS, tuberculosis and malaria.<sup>136</sup> Paragraph 5 further reiterates that flexibilities built into the TRIPS agreement should be used to break any barrier that IP creates in accessing medicines. It confirms the use of compulsory licensing at the necessity of members, rather than restricting it to emergency or urgent situations.<sup>137</sup>

The declaration does not find a quick fix for Article 31(f) of the TRIPS agreement, which restricts the use of compulsory licensing. However, it responds to this problem in Paragraph 6:

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<sup>133</sup> *Declaration on TRIPS and Public Health*, WTO Doc WT/MIN (01)/DEC/2 (20 November 2001, adopted 14 November 2001) 1.

<sup>134</sup> *Declaration on TRIPS and Public Health*, WTO Doc WT/MIN(01)/DEC/2 (20 November 2001, adopted 14 November 2001) 1

<sup>135</sup> *Declaration on TRIPS and Public Health*, WTO Doc WT/MIN(01)/DEC/2 (20 November 2001, adopted 14 November 2001) 1

<sup>136</sup> *Declaration on TRIPS and Public Health*, WTO Doc WT/MIN (01)/DEC/2 (20 November 2001, adopted 14 November 2001) [1], [2].

<sup>137</sup> *Declaration on TRIPS and Public Health*, WTO Doc WT/MIN (01)/DEC/2 (20 November 2001, adopted 14 November 2001) [5].

We recognise that WTO members with insufficient or no manufacturing capacities in the pharmaceutical sector could face difficulties in making effective use of compulsory licensing under the TRIPS Agreement. We instruct the Council for TRIPS to find an expeditious solution to this problem and to report to the General Council before the end of 2002.<sup>138</sup>

#### 4 Waiver Decision

The waiver decision was adopted on 30 August 2003 to amend Articles 31(f) and 31(h).<sup>139</sup> With certain waivers, this decision contains a new set of rights and obligations, adding to the pre-existing rights and obligations set out in the TRIPS agreement.<sup>140</sup> The decision provides a waiver for an exporter's obligation, as provided in Article 31(f), to predominantly supply the domestic market.<sup>141</sup> It enables any country with manufacturing capacity to issue a compulsory licence to produce generic drugs for export to countries that have insufficient or no manufacturing capacity.<sup>142</sup>

The decision also waives the obligations under Article 31(f) 'to the extent necessary for the purposes of production of a pharmaceutical product(s) and its export to an eligible importing Member(s)'.<sup>143</sup> The decision also requires importing countries, other than LDCs,

<sup>138</sup> *Declaration on TRIPS and Public Health*, WTO Doc WT/MIN(01)/DEC/2 (20 November 2001, adopted 14 November 2001) [6].

<sup>139</sup> WTO, *Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health*, WTO Doc WT/L/540 and Corr.1 (1 September 2003) (Decision). On 6 December 2005, the WTO General Council decided to permanently amend the TRIPS agreement, based on the 30 August 2003 decision. The new Article 31bis, which is essentially identical to the 30 August Decision, will enter into force once ratified by two thirds of all WTO members. Until then, the 30 August decision will remain in force.

<sup>140</sup> Condon and Sinha, above n 119, 10–12; Nuno Pires De Carvalho, *The TRIPS Regime of Patent Rights* (Kluwer Law International, 2<sup>nd</sup> ed, 2005), 147–151; Duncan Matthews, 'From the August 30, 2003 WTO Decision to the December 6, 2005 Agreement on an Amendment to TRIPS: Improving Access to Medicines in Developing Countries?' (2006) 10 *Intellectual Property Quarterly* 91.

<sup>141</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 31bis [1].

<sup>142</sup> Duncan Matthews, 'From the August 30, 2003 WTO Decision to the December 6, 2005 Agreement on an Amendment to TRIPS: Improving Access to Medicines in Developing Countries?' (2006) 10 *Intellectual Property Quarterly* 91.

<sup>143</sup> WTO Doha Development Agenda: Decision removes final patent obstacle to cheap drug imports (WTO Publications, Press/330/R.1, 03 August 2003) (hereinafter the Waiver Decision) adopted as 'Implementation



to specify the names and quantities of the products needed in their notification to the WTO.<sup>144</sup> Countries granting or intending to grant a compulsory licence in accordance with TRIPS Article 31 must also show that they have insufficient or no manufacturing capacity in the pharmaceutical sector for the product in question in one of two ways:

- (i) They have no manufacturing capacity in the pharmaceutical sector at all.
- (ii) They have examined this capacity (excluding that owned or controlled by the patent holder) and found it to be insufficient to meet their needs.<sup>145</sup>

The decision will no longer be applicable to a country once it is found that the capacity has become sufficient to meet its needs.<sup>146</sup> The decision will also be irrelevant to countries that have sufficient manufacturing capacity to issue compulsory licences to meet the needs of their own populations.<sup>147</sup> Conversely, the issue of whether the importing country has manufacturing capacity for the pharmaceutical product in question now arises. For example, countries like China, India and Brazil could use the decision to import drugs from generic manufacturers in other countries if they do not have capacity for a particular medicine.<sup>148</sup> Again, the question arose as to whether developing countries with manufacturing capacity can use compulsory licensing to reduce the cost of providing

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of paragraph 6 of the Doha Declaration on the TRIPS Agreement and public health' (WT/L/540 and Corr.1, 1 September 2003) [2] available at <[http://www.wto.org/english/tratop\\_e/trips\\_e/implem\\_para6\\_e.htm](http://www.wto.org/english/tratop_e/trips_e/implem_para6_e.htm)> [2].

<sup>144</sup> WTO Doha Development Agenda: Decision removes final patent obstacle to cheap drug imports (WTO Publications, Press/330/R.1, 03 August 2003) (hereinafter the Waiver Decision) adopted as 'Implementation of paragraph 6 of the Doha Declaration on the TRIPS Agreement and public health' (WT/L/540 and Corr.1, 1 September 2003) [2] available at <[http://www.wto.org/english/tratop\\_e/trips\\_e/implem\\_para6\\_e.htm](http://www.wto.org/english/tratop_e/trips_e/implem_para6_e.htm)> [2(a)(i)]

<sup>145</sup> WTO Doha Development Agenda: Decision removes final patent obstacle to cheap drug imports (WTO Publications, Press/330/R.1, 03 August 2003) (hereinafter the Waiver Decision) adopted as 'Implementation of paragraph 6 of the Doha Declaration on the TRIPS Agreement and public health' (WT/L/540 and Corr.1, 1 September 2003) [2] available at <[http://www.wto.org/english/tratop\\_e/trips\\_e/implem\\_para6\\_e.htm](http://www.wto.org/english/tratop_e/trips_e/implem_para6_e.htm)> [2(1)(ii)]

<sup>146</sup> Senai W Andemariam, 'The Cleft-Stick between Anti-retroviral Drug Patents and HIV/AIDS Victims: An In-Depth Analysis of the WTO's TRIPS Article 31 BIS Amendment Proposal of 6 December 2005' (2007) 4 *Intellectual Property Quarterly* 414.

<sup>147</sup> Ibid

<sup>148</sup> Ibid

treatment. Thus, a number of exceptions provided in the decision are not as clear as Paragraph 31(f).<sup>149</sup>

To make the waiver decision permanent for simplifying manufacturing and importing generic medicines, WTO members reached an agreement on 18 December 2005 regarding an amendment to the TRIPS agreement in the form of Article 31 bis.<sup>150</sup> The 2005 Ministerial Declaration states:

We reaffirm the importance we attach to the General Council Decision of 30 August 2003 on the Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health, and to an amendment to the TRIPS Agreement replacing its provisions. In this regard, we welcome the work that has taken place in the Council for TRIPS and the Decision of the General Council of 6 December 2005 on an Amendment of the TRIPS Agreement.<sup>151</sup>

However, the procedure for importing generic varieties of drugs for which original patents continue to be held by major pharmaceutical transnationals is of great complexity. The complexity arises through the following issues: whether the drug in question is patented in either or both of the two countries involved, whether one of them is an LDC and whether the medicine in question was patented before 1995, between 1995 and 2005 or after 1 January 2005.<sup>152</sup> Even though such complexities exist, this waiver decision has encouraged a number of WTO members, such as Canada, the EU, India, Norway, the Netherlands and Switzerland, to pass national legislation to implement the decision or, in some cases, to put them in the phase of doing so.<sup>153</sup>

## 5 Parallel Importation of Pharmaceuticals

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<sup>149</sup> Ibid; Senai W Andemariam, 'The Status of WTO Non-members: A Review in Light of the 6 December 2005 Proposed Amendment to the TRIPS Agreement' (2007) 2(3) *Journal of Intellectual Property Law & Practice* 153.

<sup>150</sup> *Doha Work Programme*, WTO Doc WT/MIN(05)/DEC (22 December 2005, adopted 18 December 2005) (Ministerial Declaration).

<sup>151</sup> Ibid

<sup>152</sup> Roy Love, 'Corporate Wealth or Public Health? WTO/TRIPS Flexibilities and Access to HIV/ AIDS Antiretroviral Drugs by Developing Countries' (2007) 17(2) *Development in Practice* 208.

<sup>153</sup> Frederick M Abbott, 'The WTO Medicines Decision: The Political Economy of World Pharmaceutical Trade and the Protection of Public Health' (2005) 99 *American Journal of International Law* 31.

The TRIPS agreement outlines that:<sup>154</sup>

for the purposes of dispute settlement...nothing in this Agreement shall be used to address the issue of the exhaustion of intellectual property rights'.<sup>155</sup> Moreover, the Doha Declaration leaves each member free to establish its own regime for such exhaustion without dispute settlement.<sup>156</sup> TRIPS provision allows developing countries to import patented products from countries where they are sold at lower prices.<sup>157</sup> Such benefits bring pharmaceutical manufacturers into strong opposition against international exhaustion.<sup>158</sup> However, non-adaptation of international exhaustion of rights in their appropriate domestic laws deprives countries to import cheaper medicines that may be available in other markets.<sup>159</sup>

The current *Bangladesh Patent Act, 2012*<sup>160</sup> recognises the importation of cheaper drugs from other countries to protect local public health interests. Section 31 of this act contains provisions implicating parallel importation. This provision is intended to free importation from conditions such as exhaustion of patent rights in giving precedence to public health interests. To ensure the public health interest of the country, Bangladesh needs to insert the provisions so that the exporter of such patented drugs is duly authorised under the law to produce and sell or distribute the same. Such provisions<sup>161</sup> are incorporated in certain developing countries in their patent legislations, including India and Thailand.

## 6 TRIPS Transition Period

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<sup>154</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 6.

<sup>155</sup> The phrase 'international exhaustion' means that, once a legal copy of a patented product is circulated (i.e., with permission of the patent holder) somewhere in the world, patent rights for that product are exhausted.

<sup>156</sup> *Declaration on TRIPS and Public Health*, WTO Doc WT/MIN(01)/DEC/2 (20 November 2001, adopted 14 November 2001) [5](d).

<sup>157</sup> Frank Müller-Langer, 'A Game Theoretic Analysis of Parallel Trade and the Pricing of Pharmaceutical Products' (2007) July *German Working Papers in Law and Economics* 1.

<sup>158</sup> Ibid

<sup>159</sup> Ibid

<sup>160</sup> *Bangladesh Patent Act, 2012*.

<sup>161</sup> Shamnad Basheer, 'India's Tryst with TRIPS: The Patents (Amendment) Act 2005' (2005) 1 *Indian Journal of Law and Technology* 15, 30–1.

The Doha Declaration on the TRIPS Agreement and public health provides special and differential treatment to LDCs to assist them in becoming TRIPS-compliant with respect to patent protection for pharmaceutical products by the end of 2015.<sup>162</sup> The TRIPS transition period is a strategic gain for Bangladesh in its vibrant domestic pharmaceutical industry. This enables the industry to freely copy patented medicines for domestic consumption needs and export purposes without having followed the WTO's complex 30 August 2003 decision. However, the present patent regime in Bangladesh admits its pharmaceutical patenting secures the rights of pharmaceutical patent owners who are basically international firms that acquire the existing patent regime in patenting their drugs in the country and suing local firms that engage in production.<sup>163</sup>

This strict enforcement of the agreement renders local firms incapable of continuing to export generic versions of drugs patented elsewhere to other LDCs that do not have pharmaceutical patents.<sup>164</sup> For instance, a large number of African and non-African LDCs are importers of medicines produced in Bangladesh. To export patented drugs to these LDCs, Bangladesh should go through national legislation in the importing country that incorporates the TRIPS flexibilities, including the 30 August 2003 decision, and legislation in Bangladesh that allows local firms to export to other TRIPS-compliant countries through a compulsory licence.<sup>165</sup>

Strict enforcement of TRIPS compliance in 2005 in developing countries has caused the closure of cheap active pharmaceutical ingredients (API) sources, including China, India and others. This forces Bangladesh to buy costlier APIs<sup>166</sup> and results in increases in the

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<sup>162</sup> *Declaration on TRIPS and Public Health*, WTO Doc WT/MIN(01)/DEC/2 (20 November 2001, adopted 14 November 2001) [7].

<sup>163</sup> Padmashree Gehl Sampath, 'Innovation and Competitive Capacity in Bangladesh's Pharmaceutical Sector' (Working Paper 2007-031, Maastricht, UN University-MERIT, 2007) 14–6.

<sup>164</sup> *Ibid*

<sup>165</sup> Enam ul Haque, Azreen Karim and Wahid Abdullah, 'Market Access Issues: EU–Bangladesh Trade Regime—A Case Study on Market Access: Myths and Realities' (Paper, International Institute for Sustainable Development, 2005) 3.

<sup>166</sup> Cheri Grace, 'The Effect of Changing Intellectual Property on Pharmaceutical Industry Prospects in India and China: Considerations for Access to Medicines' (Issues Paper on Access to Medicines, Department of Foreign and International Development, London, June 2004).

price of domestic pharmaceutical products.<sup>167</sup> Domestic companies have stopped producing some existing essential on -patent drugs beca use of their cheap availa bility. These drugs could have continued their presence in the market and protected public health interests until the expiry of the transition period.<sup>168</sup>

India adopted the approach of maximising TRIPS flexibility between 1970 and 2005, which brought success in protecting its public health requirements. A supplementary clause should be added therein to perm it the export of generics produced in this m anner for other countries. In addition, although the mailbox rule and the EMRs are not obligatory to Bangladesh during the transition period, it ca n legali se the executive mailbox rule by inserting it into the act , which can com e into effect from the date of issuance of patents after the expiry of the transition period in 2016 or on a later date as fi xed by the TRIPS council. Through this provision, Ba ngladesh can permit the production of the generics of mailbox drugs even after its TRIPS com pliance, on paym ent of re muneration calculated from the date of its TRIPS com pliance or from the date of issuance of patents after 2015, considering the affordability of its people.

## 7 *Environmental Exceptions under TRIPS*

The TRIPS agreem ent provides privilege to m ember countries to exclude patentability rights.<sup>169</sup> According to Article 27.2, m embers m ay exclude patentability within their territory if it is necessary to protect *ordre public* or morality, including to protect hum an, animal or plant life or health or to avoid serious preju dice to the environm ent.<sup>170</sup> Article

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<sup>167</sup> Prosenjit Chakraborty, Syed Ferhat Anwar and Mahjabeen Ahmad, 'Strategies under the WTO Regime: The Pharmaceutical Sector in Bangladesh' (2003) 5(2) *Journal of Bangladesh Studies* 42–4.

<sup>168</sup> World Bank, 'Public and Private Sector Approaches to Improving Pharmaceutical Quality in Bangladesh' (Paper No 23, Bangladesh Development Series, World Bank, Human Development Unit, South Asia Region, March 2008) 18.

<sup>169</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 27.

<sup>170</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 27.

27.3 states that members may also be excluded from patentability in the following two ways:

- a) Diagnostic, therapeutic and surgical methods for the treatment of humans or animals;
- b) Plants and animals (except micro-organisms) and essentially biological processes for the production of plants or animals (except non-biological and microbiological processes).<sup>171</sup>

The abovementioned requirements are sometimes used as protectionist measures by developed countries or multinational pharmaceutical industries. However, the TRIPS agreement does not acknowledge or distinguish between indigenous, community-based knowledge and that of industry<sup>172</sup> and does not make reference to the protection of TK.<sup>173</sup> The contentious issue is Article 27.3(b), which requires WTO members to provide patent protection on life forms, particularly on microorganisms, as well as non-biological and microbiological processes. Members are also required to provide protection on plant varieties, either by granting patents or by using 'an effective *sui generis* system'.<sup>174</sup>

The Doha Declaration recognises the need to strengthen the relationship between the TRIPS agreement and the CBD<sup>175</sup> for the protection of TK and folklore, according to TRIPS Article 27.3(b).<sup>176</sup> The debate raised the question of whether the TRIPS agreement is supportive of or is counter to the principles of the CBD.<sup>177</sup> Some analysis shows that the TRIPS agreement 'paves the way for the privatization of biological resources' by allowing

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<sup>171</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 27.

<sup>172</sup> Heather Gibb, 'Gender Dimensions of Intellectual Property and Traditional Knowledge' (Discussion Paper, UNDP Asia-Pacific Trade and Investment Initiative, 1<sup>st</sup> ed, 2008) 160.

<sup>173</sup> Kibet A Ng'etich, 'Indigenous Knowledge, Alternative Medicine and Intellectual Property Rights Concerns in Kenya' (Council for the Development of Social Science Research in Africa, 11th General Assembly, Maputo, Mozambique, 6–10 December 2005).

<sup>174</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 27.3(b).

<sup>175</sup> See <www.cbd.int>.

<sup>176</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 27.3(b).

<sup>177</sup> Gibb, above n 172.

patents on biological materials associated with TK and keeping pressure on developing countries to increase the level of protection according to developed countries' standards.<sup>178</sup> There have been concerns about ethical, social and environmental issues regarding patenting of life forms, and developing countries tried to incorporate the CBD principles<sup>179</sup> within the TRIPS agreement on mutually agreed terms, with fair and equitable benefit sharing, including with respect to TK.<sup>180</sup> Most developed countries did not support the proposal; however, the north-south debate between technology-rich developed countries and biodiversity-rich developing countries exists.<sup>181</sup>

Therefore, it is necessary to incorporate all exclusions mentioned under Article 27 of the TRIPS agreement into the domestic patent law, which could involve excluding plants and animals from patentability but not microorganisms. It is also necessary to adopt an expansive interpretation of the exclusions of Article 27.2 when it is necessary to protect human, animal and plant life or health<sup>182</sup> to avoid the debate about protectionist measures market access barriers for developing countries and LDCs.

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<sup>178</sup> Commission on Intellectual Property Rights, 'Executive Summary: Integrating Intellectual Property Rights and Development Policy' (Report of the Commission on Intellectual Property Rights, London Commission on Intellectual Property Rights, September 2002).

<sup>179</sup> CBD principles recognise the authority of governments to grant access to generic resources, subject to prior informed consent.

<sup>180</sup> Gibb, above n 172.

<sup>181</sup> Economics and Environment South Asia Watch on Trade, 'South Asian Common Position of TRIPS Review: Situations, Options and Positions' (2006) 2(2) *Trade Insight*.

<sup>182</sup> Kim Connolly-Stone, 'The Interface with Existing Intellectual Property Systems: Limits and Opportunities for Existing Intellectual Property Rights' (Paper presented at International Expert Workshop on Access to Generic Resources and Benefit Sharing, Cuernavaca, Mexico, 4-27 October 2004).

## 8 Developmental Needs of Bangladesh Pharmaceutical Products under TRIPS

Article 66.1 of the TRIPS agreement recognises the necessity of the creation of a sound and viable technological base for LDCs.<sup>183</sup> To this end, it urges developed country members to provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to LDC members.<sup>184</sup> The Doha Declaration also reminds developed countries of their unfulfilled obligations under Article 66.2 of the TRIPS agreement to provide incentives for their enterprises and institutions to promote technology transfer to LDCs.<sup>185</sup> Bangladesh already possesses a strong base in manufacturing pharmaceuticals. However, it depends mostly on imports for raw materials, especially API. To reduce dependability on imports, pharmaceutical sector leaders and professionals in Bangladesh instructed the government to set up an API park equipped with facilities for bioequivalence tests and technical support and to copy patented drugs to make best use of the transition period.<sup>186</sup> This also carries the prospect of making the country a potential cheap supplier of medicines to Bangladesh itself and to other LDCs, ensuring the protection of public health worldwide, even after the TRIPS compliance deadline.<sup>187</sup>

With regards to capacity building, Article 67 of the TRIPS agreement advises developed country members to help developing country and LDC members with technical and financial cooperation, which includes assistance in preparing laws and regulations for the protection and promotion of IP rights and support in establishing domestic offices and agencies and offering training to the personnel employed therein.

As part of such capacity building, the Law Commission of Bangladesh received support from WIPO experts in preparing the draft *Patents and Designs Act, 2003* and finalised the

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<sup>183</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 66.1.

<sup>184</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C ('Agreement on Trade-Related Aspects of Intellectual Property Rights') art 66.2.

<sup>185</sup> Declaration on TRIPS and Public Health, WTO Doc WT/MIN(01)/DEC/2 (20 November 2001, adopted 14 November 2001) [7].

<sup>186</sup> 'PM Calls for Setting up Pharma Industries in API Park' *The Financial Express* (Dhaka), 21 July 2006.

<sup>187</sup> 'Bangladesh Pharmaceuticals and Healthcare Report' (2009) Q3(June) *Business Monitor International*.



draft during the first quarter of 2004.<sup>188</sup> However, the Doha Declaration and the waiver decision encouraged the Ministry of Industry to prepare the draft patent act in 2007<sup>189</sup> and finally enact it in 2012 as the *Bangladesh Patent Act, 2012*. This act contains all the exceptions for pharmaceutical products in accordance with the TRIPS agreement, the Doha Declaration on the TRIPS agreement and public health and the waiver decision. The exceptions include patent exemption to pharmaceuticals and parallel importation.

As mentioned, the production of generics from on-patent and off-patent drugs serving public health interests in Bangladesh would not be affected significantly before 1 January 2016, being an LDC member with manufacturing capacity.<sup>190</sup> However, after that deadline, the current practice of producing reverse-engineering patented medicines and supplying them at competitive prices would be affected.<sup>191</sup> Currently, Bangladesh is enjoying the opportunity to produce generic medicines; however, it is feared that domestic manufacturing of pharmaceutical products in Bangladesh will come to a standstill. Until now, generic pharmaceutical producers have been able to produce new medicines using a process of reverse engineering; that is, researchers in developing countries may develop a new process that is different from the process invented (and protected by patent) to manufacture the new medicine or chemical entity. Therefore, TRIPS compliance, which ensures patent rights in pharmaceuticals, is likely to become a health issue for LDCs, like Bangladesh, because of the costs associated with licensing patent rights or importing drugs.

There are number of ways to build up the capacity of the regulatory agencies of Bangladesh, including the Department of Patent, Design and Trademarks and the Department of Drug Administration, so that Bangladesh can cope with post-TRIPS challenges. These<sup>192</sup> include the development of a database designed for footage patent application and granted patents, introduction of an online application, development of an

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<sup>188</sup> *Report on Discussion between Bangladesh Delegation and WIPO Experts on Proposed Patents and Designs Act, Trade Marks and Merchandise Marks Act, Copyright Act, 2000 and Other Subjects of Intellectual Property Rights within the Purview of WTO*, WIPO Doc No. LC/WIPO/98/105/ (11 December 2003).

<sup>189</sup> *Draft Patent Act, 2007* (Proposed).

<sup>190</sup> M A Rahman, 'New Year Brings Fresh Hopes for Pharma Sector' *The Financial Express* (Dhaka), 2 January 2006.

<sup>191</sup> World Bank, above n 166, 5.

<sup>192</sup> Azam and Richardson, above n 3, 14.

institutional framework for facilitating IP rights in Bangladesh and joining the *Patent Cooperation Treaty, 1970*<sup>193</sup> to outsource patent examinations. Moreover, there is a need to strengthen university–industry–government collaboration to support IP creation and technology transfer. This is vital to encourage basic research and continuous supply of graduates in relevant fields. The government should provide proper training and opportunity for research under the supervision of qualified experienced experts, which would be an important step in the right direction for the transition of pharmaceutical industries in Bangladesh beyond 2016, as it has great potential in regards to infrastructure and labour costs compared to China and India.<sup>194</sup>

Access to medicines in LDCs, like Bangladesh, also depends on other factors, including research and development in health, health education, health systems, rational drug use, government taxation and tariff's policies.<sup>195</sup> Most of these factors require global support in the form of infrastructure and administration. Therefore, to ensure profit from the latest generic drugs in terms of the protection of public health and export growth, Bangladesh needs to focus on infrastructure development, both in administrative support and equipment testing. However, these involve both financial and technological assistance, as mentioned in Article 66.2 of the TRIPS agreement and its preamble. To achieve this, developed countries should provide incentives to pharmaceutical companies in their territories to promote and encourage technology transfer to LDCs and make such rulings strictly binding. In the absence of such support, Bangladesh can hardly stand on a firm basis to accept the reality of the industry-dominated TRIPS agreement, which requires it to shift from pharmaceutical replication to innovation.

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<sup>193</sup> The *Patent Cooperation Treaty, 1970* is a WIPO administered treaty that provides patent applicants with the opportunity of filing a *single* international patent application. Instead of filing separate applications in different countries, the applicant can file a Patent Cooperation Treaty application with the international Bureau (WIPO) or any national or regional patent office. The date of this international filing is deemed as the date of filing in all national offices.

<sup>194</sup> Azam and Richardson, above n 3, 15.

<sup>195</sup> Balavenkatesh Kanna, 'Access to Highly Active Anti-Retroviral Therapy (HAART) for HIV Infection in India' (2007) 4(2) *Internet Journal of Law, Healthcare and Ethics*.

## 9 Under TRIPS-plus Initiatives

TRIPS-plus agreements require member countries to accept IP standards that exceed the TRIPS agreement, which is extremely unpopular with developing countries and LDCs.<sup>196</sup> Mostly, such treaties appear as bilateral or regional free trade agreements (FTA) or investment treaties negotiated between a major industrialised country (such as the US, the EU or Canada) and a developing country or an LDC.<sup>197</sup> Industrialised countries are not free from such treaties. For instance, Australia has also signed an FTA with the US and Canada with the result that the US now hampers their historic ability to provide relatively low-cost drugs to their citizens.<sup>198</sup> Developing countries, including LDCs, often sign such agreements, thus, binding themselves to higher IP standardisation regarding patentability and patent rights, as part of a bargain for increased market access.<sup>199</sup> However, the TRIPS-plus agreements are misaligned with the objectives and principles of TRIPS Articles 7 and 8 and the Doha Declaration, which take into account the establishment of an interpretative framework supporting public health.<sup>200</sup>

Like others, Bangladesh bends to the TRIPS agreement in exceeding commitments by signing investment treaties with the EU and the US for improved market access. For Example, Bangladesh has signed the Trade and Investment Cooperation Forum Agreement (TICFA) with the USA on November 25, 2013.<sup>201</sup> All such treaties enclose highly restrictive regulatory regimes with the discontinuation of the current practice of reverse-engineering drugs and supplying them at cheaper rates, regardless of their patents. Such TRIPS-plus agreements are likely to make Bangladesh compromise access of its poor

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<sup>196</sup> Ho, above n 101, 1469, 1495–1505.

<sup>197</sup> For example, *Draft Substantive Patent Law Treaty*, WIPO Doc SCP/9/2 (3 Mar 2003).

<sup>198</sup> Department of Foreign Affairs and Trading, *Australia–United States Free Trade Agreement*, TIAS No 642 (18 May 2004) art 17.9(1)–(2).

<[http://www.ustr.gov/sites/default/files/uploads/agreements/fta/australia/asset\\_upload\\_file148\\_5168.pdf](http://www.ustr.gov/sites/default/files/uploads/agreements/fta/australia/asset_upload_file148_5168.pdf)>

7 February, 2012 (requiring patent protection for plants) Art 17

Ho, above n 193, 1495–1505; Duncan Matthews, 'TRIPS Flexibilities and Access to Medicines in Developing Countries: The Problem with Technical Assistance and Free Trade Agreements' (2005) 27(11) *European Intellectual Property Review* 420.

<sup>200</sup> Ibid

<sup>201</sup> See at <http://www.ustr.gov/about-us/press-office/press-releases/2013/November/US-Bangladesh-TICFA-Signing>

citizens to essential medicines.<sup>202</sup> Global efforts and domestic initiatives are evolving to take up TRIPS challenges and manage TRIPS-plus agreements. A number of milestone global developments have made an appearance, including the WIPO Development Agenda or Substantive Patent Law Treaty, the WHO Commission on Public Health, Innovation and IP Rights, the Report of the UK Commission on IP Rights, the UN Sub-Commission on the Promotion and Protection of Human Rights and the United Nations' declarations, including MDGs.<sup>203</sup> Among the domestic initiatives, patent legislations of some developing countries, especially India and Thailand, set examples for others to follow. These efforts aim to highlight the health implications of TRIPS-plus agreements and emphasise the importance of public health in relation to patent rights adopted in the TRIPS agreement.<sup>204</sup>

### *E Challenges in Bangladesh Pharmaceutical Trade because of Domestic Regulations*

Bangladesh domestic regulations that are responsible for pharmaceutical trade and have market access implications include the National Drug Policy (NDP), *the Drugs (Control) Ordinance, 1982*, *Bangladesh Patent Act, 2012* and *Consumer Rights Protection Act, 2009*.

#### *1 National Drug Policy, 2005 and the Final Draft, 2013*

To ensure adequate supply and availability of good quality essential drugs at affordable prices, a NDP<sup>205</sup> was formulated in 1982. Following the guidelines of the policy, the *Drug (Control) Ordinance, 1982*<sup>206</sup> was also promulgated, which produced tremendous positive effects on rapid development of local pharmaceutical industries and gradual improvement and gains in the drug sector of the country. The NDP facilitates the procurement of raw materials of acceptable quality at the most competitive prices, which led to a sharp decrease

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<sup>202</sup> Mustafiz ur Rahman, 'Globalisation, Developed Country Policies, and Market Access: Insights from Bangladesh Experience' in Robert Picciotto and Rachel Weaving (eds) *Impact of Rich Countries' Policies on Poor Countries: Towards a Level Playing Field in Development Cooperation* (2004) 67, 91.

<sup>203</sup> Servais Van Thiel, 'Public Health versus Intellectual Property or How Members of the World Trade Organisation (WTO) without Pharmaceutical Production Capacity Could Have Access to Affordable Medicines in Public Health Emergencies by Using Compulsory Licenses' (Paper, European Union, Geneva, July 2003).

<sup>204</sup> Ho, above n 196, 1505–1515.

<sup>205</sup> *National Drug Policy, 1982*.

<sup>206</sup> *The Drugs (Control) Ordinance, 1982*.

in the prices of raw materials and, in turn, a fall in maximum retail prices of finished drugs.<sup>207</sup> These two documents effectively brought an end to transfer pricing and over-invoicing for imports of capital machinery, raw materials and packaging materials, which were common practices before 1982. However, these documents were not reviewed or updated regularly to be kept up-to-date with the remarkable developments that were taking place in the medicine world. The world has witnessed remarkable achievements in the areas of pharmaceutical industry, medical science and medicine usage because of spectacular changes in the socioeconomic sectors nationally and internationally, which led to the WTO global free trade regime. To keep up with these changed circumstances, it has become essential to modernise and expand the pharmaceutical sector, aiming beyond the national horizon to the international export market, and also to attract foreign investment in this sector. To this end, the NDP 2005<sup>208</sup> was formulated as an updated version of the NDP of 1982. The major objectives of the NDP 2005 are as follows: to ensure that the common people have easy access to useful, effective, safe and good quality essential and other drugs at affordable prices; to update, from time to time, the criteria of registration for import of all systems of medicines in line with the quality guidelines followed in developed countries to ensure safety, efficiency and usefulness of such medicines; to encourage all local and foreign companies to manufacture good quality essential drugs in adequate quantities in the country; to allow manufacturers to manufacture, distribute and sell drugs by their generic or formulary names and trade or brand names (except in homeopathic medicines) as appropriate for best identity of the product; to encourage foreign manufacturers to invest, manufacture and sell drugs in Bangladesh with corresponding assurance of transfer of new technology and technical knowledge in the country; to encourage both local and multinational manufacturers to establish full-fledged research and development facilities in the country and to encourage investors to set up facilities for manufacturing pharmaceutical raw material in the country.

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<sup>207</sup> Watal, above n 2, 733.

<sup>208</sup> *National Drug Policy, 2005*; This policy was formulated:

- i) to make it more applicable, effective and adaptive to the remarkable technological advancements that have been made in the medicine world
- ii) to guide the drug sector of the country to perform better in the competitive world market
- iii) to make the country a producer and exporter of good quality drugs in the world.

However, to maintain good manufacturing practice (GMP) and rational drug use according to WHO and to ensure compliance in accordance with the TRIPS agreement and Doha Declaration of the WTO to protect public health and increase export, it became essential to make necessary changes in the existing NDP because of some limitations in regards to low production of APIs. Hence, the *Draft Policy, 2013* was prepared in consultation with relevant stakeholders. The draft policy incorporates the issue of research and development, which encourages applied research, and also incorporates the issue of environmental protection from the wastes of pharmaceutical industries.

## 2 *The Drugs (Control) Ordinance, 1982*

The *Drug (Control) Ordinance, 1982* was enacted to control, manufacture, import, distribute and sell drugs. Section 3 provides the definition of drugs, which includes any substance exclusively used or prepared for use in accordance with the *ayurvedic*,<sup>209</sup> *unani*<sup>210</sup> and homeopathic<sup>211</sup> or biochemic<sup>212</sup> system of medicine. Section 10 deals with the manufacture of drugs under the licensing agreement, Section 11 deals with the fixation of drug prices, Section 14 deals with the prohibition of unregistered medicine prescription and Section 15 deals with good practices in the manufacture and quality control of drugs.

The *Drug (Control) Ordinance, 1982* is the updated version of the *Drugs Act, 1940* to provide more information regarding the manufacture of drugs. However, the TRIPS agreement came into force in 1995 and, hence, it is necessary to update this act again with the obligations of the TRIPS agreement, particularly those relating to pharmaceutical product patents. The Directorate General of Drug Administration<sup>213</sup> also has a role to play in anticipation of 1 January 2016. It<sup>214</sup> is responsible for licensing the production of

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<sup>209</sup> *Ayurvedic* is a kind of herbal drug.

<sup>210</sup> *Unani* is another kind of herbal drug.

<sup>211</sup> Homeopathy is a form of alternative medicine in which practitioners claim to treat patients using highly diluted preparations that are believed to cause healthy people to exhibit symptoms that are similar to those exhibited by the patient.

<sup>212</sup> Biochemistry is the study of the chemical processes in living organisms. It deals with the structure and function of cellular components, such as proteins, carbohydrates, lipids, nucleic acids and other biomolecular.

<sup>213</sup> The Directorate General of Drug Administration works under the Ministry of Health and Family Welfare.

<sup>214</sup> Ibid.

medicines, controlling ongoing production and, if necessary, withdrawing licences. It regulates pharmaceutical manufacture, pharmaceutical importation and the quality control of pharmaceuticals in Bangladesh. The manufacturing of pharmaceutical products is regulated by international standards, which are a pre-condition of worldwide trade. International standards include the GMPs<sup>215</sup> for medicinal products of the EU, the Code of Federal Regulations of the American Food and Drug Administration<sup>216</sup> and the Pharmaceutical Inspection Convention,<sup>217</sup> which maintains quality and efficacy of worldwide medicines. The Directorate of Drug Administration is responsible for the registration of pharmaceuticals and licensing of medicines for marketing and exporting overseas. It also issues licences for the import of raw materials and controls the quality of pharmaceuticals through an agency called the Drug Testing Laboratory in Dhaka, which is equipped with standard testing facilities.<sup>218</sup> It also shadows the workings of the Australian Therapeutic Goods Administration,<sup>219</sup> as it has a specific role in maintaining quality, safety and efficacy of pharmaceuticals produced and imported in Bangladesh. In order to monitor and control the production of pharmaceuticals and pharmacies, including testing, manufacturing, labelling, advertising, marketing, efficacy and safety, the Directorate General of Drug Administration needs to have sufficient staff.<sup>220</sup>

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<sup>215</sup> The WHO defines GMP as 'that part of quality assurance which ensures that products are consistently produced controlled to the quality standards appropriate to their intended use and as required by the marketing authorization'. GMP is a regulatory framework to ensure the correct manufacturing of pharmaceutical products.

<sup>216</sup> Title 21 of the US Code is the portion of the Code of Federal Regulations that governs food and drugs within the US for the FDA, the Drug Enforcement Administration and the Office of National Drug Control Policy.

<sup>217</sup> The Pharmaceutical Inspection Convention aims for the mutual recognition of inspections, harmonisation of GMP requirements, uniform inspection systems, training of inspectors, exchange of information and mutual confidence. The Pharmaceutical Inspection Convention and Pharmaceutical Inspection Co-operation Scheme are two international instruments between countries and pharmaceutical inspection authorities that provide an active and constructive cooperation in the field of GMP.

<sup>218</sup> Role and Responsibility of DGDA, Bangladesh, available at <[www.dgda.gov.bd](http://www.dgda.gov.bd)>

<sup>219</sup> The Therapeutic Goods Administration is a unit of the Australian Government Department of Health and Ageing and, empowered by the *Therapeutic Goods Act, 1989*, is responsible for ensuring the quality, safety and efficacy of medicines and medical devices.

<sup>220</sup> 'Bangladesh Pharmaceutical Market Q2, 2010' (Espicom Business Intelligence, 2010).

### 3 *The Patents and Design Act, 1911 and The Bangladesh Patent Act, 2012*

The *Patent and Designs Act, 1911*<sup>221</sup> was enacted to amend the law relating to the protection of inventions and designs. This was an old act and does not mention specific issues relating to pharmaceutical products. Hence, the *Bangladesh Patent Law, 2012* was enacted because it became essential to include all current issues.<sup>222</sup> Section 14 of the *Bangladesh Patent Act, 2012* deals with the grant of compulsory licences and revocation of patents. However, the term ‘emergency’ does not specify whether it covers security exceptions, as specified in Article 73(b-c) of the TRIPS agreement.<sup>223</sup> Security issues arise from natural calamities, such as epidemics or disasters, spread to wide areas and pose threats to living conditions. However, the current provision fails to recognise the issuing of compulsory licensing on the grounds of public interests and necessities.

Moreover, the obtainable grant of compulsory licensing is purely anticipated to serve domestic use, not to focus on the requirements of export permission, as provided in the TRIPS agreement, the Doha Declaration and the waiver decision. The absence of such a requirement in the act means that it is difficult to establish a case for issuing a compulsory licence for certain drugs purely on the basis of local market needs.<sup>224</sup> For example, if an MNC patented a HIV/AIDS drug in Bangladesh under the previous act, it would be difficult to argue for the issue of a compulsory licence in relation to a HIV/AIDS drug with the sole purpose of local market needs, since the country does not suffer immeasurably from a HIV/AIDS crisis. To fill this void, the current Bangladesh Patent Law contains provision for the granting of compulsory licences for the ‘manufacture and export of patented pharmaceutical products to any country having insufficient or no manufacturing capacity in the pharmaceutical sector for the concerned product to address public health problems, provided compulsory license has been granted by such country’. This provision is intended to cover exclusively the produce of that particular pharmaceutical for which the

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<sup>221</sup> *The Patents and Design Act, 1911*.

<sup>222</sup> *Bangladesh Patent law, 2012*.

<sup>223</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1C (‘Agreement on Trade-Related Aspects of Intellectual Property Rights’) art 73(b-c).

<sup>224</sup> Sampath, above n 161, 14–15.



license is obtained in both the importing and exporting country.<sup>225</sup> However, this provision does not consider export to non-WTO member countries or to countries that do not have pharmaceutical patenting or patenting of the said drug.

#### 4 *The Consumer Rights Protection Act, 2009*

The *Consumer Rights Protection Act, 2009*<sup>226</sup> was enacted with the aim of protecting consumer rights, protecting consumers from the adverse effects of anti-consumer activities and re-enacting the laws. The important sections relevant to manufacture and sale or distribution of medicine are Section 2, which provides definitions, Section 5, which deals with the establishment of the Consumer Protection Rights Council, Section 10, which deals with the establishment of the District Committee and Section 21, which deals with the duties and responsibilities of the Director General to protect the rights of the consumers, to protect consumers from anti-consumer activities and to resolve complaints regarding offences made under this Act.

This Act outlines the responsibilities of the Director General, which are to take necessary steps if there is any medicine produced and marketed deceptively (subsection 21.E), to inquire whether the medicine is infected through the mixing of filthy products (subsection 21.F), to take steps to find out the date of production and the date of expiry if counterfeit (subsection 21.G) and to take steps to discover if there is any production without a licence (subsection 21.K). This act is more improved than other acts because of its recent enactment; however, it would be far better if it could provide a separate chapter on pharmaceutical products, thus, providing more guidelines on that particular issue.

During the examination of the aforementioned domestic regulations, it is observed that these regulations have direct links with market access of Bangladesh pharmaceutical products. Other than the *Drug (Control) Ordinance, 1982*, the NDP 2013, the *Bangladesh Patent Act, 2012* and the *Consumer Rights Protection Act, 2009* are the current laws that

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<sup>225</sup> *The Bangladesh Patent Law, 2012* s 14.

<sup>226</sup> *The Consumer Rights Protection Act, 2009*.

include updated information, which is the positive side of these regulations. A similar situation prevails in the *Drug (Control) Ordinance, 1982*, although it is slightly more outdated. The Draft Drug Policy incorporates the issue of research and development, which encourages applied research, and also incorporates the issue of environmental protection from the wastes of pharmaceutical industries. Conversely, the *Drug (Control) Ordinance, 1982* was enacted before the TRIPS agreement, which came into force in 1995. Hence, it is necessary to update this act again with the obligations of the TRIPS agreement, particularly those relating to pharmaceutical product patents, which is a core issue of this research and provides an answer to part of the research question.

The *Bangladesh Patent Act, 2012* deals with the grant of compulsory licences and revocation of patents. It contains provision for the granting of compulsory licenses to address public health problems. This provision is intended exclusively to cover the produce of that particular pharmaceutical for which the licence is obtained in both the importing and exporting country. However, this provision does not discuss export to non-WTO member countries or to countries that do not have pharmaceutical patenting or patenting of the said drug. It can be summarised that, although these regulations are comparatively better drafted than other domestic regulations, a lack of coordination and implementation might jeopardise the aims of these regulations.

#### *F Greater Market Access for Bangladesh Pharmaceutical Products: Ways Forward*

To acquire a balanced option and secure the TRIPS–public-health debate, plenty of discussion is already taking place at a national and international level. However, discussions often become derailed on the issue of which right (the right to intellectual creations or the right to health) comes first.<sup>227</sup> To facilitate global and national solutions, a fair approach is required in view of the TRIPS objectives. As part of the negotiation strategy and in search of a balanced approach, countries with the least public health means, especially LDCs like Bangladesh, need to formulate strategies through domestic policy reform and reform in TRIPS flexibilities.

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<sup>227</sup> Peter K Yu, 'The International Enclosure Movement' (2007) 82 *Indiana Law Journal* 827.

## 1 *Reform in Domestic Policy*

As an LDC, Bangladesh must exercise the options already provided for in the TRIPS and other international agreements. These options include restructuring of national legislation in a way most favourable for the protection of public health and other developmental needs. Compulsory licensing, parallel importation and other choices also need to be implemented. To use such flexibilities effectively, countries, like Bangladesh, require the formulation of strategies that consider their own needs and capabilities, which might include emphasis on basic and applied research in this field and the importation or development of appropriate technologies. Such strategies should aim to provide the pharmaceutical sector with a firm base before 2016 and serve public health interests competitively at home and abroad.<sup>228</sup>

### *(a) Invoking Transitional Flexibility*

To invoke the TRIPS transitional flexibility, Bangladesh needs to address its temporarily exempt pharmaceuticals from patentability until at least 2016. A supplementary clause should be added therein to permit the export of generics produced in this manner to other countries.

### *(b) Patentability Determination*

Bangladesh should exclude the patenting of new uses of drugs on the grounds of the ever-greening of patents in pharmaceutical products that are of little improved therapeutic value and do not enhance efficacy. Therefore, as a precaution, Bangladesh can introduce pre-grant opposition of patents in clear terms and conditions with the intent to encourage early challenges to inventions that should not be patented on the grounds of public interest.

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<sup>228</sup>Karin Timmermans, 'Safeguarding Access to Medicines in Developing Countries: Strategies and Principles' (2006) 3(2) *Journal of Generic Medicine* 90.

*(c) Reconfiguring Compulsory Licensing*

Bangladesh needs to put together its provisions on compulsory licensing in regards to security exceptions or public interests and necessities. It needs to insert provisions in the act to export medicines produced under compulsory licences to other TRIPS-compliant countries that do not have the manufacturing capacity or to WTO non-member countries.

*(d) Introducing Parallel Importation*

To ensure the public health in terest of the country, Bangladesh needs to insert a provision into the act that authorises parallel import of drugs from other markets.

*(e) Strengthening State-owned Drug Companies*

In Bangladesh, the Essential Drug Company Limited is the state-owned drug company that can be strengthened and given the task of producing and supplying essential drugs to make them available in line with public health interests.

*(f) Development of Infrastructure and other Support*

Access to medicines in Bangladesh depends on various factors, including research and development in health, health education, health systems, rational drug use, government taxation and tariffs policies.<sup>229</sup> Therefore, Bangladesh needs to focus on infrastructure development, both in administrative support and equipment testing. To achieve this, Bangladesh should negotiate with its development partners to provide technological and infrastructural support and to make such support strictly binding.

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<sup>229</sup> Kanna, above n 195.

### *(g) Towards Capacity Building*

Bangladesh needs to build the capacity of regulatory agencies, mainly the Department of Patent, Design and Trademarks and the Department of Drug Administration, to cope with post-TRIPS challenges by developing a database<sup>230</sup> and by joining the *Patent Cooperation Treaty, 1970* to outsource patent examinations.

### *2 Reform in the TRIPS Agreement*

The open-source approach, by forming global funding mechanisms or public-private partnerships at the national and international level, can ensure easy access to medicine and this approach is likely to help research and development and make research findings available to all, including the provision of subsidised or free drugs and vaccines.<sup>231</sup> Developing countries, particularly LDCs, are more susceptible to global epidemics, like HIV/AIDS, SARS, Avian Flu and Swine Flu. Therefore, it is important to recognise medicines as fundamentally public goods and put a general exception for public health needs under Article 30 of the TRIPS agreement. To achieve this, pharmaceutical companies can either provide voluntary licences to the generic industry in developing countries or take out patents from LDCs and refuse to enforce existing patents for the purpose of the development of essential drugs.<sup>232</sup> Thus, a combination of the enforcement of IP laws and price regulation can be a good choice that serves both interests: ensuring royalty collection and protecting public health.

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<sup>230</sup> Yusuf, above n 87, 14.

<sup>231</sup> Pervez N Ghauria and P M Rao, 'Intellectual Property, Pharmaceutical MNEs and the Developing World' (2009) 44 (2) *Journal of World Business* 206, 212–214; Sherri A Brown, 'Operational and Normative Features, Challenges, and Prospects' (Spring 2008) *Canadian Public Administration Journal*; Carlos M Correa, 'Ownership of Knowledge: The Role of Patents in Pharmaceutical R&D' (2004) 82(10) *Bulletin of the World Health Organisation* 784.

<sup>232</sup> Susan K Sell, 'The Quest for Global Governance in Intellectual Property and Public Health: Structural, Discursive and Institutional Dimensions' (2004) 77 *Temple Law Review* 363.

The redefining of IP from a trade issue to a public health issue, which already resides in the Doha Declaration, can be taken as an example of the way forward.<sup>233</sup> The current formulation of the TRIPS agreement, with its one-size-fits-all approach, merely serves the interests of royalty collection; it fails to improve accessibility to vital medicines to protect public health. In Bangladesh, it is necessary to reiterate the LDCs' demand in regards to raising public health concerns at the WTO, which asked for further extension to the compliance deadline.<sup>234</sup> Considering the country's developmental needs, it co-opted for changes to the agreement with Special and Differential treatment, especially for LDCs, in making essential and life-saving medicines patent free and also suggested special pricing for pharmaceuticals, considering the ability of poor people to afford medicines.

#### *G Market Access Implications for Bangladesh Pharmaceutical Products under ERs*

TRIPS Agreement provides the privilege to member countries under its Article 27 where the member countries may exclude patentability within their territory if it is necessary to protect human, animal or plant life or health or to avoid serious prejudice to the environment. But the fact is that the requirements of this Article sometimes used as protectionist measures by the developed countries or the Multinational companies (discussed under subsection D7) over the developing countries where Bangladesh is a party being an LDC.

It has also been observed that TRIPS agreement allows patents on biological materials associated with Traditional Knowledge and keeping pressure on developing countries to increase the level of standard without considering their financial and technological conditions. Moreover, the domestic regulations are not up to date in light of the international rules. Therefore, it is necessary to incorporate all the exclusions mentioned

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<sup>233</sup> John H Barton and Ezekiel J Emanuel, 'The Patents-Based Pharmaceutical Development Process: Rationale, Problems, and Potential Reforms' (2005) 294(16) *Journal of the American Medical Association* 2075.

<sup>234</sup> WTO, *8th Ministerial Declaration: Transition Period for Least-Developed Countries under Article 66.1 of the TRIPS Agreement* <<http://docs.wto.org/DDFDocuments/t/WT/1/845.doc>> where the Ministerial Conference decides as follows:

We invite the TRIPS Council to give full consideration to a duly motivated request from Least-Developed Country Members for an extension of their transition period under Article 66.1 of the TRIPS Agreement, and report thereon to the WTO Ninth Ministerial Conference.

under Article 27 of the TRIPS agreement into the domestic regulations of Bangladesh to avoid the debate on protectionist measures (discussed in subsection D7).

The Doha Declaration on the TRIPS agreement and public health provides special and differential treatment to LDCs to assist them in becoming TRIPS-Compliance with respect to patent protection for pharmaceutical products by the end of 2015. The strict enforcement of TRIPS Compliance has caused the closure of cheap active pharmaceutical ingredients (API) sources that forces Bangladesh to buy costlier APIs which ultimately increases the price of the domestic pharmaceutical products (discussed in subsection D6).

### *H Conclusion*

The market access of Bangladesh pharmaceutical products under environmental concerns has been examined in this chapter. It has been observed that the TRIPS agreement creates patent monopoly because of its provisions for patenting in pharmaceuticals and restriction of compulsory licensing by establishing control over pharmaceutical products, ensures royalties for patent rights and builds barriers to the access of pharmaceuticals for LDCs. As an LDC, Bangladesh will face consequences in protecting public health interests during the TRIPS era of patenting pharmaceuticals and restricting compulsory licensing.

However, the country will reap benefits in public health protection by temporarily exempting pharmaceuticals from patenting and compulsory licensing for export because of the adoption of the Doha Declaration and the waiver decision that extends the compliance deadline. However, again, the production of cheap generics in Bangladesh is likely to be hampered because developing countries, such as India and China, have already complied with the TRIPS agreement and are now prohibited from copying. As a result, Bangladesh must collect APIs from expensive sources, which increases drug prices and is creating barriers. In addition, commitments made by developed countries to provide incentives to enterprises and institutions within their territories to achieve effective technology transfer to LDCs in accordance with Article 66.2 of the TRIPS agreement should go beyond workshops or seminars and be resolved immediately by taking adequate steps.

Domestic regulations in relation to pharmaceuticals export were examined in light of market access and it was observed that there has been some development with regards to enactment and upgradation of laws relating to pharmaceuticals. However, there is a lack of coordination, monitoring, implementation and improved management. In the given circumstances, this chapter argued that Bangladesh needs to update its legislations to maximise TRIPS flexibilities in copying medicine and supplying it at competitive prices, readdress the patentability rights issues under Article 27, which might be used as a protectionist measure, and request a further extension to the compliance deadline. Negotiations should emphasise the creation of a common fund for research and development, which is either open to all countries or provides subsidised or free drugs and vaccines for LDCs, considering access to medicine for all. The Government of Bangladesh should take immediate steps in building awareness of the TRIPS Flexibilities among the investors, scientists, negotiators and policy makers so that they can get full benefits out of these existing flexible options and devise mechanism for future development. The following chapter examines the market access implications of Bangladesh textile, clothing, leather and leather products because of their vulnerability under EUs.



## **VII ENVIRONMENTAL CONCERNS: MARKET ACCESS CHALLENGES AND OPPORTUNITIES OF BANGLADESH TEXTILE AND CLOTHING AND LEATHER AND LEATHER PRODUCTS\***

### *A Introduction*

Textile and clothing products include knitwear, woven garments, home textile and specialised textiles and leather products, generally including leather goods and footwear. According to the EPB<sup>1</sup> classification, manufactured commodities are divided into 33 subgroups (pharmaceutical products are discussed in Chapter 6). This chapter discusses the abovementioned products, considering their export potentials and vulnerability because of environmental concerns, such as PPMs, standards, environmental pollution, labelling, eco-labelling and packaging, which are covered by the SPS and TBT agreements. In doing so, this chapter examines the relevant domestic and international rules of these particular manufactured commodities.

The textile and apparel manufacturing industries have had great influence in economic development since the industrial revolution for two reasons: textile and apparel are basic items of consumption for all countries and apparel manufacture is labour intensive and creates substantial employment opportunities.<sup>2</sup> According to international trade statistics in 2009 and 2010, textiles accounted for 1.7 per cent of total merchandise exports (textile export was US\$211 billion) and clothing accounted for 2.6 per cent (clothing export was US\$216 billion).<sup>3</sup> The combined exports of textile and clothing (T&C) were US\$ 527 billion in 2009<sup>4</sup> and US\$612 billion in 2008.<sup>5</sup> Although T&C has a small share in world

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\*Part of this chapter has been accepted for publication in the *Law Asia Journal* as 'Market Access Challenges and Opportunities of Bangladesh Textile and Apparel Products' (2013) (Forthcoming).

<sup>1</sup> EPB is responsible for overseeing the overall export performance of Bangladesh products under the Ministry of Commerce. See <<http://www.epb.gov.bd>>.

<sup>2</sup> Mohammad Abdul Munim Joarder, A K M Nurul Hossain and Md Mahbubul Hakim, 'Post-MFA Performance of Bangladesh Apparel Sector' (2010) 6 *International Review of Business Research Papers* 134.

<sup>3</sup> WTO, *International Trade Statistics, 2010 (Table II.I: World Merchandise Exports by Major Product Group, 2009)* <[http://www.wto.org/english/res\\_e/statistics\\_e/its2010\\_e/section2\\_e/ii01.xls](http://www.wto.org/english/res_e/statistics_e/its2010_e/section2_e/ii01.xls)>.

<sup>4</sup> Ibid

merchandise exports compared to other products, this sector carries immense significance for LDC's economies and provides livelihoods to millions of people.<sup>6</sup>

Between 2000 and 2008, LDCs have increased their share from 8.3 per cent to 9.1 per cent in the EU clothing market and a similar pattern is observed in the US market where their share has increased from 6.4 per cent to 8.8 per cent.<sup>7</sup> Ninety-nine per cent of EU imports from LDCs originated from five countries: Bangladesh (81.5 per cent), Cambodia (9.5 per cent), Madagascar (3.7 per cent), Myanmar (2.5 per cent) and Laos (1.9 per cent).<sup>8</sup> In the US market, 99 per cent of imports are from LDCs and concentrated in five countries: Bangladesh, Cambodia, Haiti, Lesotho and Madagascar.<sup>9</sup> Being an LDC, Bangladesh is among the top six leading clothing exporters (US\$11 billion), which represented a 3.4 per cent share of world exports in 2009.<sup>10</sup>

Since the 1980s, there have been considerable demands<sup>11</sup> placed on Bangladesh's RMG industries with the international trading community demanding increased DFQF access for T&C products.<sup>12</sup> This has important ramifications given the income that this industry generates for Bangladesh.<sup>13</sup> The contribution of the clothing sector was 78.14 per cent, while the textile sector added only approximately four per cent to the export economy, in

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<sup>5</sup> WTO, *International Trade Statistics, 2009 (Table II.I: World Merchandise Exports by Major Product Group, 2008)* <[http://www.wto.org/english/res\\_e/statistics\\_e/its2009\\_e/section2\\_e/ii01.xls](http://www.wto.org/english/res_e/statistics_e/its2009_e/section2_e/ii01.xls)>.

<sup>6</sup> Umair Hafeez Ghori, 'WTO Non-Agricultural Market Access (NAMA) Negotiations & the Global Textile and Clothing (T&C) Trade: Reconciling Irreconcilable Amid the Financial Meltdown' (Paper presented at the Australian National Post graduate Law Conference, Australian National University, Canberra, 11–12 June 2009).

<sup>7</sup> WTO, *International Trade Statistics, 2009, 39 (Table II.I: World Merchandise Exports by Major Product Group, 2008)* <[http://www.wto.org/english/res\\_e/statistics\\_e/its2009\\_e/section2\\_e/ii01.xls](http://www.wto.org/english/res_e/statistics_e/its2009_e/section2_e/ii01.xls)>.

<sup>8</sup> Ibid

<sup>9</sup> Ibid

<sup>10</sup> WTO, *International Trade statistics, 2010, 114 (Table II.69) (Table II.I: World Merchandise Exports by Major Product Group, 2009)* <[http://www.wto.org/english/res\\_e/statistics\\_e/its2010\\_e/section2\\_e/ii01.xls](http://www.wto.org/english/res_e/statistics_e/its2010_e/section2_e/ii01.xls)>

<sup>11</sup> Md Amanur Rahman and David T Parkes, 'Bangladeshi Textile Industry Profitable Despite Recession' (2009) *Fibere2Fashion*.

<sup>12</sup> The textile industry and the clothing industry are the most important industries in Bangladesh. The contribution of these industries to the economy is well known in Bangladesh. The clothing industry is more significant than the textile industry in Bangladesh and in developing countries; however, the opposite is true in developed or industrial countries. The two industries are two branches of one industry; however, in most cases, there exists huge differences between the two industries.

<sup>13</sup> Ministry of Finance, *Bangladesh Economic Review* (Government of the People's Republic of Bangladesh, 2010).

the 2010 to 2011 financial year.<sup>14</sup> In a developing country like Bangladesh, the RMG sector plays an important role in overall economic development. At present, approximately 20 lakh<sup>15</sup> workers (of which 80 per cent is female) are working in this sector, which is a great source of employment.<sup>16</sup> It is also mentionable that approximately 76 per cent of Bangladesh's foreign exchange is also earned by this sector.<sup>17</sup>

The demand for DFQF market access is closer to being met because of negotiations; however, at the same time, NTBs, like ERs, are becoming increasingly crucial for market access of Bangladesh products. In the post-quota, globalised world, issues relating to social compliance have become increasingly important in the export-oriented RMG sector in Bangladesh. T&C exports from developing countries and LDCs often face regulatory and standards-related barriers in developed countries, which come from the WTO's ERs. TBT measures are the primary reported barrier for T&C<sup>18</sup> and the restrictions are mainly in the form of labelling and marketing requirements, security parameters, document verifications and compliance with labour and environmental norms.<sup>19</sup> To this end, this chapter investigates the environment-related market access implications of Bangladesh T&C products under different subheadings, considering its domestic and international legal context.

In the case of leather and leather products, this chapter investigates Bangladesh market access challenges in terms of environmental concerns, as was done for the other products in Chapters 4, 5 and 6. Leather and leather goods are another important export earner, contributing about 3.63 per cent of total export earnings.<sup>20</sup> However, a large proportion of leather materials are downgraded and rejected because of poor quality, as PPMs and environmental conditions are not well defined for manufacturing industries in ternary areas where leather products are produced. Environmental legislation on slaughter and tannery operations needs to be framed and enforced. Butchers and merchants need to be trained on

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<sup>14</sup> EPB, *Bangladesh* <<http://www.epb.gov.bd/details.php?page=12>>.

<sup>15</sup> 1 lakh is 100,000.

<sup>16</sup> EPB, above n 14.

<sup>17</sup> Ibid

<sup>18</sup> Mustafizur Rahman et al, *WTO and Bangladesh Trade Policy* (Centre For Policy Dialogue, 1<sup>st</sup> ed, 2008) 62.

<sup>19</sup> Ibid

<sup>20</sup> EPB, *Export Statistics* (July 2012 – June 2013) <<http://www.epb.gov.bd/countryexportdata.php>>.

basic knowledge of flaying, curing and storing for improved management and quality of hides and skins. In this chapter, the hides and skins, together with relevant accessories, are analysed elaborately in terms of their potential export and environment-related market access barriers.

## *B Instruments of Textiles and Clothing*

### *1 Agreement on Textile and Clothing*

The international textiles and clothing trade has gone through fundamental changes under the ten-year transitional programme of the WTO's Agreement on Textiles and Clothing since 1 January 1995.<sup>21</sup> A large share of T&C exports from developing countries to developed countries was subject to quotas under a special regime outside normal GATT rules before this agreement took effect.<sup>22</sup> WTO members have committed themselves to eliminate quotas by 1 January 2005 by integrating the sector fully into GATT rules.<sup>23</sup> Although this agreement was phased out on 1 January 2005, it is outlined here and is analysed in the relevant sections of this chapter because of its implications on market access.

### *2 Multi-Fibre Agreements*

The Multi-Fibre Agreement (MFA)<sup>24</sup> was introduced in 1947 and intended to allow developed countries to adjust imports from developing countries.<sup>25</sup> Developing countries a sort of natural advantage in textile production because it is labour intensive and they have low labour costs.<sup>26</sup> Although there was apprehension about the negative consequences that LDCs would face after elimination of the MFA quota, the arrangement was not negative for

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<sup>21</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('*The Agreement on Textiles and Clothing*') preamble [1]art 1.

<sup>22</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('*The Agreement on Textiles and Clothing*') art1.

<sup>23</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('*The Agreement on Textiles and Clothing*') art.2.

<sup>24</sup> The MFA governed world trade in textiles and garments from 1974 to 2004, imposing quotas on the amount of developing countries that could export to developed countries. It expired on 1 January 2005.

<sup>25</sup> See <[www.wto.org](http://www.wto.org)>.

<sup>26</sup> Ibid

all developing countries.<sup>27</sup> For example, the EU imposed no restrictions or duties on imports from the poorest countries like Bangladesh, which resulted in a massive expansion of the industry.<sup>28</sup> It was anticipated that Bangladesh would face more competition, particularly from China; however, this has not been the case.

In terms of Capacity and labour intensive markets, Bangladesh's labour is considered 'cheaper than anywhere else in the world'.<sup>29</sup> While some smaller factories were documented making pay cuts and lay offs, most downsizing was essentially speculative; the orders for goods kept coming even after the MFA expired. In fact, Bangladesh's exports increased in value by about \$500 million in 2006.<sup>30</sup>

### *C Bangladesh's Textile and Clothing Sector under Environmental Concern*

#### *1 Bangladesh's Textile and Clothing Sector*

It is necessary to outline Bangladesh's T&C sector before discussing its market access challenges in regards to environmental concerns. Bangladesh's T&C sector is the largest manufacturing activity in Bangladesh and provides direct employment for more than five million people, which accounts for 45 per cent of industrial employment.<sup>31</sup> It contributes 13 per cent of the country's GDP, 40 per cent of the industrial value addition and 78 per cent of the export earnings.<sup>32</sup> The T&C export amount was approximately US\$19.09 billion in the 2011 to 2012 financial year and reached approximately US\$21 billion in the 2012 to 2013 financial year.<sup>33</sup> This implies that the sector not only contributed to the economy of this country but also empowered its women. The industry has enhanced the quality of life of women and, as a whole, the standard of living. Most RMGs exported from Bangladesh are knitted and include shirts and blouses, trousers, skirts, shorts, jackets, sweaters and

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<sup>27</sup> Ibid

<sup>28</sup> Ibid

<sup>29</sup> The Countries in the Cheapest Labour, *The Richest*, (1 April 2013) <<http://www.the-richest.com/rich-list/poorest-list/countries-with-the-cheapest-labor/>>

<sup>30</sup> Mahtab Haider, 'Defying Predictions, Bangladesh's Garment Factories Thrive' *The Christian Science Monitor*, 7 February 2006.

<sup>31</sup> Ministry of Finance, *Bangladesh Economic Review* (Government of the People's Republic of Bangladesh, 2011).

<sup>32</sup> EPB, above n 14.

<sup>33</sup> Ibid

sportswear and other fashion apparel.<sup>34</sup> The Bangladesh T&C sector is divided into the primary textile sector (PTS) and the export-oriented RMG-making sector.<sup>35</sup> The PTS comprises the spinning, weaving, specialised textile units and traditional handloom sectors and the knitting and dyeing subsectors.<sup>36</sup> According to the Ministry of Textile and Jute,<sup>37</sup> there are 350 spinning mills, 400 weaving firms, 310 dyeing and finishing units and 4,500 garment factories in Bangladesh.

The exceptional development of the RMG industry in Bangladesh and the dramatic increase in the population, together with the increased standard of living in the country, has led to a large demand–supply gap. Only 21 per cent of the total demand for yarn is met locally in Bangladesh. The figures for grey are not much better, as only 28 per cent of the total demand is met locally.<sup>38</sup> Currently, the finishing subsector is able to process all locally produced grey; however, it will need to expand, as will the weaving and knitting subsectors. All sectors of the textile industry face many of the same challenges. These problems include a lack of power, obsolete technology, low capacity use, a lack of machinery maintenance, a workforce that is not adequately trained, problems with labour unrest and militancy, political unrest causing disruption, such as *hartals*,<sup>39</sup> and a lack of working capital. Some subsectors are outlined in the following sections because of their contribution to the national economy and their environmental concerns.

## *2 Market Access Challenges of Bangladesh's Textile and Clothing Sector under Environmental Concerns*

Under environmental concerns, Bangladesh's T&C sectors face market access challenges in various areas that are interrelated and interlinked. These challenges are broadly classified in the following areas: environmental, including pollution, PPMs, standards, packaging or labelling, and regulatory. These challenges are discussed in light of Bangladesh's domestic

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<sup>34</sup> Ibid

<sup>35</sup> *Bangladesh Textile Policy, 2011*.

<sup>36</sup> Ibid

<sup>37</sup> See <<http://www.motj.gov.bd/policy.html>>.

<sup>38</sup> Ministry of Finance, *Bangladesh Economic Review* (Government of the People's Republic of Bangladesh, 2011).

<sup>39</sup> *Hartals* means strikes.

regulations that are responsible for T&C export , comparing them with international rules. The domestic regulations that are exclusive for the T&C sector include:

- *The National Textile and Clothing Policy, 2011*
- *The Cotton Act, 1957*
- *The Cotton Cess Act, 1911*
- *The Cotton Cloth Act, 1918*
- *The Cotton Ginning and Pressing Act, 1957*
- *The Cotton Industry Act, 1926*
- *The Cotton Transport Act, 1923.*

The *National Textile Policy, 2011* was adopted to ensure the quality of textile products for fulfilling domestic demand, as well as increasing export and promotion-related matters in new destinations.<sup>40</sup> Prior to this policy, the *Textile Policy, 1989* and *Textile Policy, 1995* were adopted to face the challenges of 2005. The expiry of the quota in 2005 introduced new challenges, as most industries were built on quotas. There were many assumptions about the situation for RMG exporters in the post-MFA period, when the WTO's quotas were removed, resulting in a free market worldwide. Bangladesh's garment and textile manufacturers now have to face steep competition from countries like India, Pakistan, China and Thailand from which Bangladesh now imports fabric to meet the demands of its RMG sector. After the establishment of the WTO free market, these countries expanded their RMG exports, which were earlier limited by quotas. As a result, they can now use more of their locally produced yarn and fabrics internally, resulting in a rise in prices for these products in the export market and putting pressure on Bangladesh industries.

The government of Bangladesh has also taken some measures in the form of incentives to face competitive challenges,<sup>41</sup> such as developing bonded warehouse facilities , the Duty Exemption Drawback Organization (DEDO), a 25 per cent export cash incentive, a tax holiday, duty-free import of raw materials for export in RMG, avoidance of double taxation

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<sup>40</sup> *Bangladesh Textile Policy, 2011.*

<sup>41</sup> Ministry of Textile and Jute, *Government of Bangladesh* <<http://www.motj.gov.bd/>>.

for joint-venture projects, an income tax exemption for up to three years for foreign technicians and duty-free import of capital machinery.

The textile policy makes some suggestions<sup>42</sup> for developing the subsectors of the industry in a harmonious manner. These suggestions include closer monitoring of leakage in the market, improvement of research and computer technology and the development of 116 new spinning mills and 223 modern weaving units with necessary training provided. For dyeing, printing and finishing, new units would be set up with appropriate technology, a bonded warehouse would be provided until local grey production can meet the quality and quantity required by the subsector and duty on dyes and chemicals would be withdrawn. However, the policy has appeared quite abstract and has failed to address a number of issues.

The textile policy calls for the establishment of many new factories and projects, however, does not provide any scheme for their finance. The lack of training and technology is mentioned; however, no steps are suggested for enhancing the skills of the workforce and engineers. No suggestions are made for setting up institutions to conduct the technical and marketing research needed to upgrade the quality of Bangladesh products to make them more appealing in the international market. The need for expansion of Bangladesh's infrastructure, such as road, port and railway capacities, to accommodate increased imports and exports is not mentioned. The problems arising from a shortage of land on which to build the necessary factories is also not considered. The policy states that environmental pollution is negligible, however, does not go further into the matter. Effluent treatment and disposal in the industry is a serious problem that is discussed in the following sections. The need for more power is mentioned, however, no plans have been devised on how this will be achieved.

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<sup>42</sup> Ibid



### *(a) Challenges because of Environmental Concerns*

The textile industry has experienced environmental consequences in various areas. It has been condemned as being one of the world's worst offenders in terms of pollution.<sup>43</sup> It requires two major components: chemicals and water. As many as 2,000 different chemicals from dyes to transfer agents are used in the textile industry and water is a finite resource that is quickly becoming scarce and is used in every step of the process. Water is used to convey chemicals and to wash them out before beginning the next step. It becomes full of chemical additives and is then expelled as wastewater, which, in turn, pollutes the environment by its heat, its increased pH and because it is saturated with dyes, de-foamers, bleaches, detergents, optical brighteners, equalisers and many other chemicals used during the process.<sup>44</sup>

In Bangladesh,<sup>45</sup> with the recent growth of the garment industry and its backwards link sectors, composite textile mills, including dyeing, printing and finishing units, use substantial quantities of highly toxic wastes, dyes and chemicals. Some of these industries are situated close to the river, having access to disposal of their toxic wastes, and other textile finishing units are situated in landlocked areas, posing increasing pollution problems to their surroundings,<sup>46</sup> which are issues discussed in the following section.

### *(i) Environmental Pollution*

Traditionally, produced fabrics contain residues of chemicals used during their manufacture. Chemicals evaporate into the air and then entered into the human body, either through breathing or being absorbed through the skin. Some of the chemicals are carcinogenic or may cause harm to children, even before birth, while others may trigger

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<sup>43</sup> O Ecotextiles, 'Textile Industry Poses Environmental Hazards' (Report, O Ecotextiles) <[http://www.oecotextiles.com/PDF/textile\\_industry\\_hazards.pdf](http://www.oecotextiles.com/PDF/textile_industry_hazards.pdf)>.

<sup>44</sup> Ibid

<sup>45</sup> Bangladesh is a riverine country in the tropical zone and has highly fertile soil. High population growth increases the requirements of wood, diminishing plants and trees, and construction of roads, bridges and homesteads, which adds to the degradation of the environment.

<sup>46</sup> M Zameerul Alam, 'Current Environmental Problems in Bangladesh' <[http://www.unesco.org/tid/publication/chap4\\_2127\\_bang.pdf](http://www.unesco.org/tid/publication/chap4_2127_bang.pdf)>.

allergic reactions in some people. An article<sup>47</sup> estimated that the amount of people who are allergic to chemicals will increase to 60 per cent by the year 2020. It is essential to consider the following factors to produce pollution-free T&C products: water usage, water pollution, fibres, cotton, sizing, bleaching, dyeing and finishing.

In regards to water usage, it is estimated that the textile industry is one of the most chemically intensive industries on earth and a leading polluter and user of clean water (after agriculture), given that it takes 500 gallons of water to produce enough fabric to cover one sofa.<sup>48</sup> Mills discharge millions of gallons of wastewater full of chemicals each year, including chemicals such as formaldehyde (HCHO), chlorine and heavy metals (e.g., lead and mercury), which cause significant environmental degradation and human illness. The mill wastewater often carries high temperatures and high pH levels, which are extremely damaging for the environment.

Cotton is considered the most pesticide-intensive crop in the world. These pesticides injure and kill many people every year. Herbicides and the chemical defoliants that are sometimes used to aid mechanical cotton harvesting add to the death toll of both human and non-human species. Most cotton is irrigated and the combination of chemical application (through pesticides and fertilisers) and irrigation is a direct medium for toxic chemicals to circulate in groundwater worldwide. These chemicals remain in the fabric after finishing and are released during the lifetime of the garments. Genetically modified cotton adds environmental problems at another level.<sup>49</sup> Growing cotton uses 22.5 per cent of all the insecticides used globally and it is estimated that one t-shirt requires 257 gallons of water. In addition, bleaching and dyeing create toxins in the resulting fabric that flow into the ecosystem. Chlorine bleach is extremely toxic to the environment and to consumers, yet chlorine-based chemicals are still often used to bleach fabrics.

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<sup>47</sup> 'Environmental Hazards of the Textile Industry' *Business Week*, 5 June 2005.

<sup>48</sup> Ibid

<sup>49</sup> Lakshmi Challa, 'Impact of Textile and Clothing Industry on Environment: Approach towards Eco-Friendly Textiles' (2013) *Fibre2Fashion.com* < <http://www.fibre2fashion.com/industry-article/textile-industry-articles/impact-of-textiles-and-clothing-industry-on-environment/impact-of-textiles-and-clothing-industry-on-environment2.asp>>.

In Bangladesh, the *Cotton Act, 1957*<sup>50</sup> was enacted to provide for measures for the promotion of international trade in cotton. Section 2 of this act provides definitions, including cotton, which means unginced cotton (*kapas*),<sup>51</sup> ginned cotton (*rui*)<sup>52</sup> or pressed and baled cotton but does not include wool cotton or silk cotton. Section 4 details the board's function, which is to supervise and regulate all dealings in cotton in so far as they are connected with the promotion of international trade and to perform such functions as the government may direct for the purposes of the act. Section 9 of the act provides the registration of contract, which stipulates that the export of cotton must be registered according to the specified order. However, this is a dated act, as it does not reflect current trade issues that are creating market access barriers nor does it find a solution. Moreover, this act was created to control trade rather than promote expansion, which is a barrier to international trade. Conversely, the cultivation, storage and export system has been changed in this stage, which is why the act is no longer relevant and requires total reform. The *Cotton Cess Act, 1923*<sup>53</sup> was enacted to provide for the creation of a fund for improvement and development of growing, marketing and manufacture of cotton. However, again, it does not reflect current trade issues, which are creating market access barriers, or propose a solution. Moreover, the fund for improvement and development is insufficient to meet current demand. The development of cotton depends on scientific research, which is not included in this Act.

Many textile manufacturers use dyes that release aromatic amines (e.g., benzidine and toluidine). Dye bath effluents may contain heavy metals, ammonia, alkali salts, toxic solids and large amounts of pigments, many of which are toxic.<sup>54</sup> About 40 per cent of globally used colorants contain organically bound chlorine, a known carcinogen. Natural dyes are rarely low-impact dyes, depending on the specific dye and mordant used. Mordants (the substance used to fix the colour onto the fabric), such as chromium, are highly toxic. The large quantities of natural dyestuffs required for dyeing typically equal or double that of the fibre's own weight, which makes natural dyes that are prepared from wild plants and

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<sup>50</sup> *The Cotton Act, 1957*.

<sup>51</sup> In Bangladesh, unginced cotton is known as *kapas*.

<sup>52</sup> In Bangladesh, ginned cotton is known as *rui*.

<sup>53</sup> *The Cotton Cess Act, 1923*.

<sup>54</sup> 'Environmental Hazards of the Textile Industry', above n 46, 3.

lichens very high-impact dyes. In finishing, mills generally apply functional finishes (such as flame retardants) to the fabrics. However, companies could manufacture certain flame retardants without the use of hazardous chemicals, such as bees wax, aloe vera and vitamin A.<sup>55</sup>

The Industrial Policy<sup>56</sup> states that industrial development is subject to all environmental pollution controls and other precautionary measures are included in the project proposals. Although these statements were reflected adequately in the policy and procedures at the time of approving any industrial proposals, there were difficulties encountered by industries during implementation and enforcement of such measures.

#### *(ii) Process and Production Methods*

The PPMs of T&C products have environmental consequences.<sup>57</sup> Nylon and polyester are synthetics made from petrochemicals that are non-biodegradable. Nylon manufacture creates nitrous oxide, a greenhouse gas 310 times more potent than carbon dioxide, and polyester uses large amounts of water for cooling, as well as lubricants that advance contamination. Rayon (viscose) is another artificial fibre that is made from wood pulp. Often the eucalyptus draws up unusual amounts of water, causing problems in sensitive regions. To make rayon, the wood pulp is treated with hazardous chemicals like caustic soda and sulphuric acid. The use of rayon for clothing is contributing to the rapid depletion of the world's forests. In addition, petroleum-based products are detrimental to the environment on many levels.<sup>58</sup>

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<sup>55</sup> Ibid

<sup>56</sup> Industrial Policy, s 12.

<sup>57</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') annex A, art 5.

<sup>58</sup> Ibid

### *(iii) Standards*

Challa<sup>59</sup> noted that, from an environmental perspective, the clothes people wear and the textiles that these clothes are made from can cause a great deal of damage. Challa reiterated that it is necessary to adopt clean technologies to produce eco-friendly products to keep the environment safe. Chapter 4 of the *Textile Policy, 2011* discusses the implementation strategy of ensuring environmentally friendly effluent treatment plants (ETPs) in the wet-processing units of the textile industries.<sup>60</sup> Chapter 8 discusses the dyeing, printing and finishing subsector industries in Bangladesh with a view to solving existing problems to improve quality and increase growth. However, these two chapters fail to incorporate how the standard of these products could be maintained in light of international standards to attract international consumers.

In the case of the *Cotton Cloth Act, 1918*,<sup>61</sup> Section 6 discusses the manufacture and delivery of standard cloths. Section 9 of this act discusses the power to fix the price of standard cloths; Section 10 deals with the limitation of the sale of standard cloths and Section 11 deals with the grant of licences for sale of standard cloths. Again, this dated act does not reflect the current state of international trade, however, has important ramifications on the environment. This may include processes during production, particularly in the dyeing and printing stage of production, where standards matter. The demand for cotton clothing is increasing and has been attracting foreign buyers from whom Bangladesh can earn foreign currency through the production of quality cotton clothing.

### *(iv) Packaging or Labelling*

Some countries have rigorous regulations that regulate the material, specification, word, figure or code of the product, packing materials of packings and labelling of import

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<sup>59</sup> Challa, above n 48, 1.

<sup>60</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') annex A, art 2.

<sup>61</sup> *The Cotton Cloth Act, 1918*.

products.<sup>62</sup> The products must meet these regulations, otherwise they may be prohibited. Some packing materials are tested by the exporter, who provides disinfection documents. For example, in January 1999, Canada proposed the quarantine of wood pickings in Chinese import products.<sup>63</sup> In June 1999, the EU proposed that wood pickings in Chinese import products should not contain bark or wormholes with a diameter of more than 3 mm. Further, they should be dried and should not contain more than 20 per cent water.<sup>64</sup>

Labels are extremely important for exporting apparel. For example, the EU places ecological labels on import textile products from China. The ecological label 'OKO-Tex Standard 100' is a passport for textile products entering the EU market from China. Australia stipulates that the labels of import apparel must specify the raw materials, age and stature of the product, the washing method and the production country; whereas, Canada stipulates that some import apparel must be printed in English and French.<sup>65</sup>

Although the European Parliament was strongly in favour of 'made in' labels for textile products imported from non-EU countries, the council did not agree. Those who did not approve found that it was a barrier to free trade and a protectionist measure against imports from countries outside the EU. As a result, the EU Commission will present a study by 30 September 2013 on the feasibility of an origin labelling scheme. This means that mandatory country-of-origin labelling for textiles in the EU is not on the current legislative horizon. However, it should be noted that, under the European General Product Safety Directive, all products in the EU must be traceable through the supply chain back to the manufacturing source in case of product recalls.<sup>66</sup> Another issue is that the EU has assessed the feasibility of harmonising certain labelling requirements, including care labelling (currently voluntary); EU-wide uniform size labelling and labelling to indicate the presence of possible allergenic substances. The EU Parliament stressed the need to evaluate innovative labelling technologies, such as micro-chips or radio frequency identification, as a means of

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<sup>62</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Technical Barriers to Trade') annex A, art 1–2.

<sup>63</sup> Ningchuan Jiang, 'Effect of Technical Barriers to Trade on Chinese Textile Product Trade' (2008) 1(3) *International Business Research* 92.

<sup>64</sup> Ibid

<sup>65</sup> Ibid

<sup>66</sup> 'EU Textile Labelling Issues from Parliament Session', *Bureau Veritas*, May 2011.

conveying information to EU consumers.<sup>67</sup> These new, stringent regulations on labelling will reduce the market access of Bangladesh textile products to the EU market because it will increase the cost of production and the need to import new technology to comply with these regulations. For the US, all imports from Bangladesh are required to carry a label indicating the country of origin. The label must also indicate quantity, weight, measurements, trade description, component materials and date of manufacture/expiry, where Bangla or English is permissible for labelling. Imported goods, including their containers, must not bear any words or inscription of religious connotation.<sup>68</sup>

### *(b) Regulatory Challenges*

Challenges in this sector arise from demand and supply constraints. Trade remedy measures, safeguard measures, regulatory-related measures and rules of origin are created from demand, whereas preference erosion, lack of finance and technology, and lack of a coordinated approach are created from supply constraints.

### *(i) Trade Remedy Measures*

Antidumping measures are frequently used by developed countries in the T&C sector. The EU initiated 64 antidumping actions in this sector from which 57 target apparel exports of developing countries.<sup>69</sup> Traditionally, China, India, Pakistan and Turkey have been the

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<sup>67</sup> Ibid

<sup>68</sup> Office of Textiles and Apparel, *Labeling Requirements* (4 September 2013) <<http://web.ita.doc.gov/tacgi/overseasnew.nsf/d1c13cd06af5e3a9852576b20052d5d5/fad8900a6a29da2b8525789d0049ea04?OpenDocument>>.

<sup>69</sup> *WTO General Council, Anti-dumping Actions in the Areas of Textile and Clothing, Proposal for a Specific Short-term Dispensation in Favour of Developing Countries Following Full Integration of the Sector into GATT 1994 From January 2005*, WTO Doc WT/GC/W/502 (14 July 2003) (Communication from Costa Rica, Guatemala, Hong Kong, China, India, Indonesia, Macao, China, Maldives, Pakistan, People's Republic of China, Thailand and Vietnam); ITCB, 'Anti-dumping Actions in the Area of Textile and Clothing: Developing Members' Experiences and Concerns', (ICTB Submission to the WTO Negotiating Group on Rules, February 2003); *WTO Negotiating Group on Rules, Anti-dumping Actions in the Areas of Textile and Clothing: Developing Members Experiences and Concerns*, WTO Doc TN/RL/W/48/Rev.1 (February 2003) (Submission by the International Textile and Clothing Bureau).

main target of antidumping actions in the T&C sector.<sup>70</sup> LDCs are not yet subject to such measures because their share of the industry is small; however, caution has been raised by LDCs, such as Bangladesh, because this share is increasing.<sup>71</sup> Currently, Bangladesh holds the second position (with a 6.4 per cent share) in clothing imports in Canada and fourth position in both the US (with a 4.4 per cent share) and the EU (with a 3.9 per cent share).<sup>72</sup>

### *(ii) Safeguard Measures*

Safeguard measures are also used by developed countries in the T&C sector. Although LDC T&C export has not yet faced such measures from developed countries, the imposition of safeguard measures by the US and EU on several items of Chinese T&C under the mandate of the textile specific safeguard clause<sup>73</sup> were a blessing for small T&C exporting countries. However, the EU specifically mentioned concerns for major textile exporting LDCs, like Bangladesh, and developing countries, like Morocco, Tunisia and Turkey, that might suffer severe loss in the EU market because of the surge in Chinese export.<sup>74</sup> However, there have been no safeguard measures on Chinese T&C exports since the beginning of 2009. Hence, China continues to capture a large part of the market share in the EU.<sup>75</sup>

### *(iii) Regulatory Barriers*

Developing countries and LDCs often face regulatory and standards-related barriers from developed markets, where TBT measures are the primary reported barrier for the T&C

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<sup>70</sup> Ratnakar Adhikari and Chatrini Weeratunge, 'Textile & Clothing Sector in South Asia: Coping with Post-Quota Challenges' in B S Chimni et al (eds), *Multilateralism at Cross-roads: Reaffirming Development Priorities, South Asian Yearbook of Trade and Development 2006* (World Bank, 2007) volume 109.

<sup>71</sup> Ratnakar Adhikari, 'Textile and Clothing in South Asia: Current States and Future Potential' (2007) 8(2) *South Asian Economic Journal* 171, 183.

<sup>72</sup> WTO, *International Trade Statistics, 2009* (Table 2.68: *Clothing Imports of Selected Economies by Origin*).

<sup>73</sup> This clause allows WTO Members to impose quantitative restrictions on imports of Chinese textiles and clothing if they are found to disrupt markets. It permits countries to restrain the annual growth of T & C imports from China to 7.5 per cent above the preceding year's import levels.

<sup>74</sup> ICTSD, 'EU Launches Textile Safeguard Investigation' (2005) 9(14) *Bridges Weekly Trade News Digest* 2, 2.

<sup>75</sup> See the EU website <<http://ec.europa.eu/trade/creating-opportunities/economic-sectors/industrial-goods/textiles-and-footwear/>>.



sector.<sup>76</sup> Restrictions are in the form of labelling and marking requirements, security parameters and document verification at ports of importing countries and issues relating to labour and environmental norms (to be discussed in the following sections).<sup>77</sup> For example, India faced such barriers on Indian-made skirts and rayon scarves on the grounds of non-conformity to flammability standards and a ban on imports of textile and leather goods treated with azo dyes and pentachlorophenol.<sup>78</sup> Nepalese woollen carpets were banned by Germany in the 1990s.<sup>79</sup> Bangladesh also suffered a US import ban for engaging in child labour in factories of the RMG sector. This was subsequently removed after the US authority was satisfied that child labour was no longer being used.<sup>80</sup>

The *Cotton Ginning and Pressing Act, 1957* was enacted to provide power to regulate charges for ginning and pressing of cotton, for the requisition of factories for storing of cotton and to enforce any agreement for the purchase and sale of cotton. Again, this is a dated act that does not include provisions relating to international trade. It has an indirect effect on textile products and has not been updated with current information, which indicates a gap for present use.

The *Cotton Transport Act, 1923*<sup>81</sup> was enacted to provide for the restriction and control of the transport of cotton in certain circumstances. This dated act creates a market access barrier as it was enacted for restriction and control purposes. It does not suggest any possible solution to such conflicting problems.

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<sup>76</sup> Pnnav Kumar and Simi T B Chandan Mukherjee, 'Negotiations on Non-Tariff Barriers under NAMA: The Major South Asian Concerns' in CUTS International (ed), *South Asian Positions in the WTO Doha Round: In Search of a True Development Agenda* (CUTS International, 2007) vol 2, 169.

<sup>77</sup> Ibid 163.

<sup>78</sup> R K Gupta, 'Non-tariff Barriers or Disguised Protectionism' (Briefing Paper No 2/1997, CUTS, 1997); see also Gordhan K Saini, *Non-tariff Measures Affecting India's Textiles and Clothing Exports: Findings from the Survey of Exporters* (2009) <<http://www.igidr.ac.in/pdf/publication/Wp-2009-008.pdf>>.

<sup>79</sup> Adhikari and Veeratuenge, above n 70, 127.

<sup>80</sup> Michael E Nielsen, 'The Politics of Corporate Responsibility and Child Labour in the Bangladeshi Garment Industry' (2005) 81(3) *International Affairs* 559.

<sup>81</sup> *The Cotton Transport Act, 1923*.

#### *(iv) Preference Erosion*

The aim for greater market access of Bangladesh and other LDCs was justified; however, a number of factors contributed to the non-realisation of this aim. For Bangladesh, NAMA negotiation was an important issue because the textile sector consists of a large part of total exports. Thus, any change in industrial tariffs would affect Bangladesh's export competitive capacity for two major reasons: more favourable market access in countries where Bangladesh exporters face MFN tariffs and erosion of preferences in countries where Bangladesh exporters enjoy GSP facility. Bangladesh faced a loss of approximately US\$42.1 million because of preference erosion in the EU market.<sup>82</sup> In 2004, Bangladesh exported US\$2.35 billion in this sector to the US and paid US\$331 million of duty, whereas exports from France amounted to US\$30.02 billion for which US\$330 million duty was paid.<sup>83</sup> This reiterates that export competitiveness capacity, duty and quota-free market access are important for Bangladesh. Another modelling exercise indicates that zero tariff access in the US would have increased Bangladesh's export of apparels to the US market by approximately US\$1 billion or 50 per cent.<sup>84</sup>

Through NAMA negotiation, the tariff can be brought down to zero if the T&C sector is brought within the sectoral negotiation, resulting in positive and negative effects on T&C-dependant LDCs, like Bangladesh. Bangladesh will encounter preference erosion in the EU market where its T&C products are enjoying DFQF market access under the EBA initiative. Bangladesh will have better market access where its T&C sector is not covered under any preferential arrangement.

#### *(v) Lack of Finance and Technology*

The supply constraints that LDCs face are often in the form of low human capital marked by low labour wages, lack of safety standards and a severe skills deficit because of a lack of

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<sup>82</sup> M Shadat Rahman, 'NAMA Negotiations in the WTO and Preference Erosion: Concerns of Bangladesh and Regional LDCs' (CPD Occasional Paper 51, Dhaka Centre for Policy Dialogue, 2005).

<sup>83</sup> M Rahman, 'NAMA Negotiations in the WTO and Preference Erosion: Concerns of Bangladesh and other Regional LDCs' (Research Report, Dhaka Center for Policy Dialogue, 2005).

<sup>84</sup> Ibid

training opportunities for garment workers.<sup>85</sup> For this reason, LDCs produce basic items with low value addition that are less profitable but entrenched with high competition.<sup>86</sup> Other supply constraints are the substandard quality of infrastructure, communication technologies, power supply and port services<sup>87</sup>; inefficient trade facilitation measures;<sup>88</sup> increased cost of inputs<sup>89</sup> and access to flexible credits.<sup>90</sup> Although some LDCs, particularly Bangladesh, have increased their T&C exports in the US and EU markets, after the elimination of quota, it is still too optimistic to expect LDCs to perform well in the T&C sector.

*(vi) Lack of Coordinated Approach*

Chapter 15 of the Textile Policy discusses human resource development to meet the challenges of increasing demand for qualified technical staff and resources in the textile industries in Bangladesh through establishing textile-related institutions. However, the policy fails to propose methods to monitor or implement its objectives. Proper implementation of this policy is a major challenge for Bangladesh that needs to adopt a coordinated approach.

The *Cotton Industries (Statistics) Act, 1926*<sup>91</sup> was enacted to provide for the regular submission of returns of quantities of cotton goods manufactured and cotton yarn spun in Bangladesh. This is also an old act that does not reflect many current trade issues that are creating market access barriers. However, the act is useful in that it provides the statistics of the cotton goods manufactured in Bangladesh based on which it is contributing in increasing the export basket. Despite this useful aim, the act lacks updated information and does not specify the coordination needed to achieve its target. The *Textile Policy, 2011* is the improved version of the previous policies of 1989 and 1995. This policy specifically

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<sup>85</sup> IMF, 'Bangladesh: Selected Issues' (IMF Country Report No 7/230, IMF, 2007).

<sup>86</sup> Ratnakar Adhikari, 'Textile and Clothing in South Asia: Current States and Future Potential' (2007) 8(2) *South Asian Economic Journal* 183,185.

<sup>87</sup> Ibid 186.

<sup>88</sup> Ibid

<sup>89</sup> Ibid 188.

<sup>90</sup> Ibid

<sup>91</sup> *The Cotton Industries (Statistics) Act, 1926*.

mentions its implementation strategy (in Chapter 4) of ensuring environmentally friendly ETPs in the wet-processing units of the textile industries. In addition, Chapter 19 of this policy outlines the need for an advisory committee that can implement, monitor and evaluate this sector through proper coordination of relevant stakeholders.

### *D Bangladesh Leather and Leather Products under Environmental Concerns*

#### *1 Bangladesh Leather Products*

The leather sector includes leather, footwear and leather goods. Within the sectoral division, leather covers finished, semi-finished and crust leather; footwear covers shoes and sandals and leather goods covers wallets, belts, ladies bags and jackets. Leather comes from raw hides and skins (other than fur skins) of animals. From July 2012 to June 2013, Bangladesh exported US\$399.73 million worth of leather, US\$419.32 million worth of footwear and US\$161.62 million worth of leather products.<sup>92</sup> Leather is processed in a tannery, which transforms the raw hides and skins into leather for manufacturing articles like shoe uppers, bags, suitcases, belts, wallets and jackets. In the past, leather processing was done manually using certain indigenous chemicals. Until 1960, the tanneries of East Pakistan processed raw hides and skins by applying salt and then drying them in the sun. Thus, the material developed was known as *shaltu*. Bangladesh tannery workers and the people who live nearby are not safe because tanneries contain major contaminated elements that may affect the environment, as well as human and animal health and plant life. Enamul et al.<sup>93</sup> outlined that market access for leather and leather products is a major issue to which technical regulations, standards, certification arrangement, rules of origin and labelling, marking and packaging are major barriers.

<sup>92</sup> EPB, *Export Statistics* (July 2012 – June 2013) <<http://www.epb.gov.bd/countryexportdata.php>>.

<sup>93</sup> Enam ul Haque, Azreen Karim and Wahid Abdullah, 'Market Access Issues: EU–Bangladesh Trade Regime—A Case Study on Market Access: Myths and Realities' (Paper, International Institute for Sustainable Development, 2005) 9.

At present, there are approximately 170 tannery units in Bangladesh, 114 being registered large and medium units (by local standards). Others are mostly of small and cottage type units and are not registered with the government.<sup>94</sup>

## *2 Market Access Challenges of Bangladesh Leather and Leather Products under Environmental Concerns*

### *(a) Challenges because of Environmental Concerns*

Leather is collected from the slaughtering of animals. Cattle and goats are the major skin- and hide-producing species, followed by buffalo and sheep. In most cases, hides are removed by unskilled people using inappropriate tools, giving rise to irregular shapes and flay cuts. Most slaughtering takes place in inadequate facilities that lack the appropriate electricity, water and sewerage requirements.

Since leather is covered in the *National Livestock Policy, 2007* and according to the National Livestock Development Policy, 'shortage of quality inputs, inadequate services and physical infrastructure, institutional weaknesses in terms of weak regulatory framework and enforcement, limited skilled manpower and resources, and inadequate research and technological advancement are all continuing to act as constraints to livestock development'.<sup>95</sup> The challenges of leather and leather products are discussed in the following sections.

### *(i) Environmental Pollution*

Leather, including crust and finished leather, and leather goods is an important export earner, contributing approximately 3.63 per cent of total export earnings.<sup>96</sup> However, a large proportion of leather materials are downgraded and rejected because of poor quality. In Bangladesh, leather defects are reported to be responsible for more than a 50 per cent cut in the value of leather. The shortage of capital reduces the purchasing capacity of

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<sup>94</sup> Directorate of Industries, Ministry of Industries, Government of Bangladesh

<sup>95</sup> Ibid

<sup>96</sup> EPB, *Export Statistics* (July 2012 – June 2013) <<http://www.epb.gov.bd/countryexportdata.php>>.

intermediaries and, consequently, a large quantity of hides and skins are pilfered in the neighbouring country. Environmental legislation on slaughter and tannery operations needs to be framed and enforced to maintain standards. The *Animals Slaughter (Registration) and Meat Control Act, 1957*<sup>97</sup> was enacted to provide for restriction on the slaughter of certain animals and for control of consumption of meat. Section 2 defines the terms ‘meat’, ‘prohibited day’ and ‘slaughterhouse’ and Section 5 deals with the restriction on the slaughter of animals. This act only provides some restrictions on and control of the slaughtering of animals and consumption of their meats; however, it does not mention anything relevant to hygiene and standards to be maintained in the processing of meat, which is a concern in Bangladesh for both national and international consumers. The PPMs, together with the standards, are the major limitations of this act, which need further reform in light of the SPS and TBT agreements.

In Bangladesh, chemically contaminated tannery wastewater and solid waste are by far the most hazardous for the environment and the population. The wastewater that pours off tannery floors, through Hazaribagh’s open gutters and, ultimately, through Dhaka’s main river contains animal flesh, sulphuric acid, chromium and lead.<sup>98</sup> The government estimates that approximately 21,000 cubic metres of untreated effluent is released each day in Hazaribagh.<sup>99</sup> This is because the Hazaribagh tannery does not have an ETP to treat its waste, which can have many thousands of times the legally permitted concentrations of pollutants.<sup>100</sup> This report documented an occupational health and safety crisis among tannery workers, including skin diseases and respiratory illnesses caused by exposure to tanning chemicals and limb amputations caused by accidents in dangerous tannery machinery. Residents of Hazaribagh slums also complained of illnesses, like fevers, skin diseases, respiratory problems and diarrhoea, caused by the extreme pollution of air, water and soil. This report argued that the government could not protect the right to health of the

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<sup>97</sup> *The Animal Slaughter (Restriction) and Meat Control Act, 1957.*

<sup>98</sup> Human Rights Watch, *Toxic Tanneries: The Health Repercussions of Bangladesh’s Hazaribagh Leather* (9 October 2012) <<http://www.hrw.org/reports/2012/10/08/toxic-tanneries>>.

<sup>99</sup> Ibid

<sup>100</sup> Ibid

workers and residents, failed to enforce labour or environmental laws in Hazaribagh and ignored High Court orders to clean up these tanneries.<sup>101</sup>

Enamul et al.<sup>102</sup> found that the most important obstruction is environmentally friendly chemical usage (e.g., preservative chemical) certification (known as a barrier related to certification arrangement). As one of the major EU importers, Germany is very restrictive in AZO-free certification on health grounds because of the cancer hazard. Many small and medium enterprises (SMEs) are not clear about the certification procedure. Moreover, it is costly for them. This shows that standards set by importing nations are another major barrier in the industry for leather and leather goods. Containers are sometimes rejected on the basis of not meeting the standards set in the terms of usage of particular chemicals (often recommended by importers). This is an estimated cost of US\$3,000 per 20-foot container.<sup>103</sup>

Considering the efficient use of natural resources and significant reduction of environmental pollution in Bangladesh, the leather sector needs to develop simple tools and methods. A joint project funded by the EU and UN Industrial Development Organization ran from 2009 to 2012 and found<sup>104</sup> that motivation for SMEs to produce more environmentally friendly leather can be encouraged through an increased exportability of their products and lower production costs, as a result of a reduction of inputs. The objective of the project was to facilitate SMEs in the leather industry to work economically and ecologically with the use of aligned technologies and practices. It helped more than 300 local managers and technicians, training them on how to use appropriate, cleaner technologies and effluent treatment. As a result, development water consumption reduced by 30–40 per cent through better water management, chrome content in waste water reduced by 60 per cent, chemical oxygen demand reduced by 30 per cent and solar energy was introduced for water heating.<sup>105</sup>

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<sup>101</sup> Ibid

<sup>102</sup> Haque et al, above n 92, 12.

<sup>103</sup> Ibid 13.

<sup>104</sup> Europe Aid, *Reduction of Environmental Threats and Increase of Exportability of Bangladeshi Leather Products* <[http://ec.europa.eu/europeaid/documents/case-studies/bangladesh\\_trade\\_leather\\_en.pdf](http://ec.europa.eu/europeaid/documents/case-studies/bangladesh_trade_leather_en.pdf)>.

<sup>105</sup> Ibid

## *(ii) Process and Production Methods*

The above discussion details the existing PPMs for leather in tanneries. This is important for ensuring environmentally sustainable PPMs in all the areas, like leather, footwear and leather goods. To process leather, various steps are generally taken. The cycle starts from wet-blue to crust and moves from crust to finished leather. Raw hides are turned into wet-blue using soaking (dipping into liquid for a period), liming (handling under a process with lime) and tanning (sunburning). To turn the hides from wet-blue to crust, procedures like splitting (ripping apart), shaving, re-tanning, vacuuming, drying and trimming (removing excess and making smooth) are the major steps to be followed. The final processing is from crust to finished products. The primary procedures here are buffing (polishing or shining), coating (covering by a thin layer), spraying, plating (coating or covering), selecting, measuring and packing. During this process, environmental sustainability needs to be maintained in terms of whether the workers' capability, the technology they use, the chemicals or elements they use and the condition at which this process is run are safe for human, animal and plant life or health, which are the preconditions of the SPS agreement. Existing literature<sup>106</sup> argues that tannery conditions neither support environmental sustainability nor offer immediate initiatives to overcome or improve conditions from a stakeholder's perspective. This situation warrants immediate steps for the benefit of both national and international consumers and the inhabitants of tannery areas.

## *(iii) Packaging/Labelling*

Other than meeting labour and environmental standards, improving design, packaging and labelling and accessing and using up-to-date information on consumer preferences has been an emerging trend in global markets, which provides potential for significant international trade. Enamul et al.<sup>107</sup> found that labelling rules, packaging and marking requirements are major problems for market access, which comes from the TBT agreement. They also argued that problems related to packaging, marking and labelling have been found to create

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<sup>106</sup> Human Rights Watch, above n 97.

<sup>107</sup> Haque et al., above n 92, 12.



strong obstacles for EU export. They added that Bangladesh SME exporters cannot properly meet the requirements of respective importers that act as a barrier for market access because of inadequate training and a lack of skilled labour. Moreover, compliance with these requirements imposes additional costs on exporters. The EU has specific directives for the importation of footwear made from leather. This includes the Chemical Reach Regulation (EC) 1907/2006, which came into force on 1 June 2007. This document provides answers to the basic questions surrounding reach and the possible effects on exporters from developing countries. For example, Azo dyes are often used in the colouring process of several leather products. Their use is restricted in products marketed in the EU.<sup>108</sup> Further, Germany has set national legislation on hexavalent chromium (Cr (VI)) in leather products.<sup>109</sup> Many enterprises have neither the in-house capacity to gather necessary trade-related information nor the networks to access such information where government can provide support for development. In Bangladesh, BSTI has introduced the *Packaging Rules, 2007* for Bangladesh products, which is the only visible initiative from the government. Again, respective stakeholders need to adopt proper initiatives to overcome this barrier.

### *(b) Regulatory Challenges*

Most domestic regulations are not up-to-date with relevant international rules and regulations and, hence, Bangladesh has faced regulatory challenges in compliance and market access. The *Bangladesh Veterinary Practitioners Ordinance, 1982*<sup>110</sup> was enacted to make provision for the regulation, control and registration of veterinary practitioners in Bangladesh and for the constitution of the Veterinary Council and matters connected

<sup>108</sup> CBI, Ministry of Foreign Affairs, *Compliance with EU Buyer Requirements for Safety Footwear* (2007) <[http://www.cbi.eu/system/files/marketintel/Compliance\\_with\\_EU\\_buyer\\_requirements\\_for\\_safety\\_footwear.pdf](http://www.cbi.eu/system/files/marketintel/Compliance_with_EU_buyer_requirements_for_safety_footwear.pdf)>.

<sup>109</sup> Ibid

<sup>110</sup> *The Bangladesh Veterinary Practitioners Ordinance, 1982*; the important features of this ordinance are as follows:

- Section 3 provides the constitution of council
- Section 4 deals with the incorporation of the council
- Section 5 deals with the term of office
- Section 10 deals with the registration of veterinary practitioners
- Section 19 deals with the responsibility of registered veterinary practitioners.

therewith. This act provides guidelines for practitioners for proper treatment of animals, however, do not provide any mechanism as to how this act can ensure sustainable growth by increasing productivity to accelerate market access opportunities.

*(i) Lack of Finance and Technology*

Bangladesh is not fully able to meet the recommended safety and quality standards for livestock products consistent with the SPS guidelines, as regulated by the OIE and the Codex. The main problem stems from inadequate veterinary services, a lack of skilled human resources, a lack of diagnostic facilities, a lack of financial support, a lack of disease surveillance and monitoring of animal health, a lack of updated food legislation and the need for an improved national food export inspection and certification program. These issues should be considered during implementation of the policies and integrated in a coordinated way so that all relevant fields are covered.

*(ii) Lack of a Coordinated Approach*

Market access of leather and leather products is immensely important for Bangladesh because of its diverse contribution to domestic and international markets. However, it is emphasised here because of the lack of proper guidelines and inadequate interconnectivity with other relevant regulations for improving domestic and international markets. Weakness of domestic regulations mainly involves a lack of up-to-date information, which is necessary not only for market access but also for local consumers. The ERs mentioned in the WTO's agreements determine the standards that need to be incorporated into domestic regulations to meet the challenges of compliance and to raise the standards for human, animal and plant life or health.

The above analysis explicitly emphasises the upgradation of existing domestic regulations in line with international rules and obligations by incorporating hygiene and environmentally friendly PPMs, depending on the developmental needs of Bangladesh, to ensure quality livelihoods and improve the possibility of potential gain in market access.

## *E Way Forward*

### *1 Reform in International Rules through Negotiations*

Current negotiations on T&C products and leather and leather products come under NAMA negotiation. In Doha, ministers agreed to initiate negotiations to liberalise trade on non-agricultural goods.<sup>111</sup> The Doha decision adopted the framework for modalities for negotiations on non-agricultural products.<sup>112</sup> It also reiterated the commitment of developed WTO members to grant DFQF market access for products originating from LDCs. It recognised that integration of LDCs into the MTS requires meaningful market access,<sup>113</sup> support for diversification of production and export base<sup>114</sup> and trade-related technical assistance and capacity building support.<sup>115</sup> Although the revised February 2008 draft is an improvement on the 2007 draft, it needs to be improved further in light of the Maseru Declaration<sup>116</sup> to fully reflect LDCs' concerns and interests.

### *2 Reform in Domestic Policy*

#### *(a) The Legislation, Policy, Monitoring and Enforcement Programme*

In line with the importance of environmental protection and sound management practices for long-term sustainable development, the government should adopt policy measures to ensure proper implementation. The *Environment Protection Act of 1995* (EPA) has provided the opportunity to create some programmes through radio and television broadcasting to motivate people regarding environmental pollution. The Department of Environment monitors the environment and imposes regulatory measures on industrial units, automotive vehicles and other concerned bodies. However, these are not sufficient in

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<sup>111</sup> *Doha WTO Ministerial 2001*, Declaration) [31](iii). WTO Doc WT/MIN(01)/ DEC/1 (20 November 2001) (Ministerial Declaration)

<sup>112</sup> *Doha WTO Ministerial 2001*, Declaration) annex B. WTO Doc WT/MIN(01)/ DEC/1 (20 November 2001) (Ministerial Declaration)

<sup>113</sup> *Doha WTO Ministerial 2001*, Declaration) [16]. WTO Doc WT/MIN(01)/ DEC/1 (20 November 2001) (Ministerial Declaration)

<sup>114</sup> *Doha WTO Ministerial 2001*, Declaration) [27]. WTO Doc WT/MIN(01)/ DEC/1 (20 November 2001) (Ministerial Declaration)

<sup>115</sup> *Doha WTO Ministerial 2001*, Declaration) [38]–[40]. WTO Doc WT/MIN(01)/ DEC/1 (20 November 2001) (Ministerial Declaration)

<sup>116</sup> Where LDCs demands are listed

terms of reducing pollution. The department must collect river water samples at random and examine laboratories continuously, despite limited expertise and resources. They must enforce environment-related compliance without disturbing the development of the industrial sector. The industries are listed in three different categories: green, orange and red, in accordance with the pollution-related factors, particularly for new or proposed industrial units for local and overseas investors.<sup>117</sup>

*(b) Environmental Protection Legislation and Policy*

Awareness should be increased among industrialists regarding environmental-protection-related legislation and policy because it is important to help Bangladesh achieve greater market access and for domestic consumption. Industries should be aware of the environmental protection legislation and policy so that they can be developed without affecting the environment and residential and agricultural land.<sup>118</sup> The environment programme implementation is still in its infancy.<sup>119</sup>

The Sector Corporation of the government faces another major impediment for implementation and enforcement of the act. In principle, government has accepted the necessity of incentives for environment protection measures and these are in progress with respective government offices. This could bring a definite improvement and change in anti-pollution measures.<sup>120</sup> The problem is that entrepreneurs still need to be competitive in the market, which is why they are not interested in advanced technology that is environmentally friendly. However, all Bangladesh Small, Cottage and Industries Corporation (BSCIC) industrial estates have been designed and set up to cover pollution protective measures in addition to the abovementioned programme. The Pollution Prevention Demonstration Project for SMEs in the country does not mention how to prevent the pollution except some programmes of concerned departments organised in

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<sup>117</sup> *The Environment Protection Act, 1995.*

<sup>118</sup> *National Industrial Policy, 2010* ch xiv, s 13.

<sup>119</sup> However, some local, social organisations, in association with some NGOs, are engaged in the programme in remote rural areas where they sometimes encounter fundamentalists because NGOs hire local young women, irrespective of their education level.

<sup>120</sup> Among these incentives is the financing of industries that cause no environmental hazards. In this type of industry, special allocation may be given for advanced technology.

association and support of local trade bodies (chamber and other social organisations). The demonstration project needs to be introduced through local trade bodies, like the Dhaka Chamber in association with BSCIC, to create better awareness about the problem and its prevention from and among SMEs of both the public and private sectors.

*(c) Government Assistance on Environmental Protection Measures*

Government assistance is necessary to produce environmentally friendly products. No mentionable assistance is given to the public or SMEs, except that the forest department provides a range of attractive and costly tree saplings at a nominal token price to individuals and free of cost at official functions during the season. The most important factor is that they demonstrate proper plantation processes regularly through special television bulletins. These should be presented in simple language to encourage the common people to adopt this idea.

*(d) Reform of Relevant Domestic Regulations*

In addition to the abovementioned domestic reform, this chapter argues for the specific reform of domestic regulations to improve the quality of manufactured products with a view to ensure greater market access. This includes the *National Textile and Clothing Policy, 2011*, the *Cotton Act, 1957*, the *Cotton Cess Act, 1911*, the *Cotton Cloth Act, 1918*, the *Cotton Ginning and Pressing Act, 1957*, the *Cotton Industry Act, 1926* and the *Cotton Transport Act, 1923* for T&C products and the *National Livestock Policy, 2007*, the *Animals Slaughter (Registration) and Meat Control Act, 1957* and the *Bangladesh Veterinary Practitioners Ordinance, 1982* for leather and leather products, which should be updated in light of current international laws so that these regulations reflect the most advantageous environment for achieving greater market access. These regulations should be administered with proper planning, monitoring and evaluation.

#### *(e) Other Management Issues*

Coordination of internal and external marketing of textiles, including synthetic, specialised, power loom products and their transportation and shipment, should be encouraged with a view to increasing export of textiles and leather products, market promotion and related matters. Necessary care should be taken during collection, processing and publication of all statistical data. Certification of the standards and quality should be maintained for finished products, as well as the raw materials and ingredients used, to facilitate promotion of all manufactured products of the industries in the private sector.

Consideration should be given in cases of promotion, research and development of textiles and leather raw materials. Attention should also be given to promotion, establishment, balancing, modernisation and replacement of mills and factories in the public sector. Setting up of a permanent commission should be encouraged, as it is required for the study and investigation of various subject matters and particular issues. Education and training of human resource development in these sectors should be ensured by the respective stakeholders. RMGs and primary textiles, including allied textile-processing industries should be facilitated, as should matters relating to the backwards and forwards links in textiles, textile goods and leather goods.

#### *F Market Access Implications for Bangladesh Textile and Clothing and Leather and Leather Products under ERs*

Bangladesh Textile, Clothing, Leather and Leather products are facing market access barriers due to environmental pollution that has created severe problems for the environment. The textile industries including dyeing, printing and finishing units use substantial quantities of highly toxic wastes, dyes and chemicals most of which ultimately disposed in the nearby rivers or landlocked areas that are creating problems for human, plants and animals. Moreover, the other factors of ERs like PPMs, Labelling and Packaging are also creating barriers for their market access for textile and clothing products since

these products contains toxic chemicals like organically bound chlorine (Carcinogen) during processing {discussed in subsection C2(a) (i)}.

Leather industries are also creating environmental pollution by discharging wastewater from the tannery house that contains animal flesh, sulphuric acid, chromium and lead. The workers and the inhabitants of those particular areas suffer from fevers, skin diseases, respiratory problems and diarrhoea. Furthermore, the PPMs, Standards, Packaging matters are also creating barriers as ERs {discussed in subsection D2 (a) (i)}.

Furthermore, the regulatory challenges like lack of Finance and Technology, lack of coordinated approach are also creating barriers for their market access. The domestic regulations of Bangladesh are not well equipped to meet the challenges of the current demand which are mentioned throughout the chapter during the discussion of market access implications {discussed in subsections of C2 (b) and D2 (b)}.

### *G Conclusions*

This chapter addressed LDC market access implications because of ERs in Bangladesh's textile and leather sectors under NAMA negotiations. Paragraph 16 of the Doha Declaration mandates that NAMA negotiations should be conducted on the principles of non-reciprocity, less than full reciprocity and special and differential treatment for LDCs and considering their special needs and interests. Accordingly, the special needs of LDCs have been considered in providing DFQF market access, promises for technical and financial assistance and exemption from reduction commitments in NAMA negotiations. Although LDC provisions seem positive, a complete assessment of the fairness discourse depends on how these provisions are implemented.

DFQF market access does not exempt LDCs from complying with SPS- and TBT-related barriers, like PPMs, standards, environmental pollution and labelling and packaging issues in relation to these products. This chapter examined the post-quota performance of Bangladesh as an LDC. It was observed that, although there is some progress in Bangladesh's export growth, it faces both supply and demand constraints. These include

erosion of preference, lack of technical assistance, lack of financial resources, lack of technological advancement, lack of infrastructure and low value-added production. It was also observed that the quality and standards of products should not be compromised. However, changes should be integrated with the developmental needs of Bangladesh to ensure environmental sustainability for domestic and international consumers. It is necessary to adopt appropriate measures to strengthen the negotiating skills of the negotiators responsible for trade negotiations so that they can benefit from the ongoing negotiations to ensure 100% DFQF market access for all products originating from Bangladesh including textile, clothing, leather and leather products.

This chapter also examined the domestic regulations of Bangladesh that are responsible for greater market access. It was found that most policies and rules are not up-to-date or integrated with the latest regulations. Moreover, there are challenges in the implementation of existing rules. This chapter argued for reforms in those domestic regulations discussed above in light of international rules to provide greater market access for Bangladesh's textile, clothing, leather and leather products. The following chapter provides the concluding remarks of this thesis, including recommendations.



## **VIII CONCLUSIONS AND RECOMMENDATIONS: A QUEST FOR MARKET ACCESS, BETTER COMPLIANCE AND POLICY REFORM**

### *A Interface between Market Access and Environmental Requirements*

The main objective of this thesis was to examine the Bangladesh market access implications in regards to WTO's ERs. Market access plays a critical role in the world order, as it has become clear that, to ensure economic growth, states must address market access barriers continually. ERs, such as PPMs, eco-labelling, packaging and standards require a balancing of economic and social factors, as well as the maintenance of a minimum level for development of human, animal and plant life and the environment. Formation of standard-setting bodies, as well as implementation and monitoring systems, should be transparent to improve access and compliance, as well as to avoid unwanted circumstances in development. This thesis underscores the standpoint of Bangladesh as a n LDC to identify its market access barriers in general and particularly in regards to ERs.

In doing so, this thesis analysed the most vulnerable products of Bangladesh that are subject to market access barriers due to ERs under sector specific chapters (chapter IV - deals with agricultural products; chapter V- deals with fish and fisheries products; chapter VI- deals with pharmaceutical products; and chapter VII-deals with textile, clothing, leather and leather products). These chapters critically examined the market access implications of these products due to ERs and provide ways forward with future directives under the WTO rules.

This thesis demonstrates that Bangladesh has faced barriers under ERs in terms of standards, eco-labelling, PPMs, packaging and environmental pollution and also regulatory-barriers, such as a lack of updated legislations, a lack of proper coordination and implementation, a lack of adequate financial, institutional and technological support and a lack of capacity of respective stakeholders. It is also observed that Bangladesh has moulded its stance in the WTO to reduce environmental concerns, including other NTMs, which

affect its market access and asked for technological and financial assistance and an extended timeframe for compliance of such measures.

### *B Environmental Concerns: Compliance for Bangladesh*

Compliance for Bangladesh market access was assessed with special regard to both SPS and TBT agreements and Article XX of GATT. Although the objective of such agreements was to safeguard consumer interest in member countries, a competing goal lies in ensuring that such measures would not create an unnecessary obstacle to international trade given the importance of trade in achieving economic development. In doing so, the WTO puts in place a set of basic rules that would address food safety and animal and plant health issues and provide guidelines for both producers and exporters. Under the SPS and TBT agreements, there are certain measures that are directly or indirectly related to environmental concerns, which are known as ERs.

#### *1 Process and Production Methods*

Environmental regulations based on PPMs, as opposed to product standards, cause more complex interactions with trade. Bangladesh, as an LDC, has faced PPM-related barriers because of the WTO's ERs, which were discussed in Chapter 2 and in all sector-specific chapters, including agriculture, fish and fish products, pharmaceutical products, T&C and leather and leather products.

It has been observed that the key debate concerning PPMs is how these contentious issues can be dealt with under existing WTO agreements, particularly the GATT Article XX and the SPS and TBT agreements. The health and safety aspects of new technology include uncertainty about the effects of the use of beef hormones and GMOs, which led to EU invoking the precautionary principle to restrict trade in these products. The increased impetus for the consideration of PPMs within the WTO rules comes primarily from consumers based on qualitative grounds.<sup>1</sup> The desire of regulations based on PPMs is

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<sup>1</sup> Discussed in Chapter 2 under Section F(1)

perhaps a direct consequence of multilateral trade liberalisation in industrialist countries.<sup>2</sup> There is considerable concern that, even if there is a consensus on PPMs, extending the rules to include them would give rise to complexity and scope for disputes. Failure of member countries to deal with consumer concerns and the acts of PPMs is likely to widen the gap between developed and developing countries and undermine the WTO's credibility.<sup>3</sup> Many developing countries are suspicious of the explicit inclusion of PPMs in the WTO agreements because of their fear of the imposition of harmonised environmental, technological and other qualitative standards with the high thresholds set by developed countries. Therefore, the treatment of PPMs within the WTO remains problematic, and there is no leeway for the implementation of a voluntary code, as agreed in the Tokyo Round.

The issue of disguised protection remains a particular concern of the WTO with respect to PPMs, as it uses qualitative criteria for restrictive trade measures. The infeasibility of scrutinising products embodying intangible PPMs in the absence of adequate documentation and traceability of consignments gives rise to potential for fraud. The ever-increasing importance of PPMs proportionately increases the regulatory complexity and cost of monitoring and enforcement.<sup>4</sup> There have been several recent trade disputes at the GATT/WTO that have addressed various issues regarding PPMs, such as bananas, beef hormones and GMOs.

## 2 Packaging

As mentioned in Chapters 1, 2 and 6, packaging obligations in Bangladesh have substantial market access barriers in developed and developing countries. Bangladesh exporters have experienced various kinds of packaging-related barriers in India.<sup>5</sup> Continuous upgradation of standards based on environmental grounds increases the production price. BSTI have enacted the *Packaged Commodities Rules, 2007* with a view to ensuring quality and

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<sup>2</sup> Ibid

<sup>3</sup> Ibid

<sup>4</sup> Discussed in Chapter 2 under section F(1)

<sup>5</sup> Discussed in Chapter 2 under section F (2).

standards and to protecting consumer rights. However, there are still problems in implementations.

### *3 Eco-labelling*

Bangladesh exporters have experienced various kinds of eco-labelling barriers. For example, India's labelling requirement for jute bags and certification requirement regarding the content of non-halogenated hydrocarbon in jute products is a market access barrier faced by Bangladesh exporters.<sup>6</sup> The inability and unwillingness to comply with requirements may lead to erosion of market share. However, it involves costly process and technology modifications to make the product environmentally friendly. There are challenges in implementing these measures and in capacity to obtain certification and internalise the social cost associated with WTO rules.

### *4 Standards*

Standards in trade convey requirements demanded by customers to the supplier, define the product or service and verify or assess the products. Product standards are necessary for domestic and international use. However, Bangladesh does not have the financial or technological resources to improve and ensure product standard compliance, as desired by developed members. In Bangladesh, BSTI has developed basic standards based on international standards, which include product specification, test methods, system standards, guidelines and code of practices. BSTI has developed a product certification scheme in light of ISO Guide 65 and has taken the task of management system certification, which includes a quality management system, environmental management system and food safety management system.<sup>7</sup> For quality assurance of products, there is need to assess conformity of standards requirements and Bangladesh needs to have technological support to set up new laboratories from developed countries and proper training for operational staff so that they can work properly with new technology.

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<sup>6</sup> Ibid

<sup>7</sup> Ibid, s F(5) .

## *C Bangladesh Sector-specific Market Access Challenges and Opportunities*

### *1 Agriculture*

As mentioned in Chapter 4, agricultural market access is regulated by the WTO's AOA and, hence, the agreement seeks members' commitment to protect the environment.<sup>8</sup> Annex 2 of the AOA provides the opportunity to provide domestic support (green box policies that are excluded from the reduction commitment) in the name of environmental programmes when certain conditions are met. According to this, government may provide any payments to its farmers as domestic support for the sole purpose of protecting and promoting the environment, although these measures should have no or minimal trade-distorting effects or effects on production.<sup>9</sup>

This domestic support reduces the cost of agricultural products, which indirectly creates market access barriers for developing countries, particularly for LDCs like Bangladesh, because they have a comparative advantage in agriculture. Developing countries are demanding that this provision should not be excluded from the reduction commitment, as it has been used as a protectionist measure. Thus, market access for food or agricultural products is conditioned by a number of factors, including marketing costs, tariffs, cost of complying with standards and government regulations.<sup>10</sup> Market access barriers are also decoupled by the various types of domestic support, such as amber box, green box and blue box support, as discussed in Chapter 4.

Article 8 of the AOA prohibits export subsidies on agricultural products unless the subsidies are specified in the member's list commitments. In addition, the rules concerning the unused export subsidy, the definition of export subsidy and the issue of cross-subsidisation among markets should be tightened (see Chapter 4).

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<sup>8</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') 33.

<sup>9</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') annex 2, 48.

<sup>10</sup> Tim Josling and Donna Roberts, 'Measuring the Impact of SPS Standards on Market Access' (Report, OECD and International Food and Agriculture Trade Policy Council, 13 September 2011).

The peace clause has serious deficiencies on market access for agro-products, as it provides developed countries with a safeguard against countervailing duties with respect to amber measures,<sup>11</sup> which acts as a reverse special and differential treatment. Bangladesh is negotiating with other developing countries for the abolition of Article 13. Agricultural market access is also affected by other agreements, mainly the SPS and TBT agreements, which are detailed in Chapter 4.

Bangladesh agricultural market access is affected by domestic regulations under the key environmental concerns of PPMs, eco-labelling, packaging, standards and environmental pollution. It has been observed that most domestic regulations are backdated and there is a lack of updated information in regards to international rules to govern and ensure compliance. Moreover, a lack of proper implementation, together with a lack of capacity of concerned stakeholders, has created obstacles for market access. The issues of technology and financial support have been observed as prominent barriers for Bangladesh agricultural market access.

## *2 Fish and Fish Products*

The sanitary issues related to fish and fisheries products trade is dealt with mainly through the SPS agreement. Bangladesh experienced an EU ban on import of shrimp from Bangladesh in 1997 on the grounds of health, safety and hygiene, which is an example of market access barriers related to SPS measures.<sup>12</sup> This is because the export of shrimp did not meet the stringent provisions of EU's HACCP regulations (see Chapter 5). Shrimp processed for global markets has to comply with international standards specified by the Codex to meet buyer specifications and the importing countries' requirements. However, Bangladesh had difficulty in meeting safety standards and quality requirements, particularly at that time. There are challenges in implementing these measures, including the capacity to obtain certification and internalise the social cost associated with WTO rules.

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<sup>11</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) annex 1A ('Agreement on Agriculture') art 13, 43–44.

<sup>12</sup> See Chapter 5.

In the context of fish exports, labels are used to distinguish fish that are caught using sustainable methods from fish that are not. In Bangladesh, labelling has not yet been implemented. The country would benefit both environmentally and economically if environmentally sustainable shrimp production practices could be ensured. In the Bangladesh shrimp industry, the SSOQ<sup>13</sup> has prepared a code of conduct pertaining to food safety, traceability, environmental sustainability and human rights in the Bangladesh shrimp industry. These codes or standards have been applied to all participants in the shrimp production chain, including shrimp hatcheries, farms, transport and processing plants that are certified by SSOQ. These standards facilitate the Bangladesh shrimp industry to progress towards safe, traceable, environmentally sustainable and ethical production.

There are many obstacles to the development of the fisheries sector, such as conservation of fisheries resources, various natural calamities and manmade problems, a lack of proper management and technically skilled manpower and a lack of funds. The domestic regulations of Bangladesh, in terms of fish and fish products, was analysed and it has been observed that almost all regulations are backdated and have a lack of updated information in terms of international rules for compliance. In addition to this, a distinct lack of a national fish policy is a major cause for the underdevelopment of this sector.

### *3 Pharmaceutical Products*

As mentioned in Chapter 6, the pharmaceutical sector is the second highest contributor to the national exchequer in Bangladesh.<sup>14</sup> The WTO TRIPS agreement represents the global system of regulations governing the ownership and flow of knowledge, technology and other intellectual assets.<sup>15</sup> It emerged from the Uruguay Round negotiations and was a victory of multinational companies in raising international IP standards and boosting IP protection in developing countries.<sup>16</sup>

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<sup>13</sup> Discussed in Chapter 5 under Section B(3)

<sup>14</sup> *Bangladesh Economic Review 2013* (Ministry of Finance, Government of Bangladesh, 2013).

<sup>15</sup> Discussed in Chapter 6 under Section B

<sup>16</sup> Ibid

The TRIPS agreement creates patent monopoly because of its provisions for patenting in pharmaceuticals and restriction of compulsory licensing by establishing control over pharmaceutical products, ensuring royalties for patent rights and building barriers to the access of pharmaceuticals for LDCs. As an LDC, Bangladesh will face the consequences of protecting public health interests during the TRIPS era of patenting pharmaceuticals and restricting compulsory licensing.

However, the adoption of the Doha Declaration and the waiver decision that extends the compliance deadline comforts public health protection by temporarily exempting pharmaceuticals from patenting and allowing compulsory licensing for exports. The extended TRIPS deadline offers Bangladesh a thriving pharmaceutical manufacturing base, which is a significant opportunity to copy patented drugs for domestic consumption at affordable prices and to export them to other markets, especially LDCs. However, the production of cheap generics in Bangladesh is likely to be hampered because developing countries, such as India and China, have already complied with the TRIPS agreement and are now prohibited from copying patented drugs. As a result, Bangladesh must collect APIs from expensive sources, which increases drug prices.

In addition, the commitments made by developed countries to provide incentives to enterprises and institutions within their territories to achieve effective technology transfer to LDCs in accordance with Article 66.2 of the TRIPS agreement are limited to workshops and seminars, which warrants immediate resolution. Bangladesh also needs to be prepared to accept technology considering its developmental needs, as it is on the receiving end.

Moreover, the existing IP rights laws of Bangladesh neither support parallel imports of drugs from other cheaper markets nor support Bangladesh in exporting generics made from patented medicines under the TRIPS transitional arrangement or compulsory licensing clauses. These issues give rise to huge implications on the price of medicines and their access in protecting public health.

#### *4 Textile, Clothing, Leather and Leather Products*



Market access implications because of ERs in Bangladesh textile, clothing, leather and leather products are discussed in Chapter 7. Paragraph 16 of the Doha Declaration mandates the NAMA negotiations to be conducted on the principle of non-reciprocity, less than full reciprocity and special and differential treatment for LDCs and also by considering their special needs and interests. Accordingly, the special needs of LDCs have been considered in providing DFQF market access, promises for technical and financial assistance and exemption from reduction commitments in the NAMA negotiations. Although the LDC provisions seem to be positive, a complete assessment of the fairness discourse depends on how these provisions are implemented.

DFQF market access does not exempt LDCs from complying with SPS, TBT and other NTMs applicable in relation to these products. It is observed that, although there is some progress in Bangladesh export growth, the country has faced both supply and demand constraints. These include maintenance of SPS- and TBT-related standards, erosion of preference, lack of technical assistance, lack of financial and technological resources, lack of infrastructure and low value-added production.

The textiles industry has faced environmental consequences in various areas. It requires two major components: chemicals and water. Chemicals are used in dyes to transfer agents and as many as 2,000 different chemicals are used in the textile industry. Water is a finite resource that is quickly becoming scarce and is used in every step of the process. On the other hand, the leather industry also has faced environmental consequences during the transformation of Hides and skins of the animals into finished products that warrants urgent environmental sustainability.

It was observed that the quality and standards of products should not be compromised. Quality production depends on the capacity of industries to maintain a standard in all stages of production with efficient staff and efficient monitoring of respective departments, together with full support to ensure sustainable progress for domestic consumption and export. In examining the domestic regulations of Bangladesh responsible for greater market

access, it was observed that most policies and rules were not up-to-date or integrated with the latest regulations. Moreover, there are challenges in implementing existing rules. These regulations are not well aligned with international rules.

The most common problem in the domestic regulations is that they are not well articulated or updated and there are no export-friendly comprehensive policies in Bangladesh that can foster export growth. This thesis found that a lack of adequate and updated current domestic policies in light of international rules, together with implementation and coordination problems, hinders the greater market access environment for Bangladesh.

The thesis argued that market access barriers of Bangladesh require particular attention and cooperation from the WTO and other relevant organisations and the individual developed and advanced developing countries in light of its developmental needs. Furthermore, Bangladesh needs to adopt a strategy to recover and prepare itself with updated domestic rules to cope with international instruments.

## *D Recommendations*

### *1 Non-tariff Barriers*

DFQF market access does not exempt Bangladesh from the overabundance of NTBs that restrict market access of agricultural and NAMA. Although these barriers are mainly due to SPS and TBT measures in relation to Bangladesh products, barriers are discussed under environmental and related barrier subheadings.

#### *(a) SPS-related Barriers*

Bangladesh suffers significant export losses because of its inability to respond to the SPS requirements of developed country markets that need significant investment. Since developed countries are continually changing their standards, depending on advanced scientific research, it is becoming harder for countries like Bangladesh to cope with the ever-changing requirements. The effect of SPS measures are magnified when a developed

country imposes such regulations on weaker countries in regards to exporting their products.

The SPS agreement provides flexibility to its members to deviate from international standard, either through scientific justification or by conducting a proper risk assessment. Without technological and scientific advancement, countries like Bangladesh cannot disagree or prove without justification that developed countries' measures are inconsistent with the SPS agreement (see Chapters 2–7).

The provisions on technical assistance and special and differential treatment mentioned in the SPS agreement are only best endeavour commitments and do not provide LDCs with any entitlement to this assistance. This thesis recommends that provision for technical and financial assistance and the transfer of technology should be made a prerequisite for developed and developing countries taking any SPS measures and clear provision should be inserted in the SPS agreement to this effect.

#### *(b) TBT-related barriers*

Technical regulations and standards imposed by governments or private bodies create market access barriers for Bangladesh, as an LDC; because of their multidimensional and constantly changing nature in different markets (see Chapters 2, 5 and 6). Eco-labelling schemes often require new production costs for exporters.

#### *2 Technical assistance*

LDCs, including Bangladesh, have very little capacity to cope with the emerging complex area of market access and entry conditions. It has been observed from the previous discussion that a lack of infrastructure, institutional and technical capacity to produce goods competitively and bring them to the national and international market is supply constraints. Inadequate resources reduce Bangladesh's capacity to invest in productive sectors, including research and development, particularly human development. Hence, it is essential

for Bangladesh to have technical and financial assistance (see Chapters 3–7). There has been unanimous agreement among WTO members to provide technical and financial assistance to LDCs in the Doha Round instruments; however, these instruments are non-binding and drafted in a best endeavour form. Aid for Trade should be an addition to existing official development assistance, as demanded by LDCs in the UN LDC IV.<sup>17</sup> LDCs must have exclusive rights in identifying priority areas where they need assistance. The WTO should make available to Bangladesh, as an LDC, the essential tools necessary for development.

### *3 Capacity building*

The issue of capacity building has been a long pending demand of Bangladesh and other LDCs. During the discussion of Bangladesh market access, it has been observed that capacity building is the prerequisite for negotiations of trade-related officials of Bangladesh. Although there are some initiatives by developed countries and international organisations for improving the capacity of government officials, the number is insignificant. There is a serious lack of resources in terms of finance and trainers for internal training. The Advisory Centre on WTO Law on concessionary terms provided the support that was essential in preparing for and conducting the case against the unfair antidumping measure imposed by India on Bangladesh. In negotiations, it is essential to ensure that the contracting parties have a level playing field in terms of capacity of negotiators for obtaining meaningful market access.

### *4 Reform in International Rules*

During the examination of sector-specific Bangladesh market access implications, it has been observed that the interpretation of international rules differs from case to case. In most cases, even the Appellate Body reports were opposite to the panel reports. The ambiguity of the rules is also shown in the various negotiation meetings. Moreover, as an LDC, Bangladesh has been negotiating on most contesting issues where it has comparative

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<sup>17</sup> Discussed in Chapter 2.

advantages and, hence, this thesis recommends reform in international rules. These are discussed below.

#### *(a) Agricultural Market Access*

Annex 2 of the AOA should be re-examined and brought under the reduction commitment to avoid the use of the protectionist measure for agricultural domestic support in the name of environmental programmes. In addition, the benefits of the countries that have comparative advantage in those particular products should be considered. Special provisions should be adopted before diminishing export subsidies to compensate net food importing countries, like Bangladesh.

The peace clause (Article 13) should be abolished, as it reverses special and differential provisions by providing developed countries with safeguards against countervailing duties in respect to amber measures. The current initiatives regarding the revised draft modalities taken by the TNC on agriculture negotiation should be based on the comparative advantage of Bangladesh.

#### *(i) Sanitary and Phytosanitary Measures*

Since Bangladesh is not participating effectively in the standards-setting process and are facing problems in complying with measures based on international standards, reference should be made in Article 3 through a fair process, based on consensus, considering the developmental needs of Bangladesh. Hence, the SPS committee should develop a set of rules to which international standard-setting organisations must adhere.

Considering the lack of recognition of Bangladesh's conformity assessment certificates, the setup of internationally financed regional or sub-regional laboratories, certification bodies and accreditation institutions should be included in Article 4 and these institutions should be supervised by the Codex, the OIE and the Secretariat of the IPPC. Moreover, Article 4 could be expanded to include MRAs on conformity assessment.

A clear reference should be made in Article 6 to scientific and administrative support, specifically that it shall be provided by international organisations and developed countries to developing countries to facilitate the implementation of provisions on adaptation to regional conditions.

Article 9 should make reference to upgrading laboratories, certification bodies and accreditation institutions to strengthen the ability of developing countries to deal with scientific issues. Article 9.2 should be strengthened by making technical cooperation mandatory when new SPS measures are introduced by importing countries.

In Article 10, special and differential provisions should be converted into specific obligations to ensure that SPS measures do not hamper export of listed products.

New language should be included in Annex B to stress the expectation that comments provided in the drafts will be reflected in the final texts. The WTO Secretariat could be encouraged to set up a database that includes SPS measures implemented by members that could have a major effect on developing countries' export.

#### *(ii) Technical Barriers to Trade*

The TBT agreement also needs to provide emphasis on technical assistance issues (in Article 11) and special and differential treatment for developing countries (in Article 12) to ensure they receive meaningful benefit from the agreement. As an LDC, Bangladesh needs special provisions for integration into the standard regime according to their individual needs.

#### *(b) Non-agricultural market access*

##### *(i) Fisheries Subsidies in the WTO*

As an LDC, Bangladesh should negotiate on these issues in accordance with the Maseru Declaration. The Declaration states that LDCs would be exempt from new disciplines, and other developing members would have substantial flexibilities, especially for subsidies to subsistence-type fishing in their territorial waters.

#### (ii) *Pharmaceutical Products*

As an LDC, Bangladesh needs to update its legislation to maximise the TRIPS flexibilities in copying medicines and supplying them at competitive prices. It should also readdress outstanding issues and request a further extension to the compliance deadline, as the circumstances on which the extension was agreed still exist. Negotiations should emphasise the creation of a common fund for research and development that is either open to all countries or provides subsidised or free drugs and vaccines for LDCs.

#### (iii) *NAMA Negotiations*

As mentioned in Chapter 5, ministers agreed at Doha to initiate negotiations to further liberalise trade on non-agricultural goods<sup>18</sup> and adopted the framework for modalities for negotiations on non-agricultural products.<sup>19</sup> The framework reiterated the commitment given by developed WTO members to grant DFQF market access for products originating from LDCs. It recognised that integration of LDCs into the MTS requires meaningful market access,<sup>20</sup> support for diversification of production and export base<sup>21</sup> and trade-related technical assistance and capacity building support. Further, it demands that the Maseru Declaration fully reflect LDC's concerns and interests.

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<sup>18</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [31](iii).

<sup>19</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) annex B.

<sup>20</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [16].

<sup>21</sup> *Doha WTO Ministerial 2001*, WTO Doc WT/MIN(01)/DEC/1 (20 November 2001) (Ministerial Declaration) [27].

### *5 Reform in Domestic Regulations*

The sector specific domestic regulations of Bangladesh were analysed during the discussion of international rules (chapter 3-7) and observed that most of these regulations are dated and lack of updated information in terms of international rules that warrant urgent reform. Moreover, it has problems in the areas of implementation, coordination and monitoring system that are creating barriers in gaining greater market access opportunities of Bangladesh products. These issues are discussed in details in the relevant chapters and provided recommendations for reform.

### *6 Effective and Commercially Meaningful Market Access Regime for future development*

This thesis emphasised the need for an effective market access regime in Bangladesh both for Agricultural and NAMA, which can be ensured by making DFQF treatment operational through the successful completion of the Doha Round. In parallel, it is necessary to make SPS and TBT measures for Bangladesh products conditional on providing active technical and financial assistance by developed countries. This assistance should cover supply constraints, as well as demand constraints, based on the developmental needs of Bangladesh.

This thesis concludes with an emphasis on enhancing market access in developed and developing countries alike through mitigating barriers, particularly in regards to environmental concerns. To this end, this thesis argued for effective participation in ongoing negotiations based on a research-based, strategic move. It also argued for massive reforms in domestic regulations in light of compliance with international rules. Finally, it argued for improved management skills, including capacity building, technological and technical improvement, coordination and implementation of domestic regulations for greater market access.



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## ANNEXURE 1



### Export Promotion Bureau, Bangladesh

Export performance for July 2012 – June 2013

Overall position  
Mn. US\$

Products	Export Target for 2012-13	Export Performance July-June 2012-2013	% Change of export Performance Over Export Target	Export Performance for July-June 2011-2012	% Change of export performance July-June 2012-13 Over July-June 2011-12
1	2	3	4	5	6
<b>All products</b>	<b>28000.00</b>	<b>27018.26</b>	<b>-3.51</b>	<b>24301.90</b>	<b>11.18</b>
<b>A. Primary Commodities (Chapter 1-24)</b>	<b>1145.68</b>	<b>1079.58</b>	<b>-5.77</b>	<b>1001.12</b>	<b>7.84</b>
<b>(1) Frozen Food (Chapter 02-03)</b>	<b>700.00</b>	<b>543.84</b>	<b>-22.31</b>	<b>598.42</b>	<b>-9.12</b>
a) Frozen Fish (0300, 0302, 0303, 0307)	133.82	57.99	-56.67	108.05	-46.33
b) Shrimps (0306)	545.23	454.93	-16.56	471.67	-3.55
c) Others	20.95	30.92	47.59	18.70	65.35
<b>(2) Agricultural Products (Chapter 04-24)</b>	<b>445.68</b>	<b>535.74</b>	<b>20.21</b>	<b>402.70</b>	<b>33.04</b>
a) Tea (0902)	3.95	2.44	-38.23	3.38	-27.81
b) Vegetables (07)	79.23	110.34	39.27	77.43	42.50
c) Tobacco (24)	81.63	60.18	-26.28	68.74	-12.45
d) Cut Flower & Foliage (06)	52.59	41.43	-21.22	50.46	-17.90
e) Fruits (08)	71.76	71.89	0.18	57.16	25.77
f) Spices (0910)	15.76	21.13	34.07	13.68	54.46
g) Dry Food (19)	38.46	45.24	17.63	37.19	21.65
h) Others	102.30	183.09	78.97	94.66	93.42
<b>B. Manufactured Commodities (Chapter 25-97)</b>	<b>26854.32</b>	<b>25938.68</b>	<b>-3.41</b>	<b>23300.78</b>	<b>11.32</b>
<b>(1) Cement, Salt, Stone Etc (Chapter 25)</b>	<b>16.37</b>	<b>6.15</b>	<b>-62.43</b>	<b>14.58</b>	<b>-57.82</b>
<b>(2) Ores, Slag and Ash (Chapter 26)</b>	<b>34.86</b>	<b>22.37</b>	<b>-35.83</b>	<b>27.96</b>	<b>-19.99</b>
<b>(3) Petroleum bi Products (Chapter 27)</b>	<b>334.02</b>	<b>313.95</b>	<b>-6.01</b>	<b>275.44</b>	<b>13.98</b>
<b>(4) Chemical Products (Chapter 28-38)</b>	<b>133.77</b>	<b>93.01</b>	<b>-30.47</b>	<b>103.01</b>	<b>-9.71</b>
a) Pharmaceuticals (30)	60.00	59.82	-0.30	48.25	23.98
b) Chemical Fertilizer (31)	22.55		-100.00	17.64	-100.00
c) Cosmetics (33)	0.79	0.77	-2.53	1.06	-27.36
d) Others	50.43	32.42	-35.71	36.06	-10.09
<b>(5) Plastic Products (Chapter 39)</b>	<b>119.95</b>	<b>84.51</b>	<b>-29.55</b>	<b>88.69</b>	<b>-4.71</b>

a) PVC Bags (3923)	34.37	32.00	-6.90	31.26	2.37
b) Plastic Waste (3915)	69.22	39.09	-43.53	43.42	-9.97
c) Others	16.37	13.42	-18.02	14.01	-4.21
<b>(6) Rubber (Chapter 40)</b>	<b>18.01</b>	<b>13.57</b>	<b>-24.65</b>	<b>16.23</b>	<b>-16.39</b>
<b>(7) Leather (Chapter 41)</b>	<b>400.00</b>	<b>399.73</b>	<b>-0.07</b>	<b>330.16</b>	<b>21.07</b>
<b>(8) Leather Product (Chapter 42-43)</b>	<b>135.45</b>	<b>161.62</b>	<b>19.32</b>	<b>99.36</b>	<b>62.66</b>
<b>(9) Wood &amp; Wood Products (Chapter 44-45)</b>	<b>1.25</b>	<b>1.71</b>	<b>36.80</b>	<b>1.25</b>	<b>36.80</b>
<b>(10) Handicrafts (Chapter 46)</b>	<b>5.12</b>	<b>6.16</b>	<b>20.31</b>	<b>4.78</b>	<b>28.87</b>
<b>(11) Pulp (Chapter 47)</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>		
<b>(12) Paper &amp; Paper Products (chapter 48)</b>	<b>30.15</b>	<b>33.73</b>	<b>11.87</b>	<b>27.75</b>	<b>21.55</b>
<b>(13) Printed Materials (Chapter 49)</b>	<b>1.60</b>	<b>1.39</b>	<b>-13.13</b>	<b>1.58</b>	<b>-12.03</b>
<b>(14) Silk (Chapter 50)</b>	<b>0.01</b>	<b>0.18</b>	<b>1700.00</b>	<b>0.01</b>	<b>1700.00</b>
<b>(15) Wool &amp; Woollen Products (Chapter 51)</b>	<b>0.44</b>	<b>0.16</b>	<b>-63.64</b>	<b>0.61</b>	<b>-73.77</b>
<b>(16) Cotton &amp; Cotton Product (Yarn, Waste, Junerics etc) (Chapter 52)</b>	<b>130.00</b>	<b>124.96</b>	<b>-3.88</b>	<b>113.00</b>	<b>10.58</b>

Products	Export Target for 2012-13	Export Performance July-June 2012-2013	% Change of export Performance Over Export Target	Export Performance for July-June 2011-2012	% Change of export performance July-June 2012-13 Over July-June 2011-12
1	2	3	4	5	6
<b>(17) Jute &amp; Jute goods (Chapter 53, 630510)</b>	<b>1082.56</b>	<b>1030.61</b>	<b>-4.80</b>	<b>967.38</b>	<b>6.54</b>
a) Raw Jute (5303)	301.98	229.92	-23.86	266.28	-13.65
b) Jute Yarn & Twine (5307)	517.45	506.74	-2.07	468.15	8.24
c) Jute Sacks & Bags (630510)	208.56	237.42	13.84	185.26	28.16
d) Others	54.57	56.53	3.59	47.69	18.54
<b>(18) Man Made Filaments &amp; Staple Fibres (54-56)</b>	<b>86.04</b>	<b>101.45</b>	<b>17.91</b>	<b>81.39</b>	<b>24.65</b>
<b>(19) Carpet (Jute &amp; Others -57)</b>	<b>6.83</b>	<b>8.46</b>	<b>23.87</b>	<b>6.23</b>	<b>35.79</b>
<b>(20) Specialized Textiles (Chapter 58-60)</b>	<b>149.29</b>	<b>124.52</b>	<b>-16.59</b>	<b>138.77</b>	<b>-10.27</b>
a) Terry Towel (5802)	102.73	81.96	-20.22	92.11	-11.02
b) Special Woven Juneric (59)	11.80	10.93	-7.37	10.93	0.00
c) Knitted Junerics (60)	29.72	24.01	-19.21	30.86	-22.20
d) Other	5.04	7.62	51.19	4.87	56.47
<b>(21) Knitwear (Chapter 61)</b>	<b>10610.89</b>	<b>10475.88</b>	<b>-1.27</b>	<b>9486.39</b>	<b>10.43</b>
<b>(22) Woven Garments (Chapter</b>	<b>10927.37</b>	<b>11039.85</b>	<b>1.03</b>	<b>9603.34</b>	<b>14.96</b>

62)					
(23) Home Textile (Chapter 63 Excluding 630510)	1150.00	791.52	-31.17	906.07	-12.64
(24) Footwear (Chapter 64)	410.05	419.32	2.26	335.51	24.98
(25) Headgear/Cap (Chapter 65)	56.54	47.69	-15.65	53.23	-10.41
(26) Umbrella Waking Sticks (66)	0.03	0.01	-66.67		
(27) Wigs & Human Hair (Chapter 67)	7.36	9.14	24.18	6.76	35.21
(28) Building Materials (Chapter 68)	0.34	1.91	461.76	0.32	496.88
(29) Ceramic Products (Chapter 69)	40.00	37.69	-5.78	33.75	11.67
(30) Glass & Glass ware (Chapter 70)	0.32	0.16	-50.00	0.37	-56.76
(31) Engineering Products (Chapter 71-88)	500.00	367.47	-26.51	375.49	-2.14
a) Iron Steel (72,73)	65.93	56.81	-13.83	59.73	-4.89
b) Copper Wire (74)	62.68	66.38	5.90	50.93	30.34
c) Stainless Steel ware (82)	4.68	1.58	-66.24	3.20	-50.63
d) Engineering Equipment (84)	74.36	48.73	-34.47	49.54	-1.64
e) Electric Products (85)	144.60	63.09	-56.37	88.53	-28.74
f) Bicycle (8712)	122.05	105.08	-13.90	105.59	-0.48
g) Others	25.70	25.80	0.39	17.97	43.57
(32) Ships, boats & floating structures (Chapter 89)	260.00	5.73	-97.80	45.95	-87.53
(33) Other mfd Products (Chapter 90-97)	120.00	121.53	1.28	84.61	43.64
a) Optical, Photographic, Medical Instruments etc (90)	49.73	50.33	1.21	34.64	45.29
b) Furniture (94)	41.67	31.41	-24.62	27.14	15.73
c) Golf Shaft (950639)	12.60	15.15	20.24	9.79	54.75
d) Others	16.00	24.64	54.00	13.04	88.96
(34) Computer Services	85.69	92.53 (July-May)	7.98	70.81	30.67

**Export performance for the month of June 2013**

Export Target for June 2013	Export performance for June-2013	% Change of export performance over export target	Export performance for June 2012	% Change of export performance June-2013 Over June-2012
2839.00	2696.36	-5.02	2318.22	16.31

Source: EPB, available at <<http://www.epb.gov.bd>>

## ANNEXTURE 2

Copies of published and accepted for publication papers relevant to this thesis are attached herewith:

1. Pradip Royhan, 'Environmental Requirements in the WTO: Developmental Challenges of the Least Developed Countries with a Particular Reference to Bangladesh' (2013) 9(1) *Macquarie Journal of International and Comparative Environmental Law* 78.
2. Pradip Royhan, 'Market Access Challenges and Opportunities for Bangladesh Pharmaceutical Products under TRIPS' (December, 2013) 8(12) *Journal of Intellectual Property Law and Practice* 932.
3. Pradip Royhan, 'Market Access Challenges and Opportunities of Bangladesh Textile and Apparel Products' (2014) *Journal of LAWASIA* (Forthcoming).



The following two articles from the annexure of this thesis have been removed as they contain published material. Please refer to the following citation for details of the articles contained in these pages.

Royhan, P. (2013). Environmental requirements in the WTO: developmental challenges of the least developed countries with a particular reference to Bangladesh. *Macquarie Journal of International and Comparative Environmental Law*, 9(1), 78-92.

Royhan, P. (2013). Market access challenges and opportunities for Bangladesh pharmaceutical products under TRIPS. *Journal of Intellectual Property Law and Practice*, 8(12), 932-938.



# Market Access Challenges and Opportunities of Bangladesh Textile and Apparel Products

Pradip Royhan\*

## 1 INTRODUCTION

Under provisions of General Agreement on Tariffs and Trade (GATT) 1994/World Trade Organisation (WTO), 'Non-Agricultural Market Access' (NAMA) refers to all products not covered by the Agreement on Agriculture.<sup>1</sup> In practice, textile and clothing products are dealt by the Negotiating Group on Market Access (NGMA).<sup>2</sup> Under NAMA, negotiations refer to industrial products or manufactured goods. The current Negotiating Group on Market Access, often called the 'Doha Development Agenda,' which was officially launched in November 2001, provided a 'Doha Ministerial Direction' as the framework for negotiations<sup>3</sup> to improve market access for all products by addressing barriers other than tariffs known as 'non-tariff barriers' (NTBs).

Market access for Least Developed Countries' (LDC) products has improved and is expected to improve both into developed as well as developing country markets.<sup>4</sup> In this regard, the Doha mandate<sup>5</sup> calls on 'developed' WTO Members,<sup>6</sup> as well as others in a position to do so, to grant duty free and quota free access to LDC products on a date to be determined. Additionally, through increased binding coverage and reduction of the binding overhang, market access conditions will be made more secure. Textile and apparel manufacturing industries has great influence on economic development as textiles and apparel are basic items of consumption in all countries, and apparel manufacture is labour-intensive and thereby creates substantial employment opportunities.<sup>7</sup>

Thus, the trade in textile and clothing is of considerable concern in international trade relations and a large number of international agreements have been made bearing on the quantities of textiles and apparel traded.<sup>8</sup> The Multi-Fiber Arrangements (MFA)<sup>9</sup> was an agreement governing world trade in textiles and apparel from 1974 to 2004. It worked through imposing quotas on developing countries for their export to developed countries. The MFA grew out of a series of voluntary export restraints on large Asian textile and clothing

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<sup>1</sup> WTO, *The Legal Texts: The Result of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) 4; Ibid (Article XXVIII bis, General Agreement on Tariffs and Trade, 1994) 17,464; Ibid (Agreement on Agriculture) 33; Ibid (Agreement on Textile and Clothing) 73; WTO, *Non-agricultural market access negotiations news archive* <[http://www.wto.org/english/news\\_e/archive\\_e/nama\\_arc\\_e.htm](http://www.wto.org/english/news_e/archive_e/nama_arc_e.htm)>

<sup>2</sup> WTO, *Non-agricultural market access negotiations* <[https://www.wto.org/english/tratop\\_e/markacc\\_e/markacc\\_negoti\\_e.htm](https://www.wto.org/english/tratop_e/markacc_e/markacc_negoti_e.htm)>

<sup>3</sup> The Direction is available at: [http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm#declaration](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm#declaration)

<sup>4</sup> UNCTADSTAT, *Percentage of Total World Volume and Share of LDC-Asia from 1948-2012* <<http://unctadstat.unctad.org/TableViewer/Table.aspx>> accessed on 29 November, 2013

<sup>5</sup> *Doha WTO Ministerial 2001, WTO Doc WT/MIN(01)/DEC/1(20 November 2001)(Ministerial Declaration)*

<sup>6</sup> WTO, *Development: definition, Who are the Developing Countries in the WTO?* <[http://www.wto.org/english/tratop\\_e/devel\\_edlwho\\_e.htm](http://www.wto.org/english/tratop_e/devel_edlwho_e.htm)>

<sup>7</sup> Mohammad Abdul Munim Joarder, A.K.M. Nurul Hossain and Md. Mahbubul Hakim, 'Post-MFA Performance of Bangladesh Apparel Sector' (2010) 6 *International Review of Business Research Papers* 134 h

<sup>8</sup> Bernard A. Geib, 'Textile and Apparel Quota Phase-out: Some Economic Implications' CRS Report for Congress, 2005.

<sup>9</sup> WTO, *Multifibre Arrangement (MFA) under the Agreement on Textile and Clothing*, available at <[http://www.wto.org/english/tratop\\_e/texti\\_e/textintro\\_e.htm#Top](http://www.wto.org/english/tratop_e/texti_e/textintro_e.htm#Top)> accessed on 30 November, 2013

exporters.<sup>10</sup> The MFA negotiated and controlled textile and clothing quotas in order to support under-developed countries who had less access to developed countries' markets. Based on the decision of the Uruguay Round negotiations in the 1990s, the WTO's Agreement on Textile and Clothing (ATC)<sup>11</sup> phased out the MFA on 1 January 1995. Since then, international textiles and clothing trade has undergone fundamental changes after completion of this 10-year transitional period. Under the MFA, a large portion of textile and apparel exports from developing countries to developed countries were subject to quotas under a special regime outside normal GATT rules. For instance, according to the international trade statistics for 2009 and 2010, textiles accounted for 1.7% (US\$211 billion) and apparel accounted for 2.6% (US\$ 216 billion) of total merchandise exports.<sup>12</sup> The combined exports of textiles and apparel were US\$612 billion in 2008.<sup>13</sup> Although textiles and apparel have a small share of the world merchandise exports compared to other products, this sector carries immense significance to the economies of developing countries and providing livelihoods to the millions of people.<sup>14</sup>

Between 2000 and 2008, developing countries have increased their share from 8.3% to 9.1% in the European Union clothing market and their share in the United States market has increased from 6.4% to 8.8%.<sup>15</sup> In 2009, 99% of European Union imports from developed countries originated from five countries: Bangladesh (81.5%), Cambodia (9.5%), Madagascar (3.7%), Myanmar (2.5%), and Laos (1.9%).<sup>16</sup> In United States market, 99% of imports from five developing countries: Bangladesh, Cambodia, Haiti, Lesotho and Madagascar.<sup>17</sup> Being a developing country, Bangladesh is among the top six clothing exporters representing a 3.4% share (US\$11 billion) of world exports in 2009.<sup>18</sup>

In Bangladesh, the journey of the ready-made garments industry started in the early 1980s and, since then, the Bangladesh textile and clothing sector has demanded duty-free and quota-free market access for all products originating from Bangladesh.<sup>19</sup> This is the most vital income generating sector of Bangladesh industry,<sup>20</sup> as for example, about 76% of Bangladesh foreign exchange is also earned by this sector.<sup>21</sup> The contribution of clothing sector is 78.14% of exports, while the textile sector added only about 4% to the export economy in 2010-2011.<sup>22</sup> In a developing country like Bangladesh, the ready-made garment sector plays an important role in the country's overall economic development. At present, there are

<sup>10</sup> J.Francois and D Spinanger, 'PostATC Textile and Clothing Trade Policies in the EU: Eyes Wide Shut' (Center for Economic Policy Research, London and Tinbergen Institute, Rotterdam (Francois) and Kiel Institute for World Economics, 2005) 37.

<sup>11</sup> WTO, *The Legal Texts: The Result of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) Annex 1A ('Agreement on Textiles and Clothing') 73.

<sup>12</sup> *International Trade Statistics, 2010 Table II.I: World Merchandise Exports by Major Product Group, 2009* WTO <[http://www.wto.org/english/res\\_e/statistics/its2010\\_e/section2\\_e/ii01.xls](http://www.wto.org/english/res_e/statistics/its2010_e/section2_e/ii01.xls)> accessed on 13 April, 2012

<sup>13</sup> *International Trade Statistics, 2009 Table II.I: World Merchandise Exports by Major Product Group, 2008* WTO <[http://www.wto.org/english/res\\_e/statistics/its2009\\_e/section2\\_e/ii01.xls](http://www.wto.org/english/res_e/statistics/its2009_e/section2_e/ii01.xls)> accessed on 13 April, 2012

<sup>14</sup> Ibid

<sup>15</sup> International Trade Statistics, 2009, above n 11, p 39

<sup>16</sup> Ibid

<sup>17</sup> Ibid

<sup>18</sup> International Trade Statistics, 2010, above n 9, 11 4 Table II.69.

<sup>19</sup> Md. Amanur Rahman and David T. Parkes, 'Bangladeshi Textile Industry Profitable Despite Recession' (2009) *Fibre2Fashion* <[http://www.fibre2fashion.com/industry-article/article\\_id=1755](http://www.fibre2fashion.com/industry-article/article_id=1755)> accessed on 23 March, 2012

<sup>20</sup> Bangladesh Economic Review 2012 (Ministry of Finance, Government of Bangladesh, 2012) 59

<sup>21</sup> Ibid

<sup>22</sup> Export Promotion Bureau, *Export Promotion Bureau, Bangladesh. Ministry of Commerce* <<http://www.epb.gov.bd/details.php?page=12>> accessed on 31 March, 2012

approximately 20 lakh <sup>23</sup> workers (80 % of whom are female) in this sector.<sup>24</sup> Continued development, including international exports, in this sector is therefore a crucial economic and social concern for Bangladesh.

The prospect of duty-free and quota-free market access is becoming more likely as the negotiations continue under the Doha Development Agenda. However, non-tariff barriers imposed by the WTO Agreements, like environmental requirements discussed in this article, are increasingly becoming crucial obstacles for real market access for Bangladesh's products. These technical barriers to trade are the primary reported barrier for textile and apparel exports, particularly in the form of labeling and marketing requirements, security parameters and document verifications and compliance with environmental norms.<sup>25</sup> This article investigates market access issues arising from environmental requirements under the WTO Agreements. In doing so, this article examines the domestic and international environmental rules. Finally, this paper provides recommendations for reforms both in the domestic and international rules to provide greater market access for Bangladesh's exports of textiles and apparel.

## **2 BANGALDESH TEXTILES AND CLOTHING SECTOR**

Bangladesh's textile and apparel sector is the largest manufacturing activity in Bangladesh that provides direct employment to more than 5 million people and accounts for 45 % of the industrial employment.<sup>26</sup> It contributes 10% of the country's GDP, 40% of the industrial value addition and 78% of the export earnings.<sup>27</sup> Many readymade garments are exported from Bangladesh, such as knitted and woven shirts, blouses, trousers, skirts, shorts, jackets, sweaters and sportswear, and other fashion apparel.<sup>28</sup> The Bangladesh textile and apparel sector can be divided into a primary textile sector (PTS) and export oriented readymade garments making sector (RMG).<sup>29</sup> The PTS comprises spinning, weaving, specialised textile units, traditional handloom sector and knitting and dyeing sub-sectors that are discussed in turn. According to the Ministry of Textile and Jute,<sup>30</sup> there are 350 spinning mills, 400 weaving firms, 310 dyeing and finishing units and 4500 garment factories in Bangladesh.

All sectors of the textile industry face many of the same challenges. These problems include lack of power, obsolete technology, low capacity utilisation, lack of machinery maintenance, a workforce that is not adequately trained, problems with labour unrest and militancy, political unrest causing disruption such as hartals,<sup>31</sup> and a lack of working capital that warrant urgent remedy.

### **2.1 The Public Sector**

The public sector is that portion of the industry controlled by the government or part of the government. The factories in the public sector benefit from certain privileges such as government funding.<sup>32</sup> In Bangladesh, the public sector is controlled by the Bangladesh

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<sup>23</sup> 1 lakh is 100,000 People.

<sup>24</sup> EPB, above n 22. Be more precise. IS there a report or document you can refer to? Page number?( Done)

<sup>25</sup> Mustafizur Rahman et al, *WTO and Bangladesh Trade Policy* (Centre For Policy Dialogue(CPD) 1st ed, 2008) p 62

<sup>26</sup> Bangladesh Economic Review 2012(Ministry of Finance, Government of Bangladesh, 2012) 13

<sup>27</sup> EPB, above n, 22

<sup>28</sup> Ibid

<sup>29</sup> Bangladesh Textile Policy, 2011< [http://www.motj.gov.bd/doc/Textile\\_policy\\_2011.doc](http://www.motj.gov.bd/doc/Textile_policy_2011.doc)> Chapter 1, 1

<sup>30</sup> Ministry of Textile and Jute, Government of Bangladesh <http://www.motj.gov.bd/policy.html>

<sup>31</sup> 'Hartals' means a labour dispute such as a workers' strike.

<sup>32</sup> However, in Bangladesh, factories in the public sector are not well supervised. There are frequent changes in officers, and many of these officials do not have a personal interest in the factory for which they are responsible.

Textile Mills Corporation (BTMC) that was brought in to existence on 26 March 1972.<sup>33</sup> The role of BTMC has been significantly altered since privatisation of large number of public sector textile mills over the last 30 years.<sup>34</sup> At the moment, there are 18 Textile Mills (22 units) of which 6 Textile Mills (8 units) are in operation under a 'service charge system' that produce different counts of cotton yarn/polyester yarn in the form of 32/1 to 80/1.<sup>35</sup> Under the 'service charge system' the mills get only a certain rate of service charge per bale from the parties. The responsibility of marketing the finished products lies with the parties. The remaining 11 mills are under process in operation, and 1 mill is earmarked for textile *palli*.<sup>36</sup>

In the service charges system, contracted parties supply raw materials to respective mills, whereas BTMC mills produce different counts of yarn/woollen fabrics within the available technical facilities prevailing in the mills according to parties' requirements. Among the 18 mills, The Valika Woollen Mills Ltd. and Nasirabad, Chittagong are the only specialised mills under BTMC, producing knitting wool, woollen suiting, men's and women's woollen shawls and woollen blankets. Most of the buyers of finished products of these mills are government, quasi-governmental and autonomous bodies of the country. For instance, Biman Bangladesh Airlines are the main buyers of the woollen blankets produced by these mills.

## 2.2 Handloom Sector

The handloom<sup>37</sup> industry is traditionally an important part of the textile industry in Bangladesh. The handloom industry provides employment for a large segment of the population of Bangladesh.<sup>38</sup> The rural group of textile producers includes operators of handlooms and a number of organisations which employ rural women, such the Bangladesh Rural Advancement Committee.<sup>39</sup> The industry supplies a large portion of the fabric required by the local market. Factories in this sector are usually well maintained by the owners and are quite productive, considering the equipment available. However, the inferiority of their machinery - mostly due to their narrow width - means that the fabric production is slow, and usually falls short of the quality needed for export. Many of the weavers cannot work steadily due to the irregular supply of the yarn, dyes, and chemicals they require. The primary reason for this is that many of these producers are located in places with poor access to transportation. Most of these weavers obtain their raw materials from brokers at their local levels. Thus the handloom industries are very vulnerable; even a minor problem such as heavy rainfall might prevent them from obtaining their raw materials or selling their finished product. Most export oriented garment factories reject a large quantity of 'grey' yarns<sup>40</sup> produced by the rural handlooms in Bangladesh due to slowness of production compared to the power looms.<sup>41</sup>

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In addition, the equipment in this sector is not well maintained, as much of the money allocated for this purpose is not spent as planned, and is wasted through corruption and poor accounting practices.

<sup>33</sup> See the promulgation of the Bangladesh Industrial Enterprises (Nationalization) Order, 1972 (President's Order No.27 of 1972) and started its formal function from July, 1972.

<sup>34</sup> *Bangladesh Textile Mills Corporation (BTMC)* <<http://www.btmc.gov.bd/>>. Also prior to privatisations, BTMC enjoyed a near monopoly in the yarn and cloth market of Bangladesh and there was no competitive source for the yarn product of BTMC.

<sup>35</sup> *Bangladesh Textile Mills Corporation (BTMC)* <<http://www.btmc.gov.bd/>>

<sup>36</sup> 'Palli' is an area marked for a specific purpose only.

<sup>37</sup> Handloom is defined as the hand-made textiles without any machine. These industries are popular in the rural areas of Bangladesh

<sup>38</sup> Bangladesh Economic Review 2012 (Ministry of Finance, Government of Bangladesh) 231

<sup>39</sup> Bangladesh Rural Advancement Committee (BRAC) is a non-governmental organisation that works for Rural Development in Bangladesh

<sup>40</sup> Grey yarns are the unfinished condition of the yarn that needs to be dyed.

<sup>41</sup> Power looms are operated by the machines

### 2.3 The Private Sector

The private sector is a more productive sector than the above categories. This is made up of factories owned by companies or entrepreneurs who take an active part in planning, decision making, and management. The machinery in these factories is superior to those in the other sectors because the owners are well aware of the connection to profit. Yet, the exceptional development of the RMG industry in Bangladesh and the dramatic increase in the population together with the increased standard of living in the country has led to a large demand-supply gap. Only 21% of the total national demand for yarn is met locally in Bangladesh. The figures for grey yarn are similar; only 28% of the total national demand is met locally.<sup>42</sup> This finishing sub-sector currently is able to process all of the locally produced grey yarn, but will need to expand activities for the weaving and knitting sub-sector due to their growing demand.

### 2.4 The Spinning Sub-Sector

The spinning sub-sector of Bangladesh also under produces because approximately 38% of the spinning mills in the country are more than 25 years old and their production capacity is rapidly depreciating.<sup>43</sup> In addition, poor maintenance, high import duties on textile machinery and their spare parts, shortage of technicians resulting in both expensive and sub-standard repairs, exacerbate the under-production capacity of this sector. Other reasons for low production figures include frequent power failures, a shortage of raw materials, a high import duty on raw materials used for local consumption, and a high percentage of wastage. The labour productivity in the spinning sub-sector is also lower than that in competing countries. The output of labour in the industry is about 0.65 kg per man-hour.<sup>44</sup>

### 2.5 The Weaving Sub-Sector

The spinning sub-sector also has a negative impact on other textile sectors because of its under-production of grey yarn. The demand for yarn is therefore filled by importing 3.15 billion meters of grey yarn annually<sup>45</sup> resulting in a more expensive end product. In addition, the weaving sub-sector is overwhelmed by a lack of organisation and coordination. There are many small-scale, isolated manufacturers all over the country resulting in replication of goods and a lack of specialisation. These factors lead to an end product of inferior quality.

#### *Knitting/Hosiery*

The hosiery industry produces different types of products such as undershirts, socks, stockings, and other soft apparel. Factories producing these products were originally designed for the local market, but qualitative improvements have encouraged them to enter the export market, and knitting has become another rapidly growing textile sub-sector for Bangladesh.<sup>46</sup> On the other hand, this sector is also facing problems in producing quality fabric due to the lack of modern facilities; the shortage of raw materials, and a lack of working capital. However, despite these obstacles, the industry currently meets the demand for knit grey yarn locally and the demands of the exporters.

#### *Printing and Finishing*

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<sup>42</sup> Bangladesh Economic Review 2011 (Ministry of Finance, Government of Bangladesh, 2011) 15

<sup>43</sup> BTMC, above n 34

<sup>44</sup> Ibid

<sup>45</sup> Ibid

<sup>46</sup> BKMEA available at <<http://www.bkmea.com>>

Dyeing, printing, and finishing - the final steps in the textile industry - are the most complicated processes.<sup>47</sup> It is the quality of this work that determines the appearance of the fabric. To make it more competitive, this sub-sector needs to expand with other sub-sectors by having a country that is self-sufficient in grey production. Although the dyeing, printing, and finishing sub-sector has improved dramatically over the last five years, due to a lack of modern equipment and facilities, the majority of dyeing, printing, and finishing units are still unable to meet the standard of quality demanded by the export-oriented RMG industries, or the export market generally. Those that are producing fabric suitable for export are heavily dependent on imported grey yarn and face a number of restrictions. However, the successful expansion of the knitting sub-sector has made the country self-sufficient in all knit grey.

### 3 INTERNATIONAL INSTRUMENTS OF TEXTILES AND CLOTHING

International textiles and clothing trade has gone through fundamental changes under the 10 year transitional program of the WTO's Agreement on Textiles and Clothing since 1 January 1995.<sup>48</sup> A large share of textiles and clothing exports from developing countries to the developed countries were subject to quotas under a special regime outside normal GATT rules before this Agreement took effect.<sup>49</sup> The WTO Members committed themselves to eliminate the quotas by 1 January 2005 by integrating the sector fully into GATT rules.<sup>50</sup>

The Multi Fibre Agreement (MFA)<sup>51</sup> was introduced in 1947 and was intended to allow developed countries to adjust imports from the developing countries. Developing countries have certain natural advantages in textile production because these are labour intensive industries and developing countries have low labour costs.<sup>52</sup> Although there was an apprehension that after the elimination of MFA Quota the least developed countries would face negative consequences, the arrangement was not negative for all developing countries.<sup>53</sup> For example, the European Union imposed no restrictions or duties on imports from the very poorest countries like Bangladesh which led to a massive expansion of the industry there.<sup>54</sup> Bangladesh was expected to face more competition, particularly from China, but this was not the case. This is probably because Bangladesh's labour is 'cheaper than anywhere else in the world.'<sup>55</sup> While some smaller factories in Bangladesh were documented to have been making pay cuts to and layoffs of workers, most downsizing in the Bangladesh textile industry was essentially speculative – the orders for goods kept coming even after the MFA expired. In fact, Bangladesh's exports increased in value by about \$500 million in 2006.<sup>56</sup>

<sup>47</sup> Ibid

<sup>48</sup> WTO, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) Annex 1A ('Agreement on Textiles and Clothing') 73

<sup>49</sup> Ibid. Preamble [1], Art 1

<sup>50</sup> Ibid. Art 1 and 2

<sup>51</sup> The Multi Fibre Arrangement (MFA) governed the world trade in textiles and garments from 1974 through 2004, imposing quotas on the amount developing countries could export to developed countries. It expired on 1 January 2005. See also Textiles Monitoring Body (TMB) The Agreement on Textiles and Clothing at <[http://www.wto.org/english/tratop\\_e/textile\\_e/textintro\\_e.htm#MFA](http://www.wto.org/english/tratop_e/textile_e/textintro_e.htm#MFA)> accessed on 23 October 2013

<sup>52</sup> Ibid

<sup>53</sup> Textile Cell working paper December 12, 2003 (Ministry of Commerce, Government of Bangladesh) 3

<sup>54</sup> EU rules on importation of textiles and clothing from the LDCs

<sup>55</sup> Sheikh Hasina, Miles to Go: A Collection of Speeches of Prime Minister Sheikh Hasina (The Press Wing 1998) 157

<sup>56</sup> Mahtab Haider, 'Defying predictions, Bangladesh's garment factories thrive' (February 7, 2006) *The Cristian Science Monitor* <<http://www.csmonitor.com/2006/0207/p04s02-wosc.html>> at 14 March, 2012

#### 4 SITUATION IN BANGLADESH

Under the environmental requirements of international trade, Bangladesh textile and apparel sectors face market access challenges in a range of interrelated ways. These challenges are broadly classified in the following ways: environmental aspects that include pollution, process and production methods, standard, packaging or labelling and regulatory aspects. These challenges are discussed in light of Bangladesh domestic regulations responsible for textile and clothing exports, and comparing them to international rules. The domestic regulations that are exclusively governing textile and clothing include:

- *The National Textile and Clothing Policy 2011;*
- *The Cotton Act 1957;*
- *The Cotton Cess Act 1911;*
- *The Cotton Cloth Act 1918;*
- *The Cotton Ginning and Pressing Act 1957;*
- *The Cotton Industry Act 1926; and*
- *The Cotton Transport Act 1923.*

The *National Textile Policy 2011* aims to ensure minimum quality of textile products fulfilling domestic demand, as well as increasing export and promotion into new export destinations.<sup>57</sup> Before that, the Textile Policies 1989 and 1995 were adopted to face the challenges of the end of the MFA Quota in 2005. After the establishment of the WTO free market, all countries expanded their RMG exports, which were earlier limited by quotas. As a result, these countries can use more of their locally produced yarn and fabrics internally, resulting in an increase in prices for these in the export market, and putting pressure on Bangladesh industries.

The Government of Bangladesh also has taken some measures in the form of incentives to face the competition challenges<sup>58</sup> such as developing bonded warehouse facilities; Duty Exemption Drawback Organisation; 25% export cash incentives; tax holidays; duty free importation of raw materials for export in the RMG market; avoidance of double taxation for joint venture projects; income tax exemptions for up to three years for foreign technicians; and duty free imports for capital machinery.

The Textile Policy 2011<sup>59</sup> makes some suggestions in order to develop the sub-sectors of the industry in a harmonious manner. These suggestions include closer monitoring of leakage in the market, improvement of research and computer technology, the development of 116 new spinning mills and 223 modern weaving units with necessary training to be provided. For dyeing, printing and finishing, new units should be set up with appropriate technology, bonded warehouses provided until local grey production can meet the quality and quantity required by the sub-sector, duty on dyes and chemicals should be withdrawn. However, the Textile Policy has failed to address a number of issues.

The Policy calls for the establishment of many new factories and projects,<sup>60</sup> but does not provide any scheme for their finance. The lack of training and technology is mentioned,<sup>61</sup> but no steps are suggested for enhancing the skills of the workforce and engineers. No suggestions are made for setting up institutions to conduct the technical and marketing

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<sup>57</sup> Bangladesh Textile Policy, 2011, Preamble, section 1

<sup>58</sup> *Ministry of Textile and Jute, Government of Bangladesh* <<http://www.motj.gov.bd/>> viewed on 23 June, 2012

<sup>59</sup> Textile Policy 2011, chapter 4, section 3

<sup>60</sup> Ibid Chapter 16, section 2

<sup>61</sup> Ibid Chapter 10, section 3

research needed to upgrade the quality of Bangladesh products to make them more appealing in the international market. The need for the expansion of the Bangladesh's infrastructure such as roads, ports, and railway capacities is not mentioned. The great problems arising from the shortage of land on which to build the necessary factories is also not considered. The need for more power is mentioned, but no plans have been devised as to how the expansion will be undertaken.

The Policy states that environmental pollution is negligible, but does not go further into the matter. In fact, the treatment and disposal of effluent materials in the textile industry is a very serious problem which is discussed in the following sections.

## **5 MARKET ACCESS CHALLENGES OF BANGLADESH TEXTILE AND APPAREL SECTOR UNDER ENVIRONMENTAL REQUIREMENTS**

The textile industry has been facing environmental consequences in different ways. It has been condemned as being one of the world's worst offenders in terms of pollution.<sup>62</sup> It requires two major components: chemicals from dyes to transfer agents and water. As many as 2,000 different chemicals are used in the textile industry. Water is a finite resource that is quickly becoming scarce, and is used at every step of the textile production process. It is used to convey the chemicals during one step and then to wash them out before beginning the next step. The water becomes full of chemical additives and is then expelled as wastewater; which in turn pollutes the environment.<sup>63</sup>

In Bangladesh, with the recent growth of garment industries with backward linkage sectors composite textile mills including dyeing printing and finishing units, there is substantial use of quantities of highly toxic wastes, dyes and chemicals. Some of these industries are situated close to rivers and disposal of their toxic wastes into the sewer supplies. Other textile finishing units are situated in landlocked areas posing increasing pollution problems to their surroundings.<sup>64</sup>

### **5.1 Environmental Pollution and Health Risks**

Traditionally, produced fabrics contain residuals of chemicals used during their manufacture. Chemicals evaporate into the air and then enter into the human body either through breathing or are absorbed through the skin. Some of the chemicals are carcinogenic or may cause harm to children even before birth, while others may trigger allergic reactions in some people. It was estimated that the population that is allergic to chemicals will grow to 60% by the year 2020.<sup>65</sup> It is essential to take into consideration the following factors to produce pollution free textile and clothing products: water usage, water pollution, fibres, cotton, sizing, bleaching, dyeing and finishing.<sup>66</sup>

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<sup>62</sup>Environmental Hazards of the Textile Industry ' (2006) (Environmental Update#24) *The Hazardous Substance Research Centers/ South & Southwest Outreach Program*  
<[http://www.oecotextiles.com/PDF/textile\\_industry\\_hazards.pdf](http://www.oecotextiles.com/PDF/textile_industry_hazards.pdf)> viewed on 02 September,2013

<sup>63</sup> Ibid 2

<sup>64</sup> M. Zamiul Alam, *Current Environmental Problems in Bangladesh*  
<[http://www.unescap.org/tid/publication/chap4\\_2127\\_bang.pdf](http://www.unescap.org/tid/publication/chap4_2127_bang.pdf)> Bangladesh is basically a riverine country in the tropical zone having highly fertile soil. High growth of population increase the requirements of wood diminishing the plants and trees and for the construction of roads, bridges and homesteads add to the degradation of environment.

<sup>65</sup> 'Environmental Hazards of the Textile Industry', *Business Week* June 5 2005  
<[http://www.oecotextiles.com/PDF/textile\\_industry\\_hazards.pdf](http://www.oecotextiles.com/PDF/textile_industry_hazards.pdf)>

<sup>66</sup> Ibid, 4



In regards to water usage, it is estimated that the textile industry is one of the most chemically intensive industries on Earth, and a leading polluter and user of clean water (after agriculture) given that it takes 500 gallons of water to produce enough fabric to cover one sofa.<sup>67</sup> Textile mills discharge millions of gallons of effluent each year full of chemicals such as formaldehyde (HCHO), chlorine, heavy metals (such as lead and mercury) which cause significant environmental degradation and human illnesses. The mill effluent is often at a high temperature and high pH which are also extremely damaging for the environment.

Cotton is considered to be the most pesticide intensive crop in the world. These pesticides injure and kill many people every year. Herbicides and also the chemical defoliants that are sometimes used to aid mechanical cotton harvesting add to the death toll of both human and non-human species.<sup>68</sup> Most cotton is irrigated, and the combination of chemical application (through pesticides and fertilisers) with irrigation is a direct medium for toxic chemicals to circulate through groundwater worldwide. These chemicals remain in the fabric after finishing, and are released during the lifetime of the garments.

Genetically modified cotton adds environmental problems at another level.<sup>69</sup> Growing cotton uses 22.5% of all the insecticides used globally. It is estimated that for one t-shirt 257 gallons of water are required. On top of that, bleaching and then dyeing the resulting fabric creates toxins that flow into the ecosystem. Chlorine bleach is extremely toxic to the environment and to consumers, yet chlorine-based chemicals are still often used to bleach fabrics.

Many textile manufacturers use dyes that release aromatic amines (e.g., benzidine, toluidine). Dye bath effluents may contain heavy metals, ammonia, alkalis, toxic solids and large amounts of pigments - many of which are toxic.<sup>70</sup> About 40% of globally used colorants contain organically bound chlorine, a known carcinogen. Natural dyes are rarely low-impact, depending on the specific dye and mordant used. Mordant (the substance used to 'fix' the colour onto the fabric) such as chromium are highly toxic. The large quantities of natural dyestuffs required for dyeing, typically equal to or double that of the fibre's own weight, make natural dyes prepared from wild plants and lichens very high impact.

The Industrial Policy, 2010<sup>71</sup> states that industrial development is subject to all environmental pollution controls and other precautionary measures are included in the project proposals of the government.<sup>72</sup> Although these statements are reflected adequately in the policy and procedures at the time of taking approval of any industrial proposal, the industries face different difficulties at the time of implementing their projects in Bangladesh either in terms of finance or other resources like electricity, gas etc. The laws in place to promote the industry do not deal with the current economic or environmental conditions described above.<sup>73</sup>

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<sup>67</sup> Ibid 4

<sup>68</sup> Ming-Ho Yu, *Environmental Toxicology – Biological and health Effects of Pollutants* (CRC Press, 2<sup>nd</sup> ed, London, 2005) 285

<sup>69</sup> Lakshmi Challa, 'Impact of Textile and Clothing Industry on Environment: Approach towards Eco Friendly Textiles' (2013) *Fibre2Fashion.com* <<http://www.fibre2fashion.com/industry-article/textile-industry-articles/impact-of-textiles-and-clothing-industry-on-environment2.asp>> ibid viewed on 03 September, 2013

<sup>70</sup> Environmental Hazards of the Textile Industry, above n 42, 3

<sup>71</sup> Industrial Policy 2010

<sup>72</sup> Industrial Policy, 2010, Section 12

<sup>73</sup> For instance, the *Cotton Act 1957* was enacted to provide measures for the promotion of international trade in cotton. Section 4 provides for the function of the Board to supervise and regulate all dealings in cotton, in so far

## 5.2 Process and Production Methods

The process and production methods of textile and clothing products have environmental consequences.<sup>74</sup> Nylon and polyester are synthetics made from petrochemicals that are non-biodegradable. Nylon manufacture creates nitrous oxide, a greenhouse gas 310 times more potent than carbon dioxide and polyester uses large amounts of water for cooling, along with lubricants that advances contamination. Rayon (viscose) is another artificial fibre that is made from wood pulp. Often eucalyptus draws up unusual amounts of water, causing problems in sensitive regions. To make rayon, the wood pulp is treated with hazardous chemicals like caustic soda and sulphuric acid. The use of rayon for clothing is contributing to the rapid depletion of the world's forests. Petroleum-based products are detrimental to the environment on many levels but Bangladesh does not have specific laws that deal with the Process and Production Methods.<sup>75</sup>

## 5.3 Standards

Challa<sup>76</sup> notes that from the environmental point of view, the clothes people wear and the textiles they are made from, can cause a great deal of damage and reiterated the need to adopt clean technologies to produce eco-friendly products. Chapter 4 of the Textile Policy 2011 discusses the implementation strategy by ensuring environmental friendly Effluent Treatment Plant (ETP)<sup>77</sup> in the wet processing units of the textile industries.<sup>78</sup>

Chapter 8 of the Textile Policy 2011 discusses the dying-printing and finishing sub-sector industries in Bangladesh with a view to improving the quality and increasing the growth of this sub-sector. But the se two Chapters fail to incorporate necessary words as to how the standard of these products could be maintained in line with the international standards to attract international consumers.

In case of the *Cotton Cloth Act 1918*, s 6 discusses the manufacture and delivery of standard cloths. Section 9 of this Act provides power to fix the price of standard cloths; Section 10 deals with the limitation of the sale of standard cloths and Section 11 deals with the grant of licences for sale of standard cloths. Again, this dated Act does not reflect the current state of international trade but has important ramifications on the environment.

## 5.4 Environmental Pollution and Packaging or Labelling

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as they are connected with the promotion of international trade, and such functions as the Government may direct. Section 9 provides that the export of cotton be registered according to the specified order. However, this is a dated Act in that it does not reflect the current trade issues that are creating market access barriers nor direct a probable solution.

The *Cotton Cess Act 1923* was enacted to provide for the creation of a fund for the improvement and development of growing, marketing and manufacture of cotton. However, again, it does not reflect the current trade issues that are creating market access barriers and direct for probable solution. Moreover, the fund for the improvement and development of growing, marketing and manufacture of cotton is insufficient to meet the current demand. The development of cotton also depends upon the scientific research that is not included in this Act.

<sup>74</sup> WTO, *The Legal Text: The Result of the Uruguay Round of Multilateral Trade Negotiations* (WTO Publications, 1994) Annex 1A ('Agreement on the Application of Sanitary and Phytosanitary Measures') Article 5

<sup>75</sup> Challa, previous n 65, 5

<sup>76</sup> Ibid, 1

<sup>77</sup> Effluent Treatment Plant is used to recycle the waste products produced by that particular industry

<sup>78</sup> According to Article 2 of the Annex A of the TBT Agreement

Some countries make rigorous regulations that include material, specification, word, figure or code of the product packing on labels of import products.<sup>79</sup> The products must conform to these regulations or be prohibited from being imported or sold in the import country's market. Some packing materials are tested by the exporter. For example, in January 1999, Canada imposed a quarantine demand for wooden Chinese import products.<sup>80</sup> Then, in June 1999, the European Union imposed new demands for wooden Chinese import products, stating that the wood should not contain bark and worm holes with the diameter more than 3mm, and the wood should be dried and not contain more than 20% water.<sup>81</sup>

Labels are extremely important for exporting apparel. For example, European Union countries put ecological labels on import textile products from China. The ecological label 'OKO-Tex Standard 100' is the passport for textile products to enter their textile products market. Australia stipulates that on the labels of import apparel there must be information about the components of raw materials, age and stature, washing method and production country. Canada stipulates that labels of import apparel must be printed in English and French.<sup>82</sup>

Another issue is that the European Union has made an assessment on the feasibility of harmonising certain labelling requirements including care labelling (currently voluntary); European Union-wide uniform size labelling and labelling to indicate the presence of possible allergenic substances. The European Union Parliament stressed the need to evaluate innovative labelling technologies such as micro-chips or radio frequency identification as means of conveying information to European Union consumers.<sup>83</sup> These incoming stringent regulations on labelling will reduce the market access of Bangladesh textile products in the European Union markets as it will increase the cost of production and the need to acquire the technology to comply with such export requirements.<sup>84</sup>

## 6 FURTHER CHALLENGES FOR INTERNATIONAL TRADE

<sup>79</sup> According to Article 1-2 of the Annex A of the TBT Agreement

<sup>80</sup> Ningchuan Jiang, 'Effect of Technical Barriers to Trade on Chinese Textile Product Trade' (2008) 1(3) *International Business Research* 92

<sup>81</sup> Ibid

<sup>82</sup> Ibid. Although the European Parliament was strongly in favour of 'Made in' labels for textile products imported from non-European Union countries, there was no agreement. Those who did not approve argued that it is a barrier to free trade and a 'protectionist' measure against imports from countries outside the European Union. As a result, the European Union Commission presented a study on 30 September 2013 on the feasibility of an origin labelling scheme. This means that mandatory country of origin labelling for textiles in the European Union is not on the current legislative horizon. However, it should be noted that under the European General Product Safety Directive all products in the European Union must be traceable through the supply chain back to the manufacturing source, including country, in case of product recalls: 'EU Textile Labelling Issues from Parliament Session', *Bureau Veritas* May 2011

<sup>83</sup> Ibid

<sup>84</sup> For USA, all imports from Bangladesh are required to carry a label indicating the country of origin. The label must also indicate quantity, weight, measurements, trade description, component materials, and date of manufacture/expiry where Bangla or English is permissible for labelling. Imported goods, including their containers, must not bear any words or inscription of a religious connotation 'Labeling Requirements' (Office of Textiles and Apparel (OTEXA), 4 September 2013) <<http://web.ita.doc.gov/tacgi/overseasnew.nsf/d1c13cd06af5e3a9852576b20052d5d5/fad8900a6a29da2b8525789d0049ea04?OpenDocument>>

The challenges are from the demand side as well as supply side constraints. Trade remedy measures, safeguard measures, regulatory related measures and rules of origin are from the demand side problems whereas the preference erosion, lack of finance and technology, and lack of coordinated approach are the supply side constraints.

### 6.1 Trade Remedy Measures

Anti-dumping measures are frequently used by the developed countries in the textile and apparel sector. The European Union initiated 64 anti-dumping actions in this sector out of which 57 are targeted against textile exports of developing countries.<sup>85</sup> China, India, Pakistan and Turkey have traditionally been the main target of anti-dumping actions.<sup>86</sup> The Least Developing countries are not yet subject to such measures due to their lesser share, but concern has been raised in recent years by developing countries such as Bangladesh due to its increasing share.<sup>87</sup> Bangladesh holds the second position (with a 6.4% share) in clothing imports in Canada and fourth position in both the USA (with a 4.4% share) and the European Union (with a 3.9% share) markets.<sup>88</sup>

### 6.2 Safeguard Measures

Safeguard measures are also used by developed countries in the textile sector. Although developed countries' textile and apparel exports have not yet faced such measures by the developed countries. These measures have been used by the USA and the European Union on several items of Chinese textile and apparel exports under the mandate of the 'textile specific safeguard clause.'<sup>89</sup> The imposition of these measures has worked as a blessing for small textile and apparel exporting countries. But recently, the European Union has specifically mentioned concerns for major textile exporter like Bangladesh.<sup>90</sup>

### 6.3 Trade Barriers

Developing countries often face regulatory and standard related barriers from developed markets where Technical Barriers to Trade (TBT) are the primary reported barrier for the textile sector.<sup>91</sup> The restrictions are in the form of labelling and marking requirements, security parameters and document verification at the ports of the importing countries and the issues relating to labour and environmental norms.<sup>92</sup> For example, India faced such barriers

<sup>85</sup> WTO General Council, *Anti-dumping Actions in the Areas of Textile and Clothing, Proposal for a Specific Short-term Dispensation in Favour of developing Countries Following Full Integration of the Sector into GATT 1994 From January 2005*, WTO Doc WT/GC/W/502(14 July 2003) (Communication from Costa Rica, Guatemala, Hong Kong China, India, Indonesia, Macao, China, Maldives, Pakistan, People's Republic of China, Thailand and Vietnam); see 'ITCB, 'Anti-dumping Actions in the Area of Textile and Clothing: Developing Members' Experiences and Concerns', ITCB Submission to the WTO Negotiating Group on Rules' (February 2003); See 'WTO Negotiating Group on Rules, Anti-dumping Actions in the Areas of Textile and Clothing: Developing Members Experiences and concerns, WTO Doc TN/RL/W/48?Rev.1 (February 2003)' ((Submission by the International Textile and Clothing Bureau(ITCB))

<sup>86</sup> Ratnakar Adhikari and Chatrini Weeraratne, 'Textile & Clothing Sector in South Asia: Coping with Post-Quota Challenges' in B S Chinnai et al (ed), *Multilateralism at Cross-roads: Reaffirming Development Priorities, South Asian Yearbook of Trade and Development 2006* (2007) vol 109,

<sup>87</sup> Ratnakar Adhikari, 'Textile and Clothing in South Asia: Current States and Future Potential' (2007) 8(2) *South Asian Economic Journal* 171, 183

<sup>88</sup> *International Trade Statistics 2009 110-11* (Table 2.68: Clothing imports of Selected Economies by Origin)

<sup>89</sup> This clause allows WTO Members to impose quantitative restrictions on imports of Chinese textiles and clothing if they are found to disrupt markets. It permits countries to restrain the annual growth of textile imports from China to 7.5% above the preceding year's import levels.

<sup>90</sup> ICTSD, 'EU Launches Textile Safeguard Investigation' (2005) 9(14) *Bridges Weekly Trade News Digest* 2,2

<sup>91</sup> Prnav Kumar and Simi TB Chandan Mukherjee, 'Negotiations on Non-Tariff Barriers under NAMA: The Major south Asian Concerns' in CUTS International (ed), *South Asian Positions in the WTO Doha Round: In Search of a true Development agenda* (2007) vol 2, 169

<sup>92</sup> Ibid 163

on Indian-made skirts and rayon scarves on the ground of non-conformity to flammability standards and ban on imports of textile and leather goods treated with azo-dyes and pentachlorophenol.<sup>93</sup> Nepalese woollen carpets were banned by Germany in 1990's.<sup>94</sup> Bangladesh also suffered an import ban by the USA for engaging child labour in the factories of the RMG sector that was subsequently removed after satisfying their authorities that there is no longer child labour in the garment factories.<sup>95</sup>

#### 6.4 Rules of Origin

The stringent rules of origin have created obstacles for the market access of the developing country exporters that is different between preferential and non-preferential trade and different due to preferential regimes. Developing countries' exports to the European Union are covered by 'Everything but Arms'<sup>96</sup> system, while African and Caribbean countries' exports to the USA are covered by the African Growth and Opportunity Act<sup>97</sup> and Caribbean Basin Initiatives.<sup>98</sup> The European Union's previous rules of origin 'double transformation'<sup>99</sup> had to be satisfied to take an advantage of duty free treatment. However, the new rules of origin in the European Union that came into effect from 1 January 2011 made the rules of origin flexible for developing countries<sup>100</sup> and replaces the double transformation rules with a single requirement.<sup>101</sup>

#### 6.5 Preference Erosion

Ambition for greater market access for Bangladesh and other developing countries is justified, but a number of factors contribute to the non-realisation of this ambition. For Bangladesh, the NAMA negotiation is important because the textile sector relies on exports and is therefore affected by international trade rules. Any change in industrial tariffs will have a significant impact on Bangladesh's export capacity for two major reasons: (a) more favourable market access in countries where Bangladesh exporters face Most Favoured Nation (MFN) tariffs; and (b) erosion of preferences in countries where Bangladesh exporters enjoy Generalised System of Preference (GSP) facility. Bangladesh faced a loss of about US\$

<sup>93</sup> RK Gupta, 'Non-tariff Barriers or Disguised Protectionism (Briefing Paper no2/1997, CUTS, 1997)' (see also Gordhan K Saini, 'Non-tariff Measures Affecting India's Textiles and Clothing Exports: Findings from the Survey of Exporters' (2009) <<http://www.igidr.ac.in/pdf/publication/Wp-2009-008.pdf>>; ibid at 5 July 2012)

<sup>94</sup> Adhikari and Veerathunge, above n 64, p 127

<sup>95</sup> Michael E Nielsen, 'The Politics of Corporate Responsibility and Child Labour in the Bangladeshi Garment Industry' (2005) 81(3) *International Affairs* 559

<sup>96</sup> EBA initiative taken by the EU for providing DFQF market access for LDCs

<sup>97</sup> The African Growth and Opportunity Act (AGOA) were signed into law on May 18, 2000 as Title 1 of The Trade and Development Act of 2000. The Act offers tangible incentives for African countries to continue their efforts to open their economies and build free markets.

<sup>98</sup> Caribbean Basin Initiative is a trade agreement between the US and the countries Central America and in the Caribbean. It was initially launched in 1983, through the Caribbean Basin Economic Recovery Act (CBERA) and expanded in 2000 through the US – Caribbean Trade Partnership Act (CBTPA): *Caribbean Basin Initiative*, Office of the USTR <<http://www.ustr.gov/trade-topics/trade-development/preference-programs/caribbean-basin-initiative-chi>> viewed on 5 July, 2012

<sup>99</sup> Under EU Rules of origin, Double Transformation means that first it transformed from yarn to fabric and then fabric to clothes

<sup>100</sup> Munir Ahmad, 'Munir Ahmad, 'Impact of Origin Rules for Textiles and Clothing on Developing Countries' (Issue Paper No 3, ICTSD, 2007) 31, 32' (2007) <<http://ictsd.org/downloads/2009/02/impact-of-origin-rules-for-textiles-and-clothing-on-developing-countries1.pdf>> at 5 July 2012

<sup>101</sup> Stefano Inama, 'The Reform of the EC GSP Rules of Origin: Per aspera ad astra?' (2011) 45(3) *Journal of World Trade* 577

42.1 million due to preference erosion in the European Union market.<sup>102</sup> In 2004, Bangladesh exported US\$ 2.35 billion to the USA and paid US\$331 million in duties, whereas exports from France amounted to US \$30.02 billion for which only US\$330 million in duties was paid.<sup>103</sup> Another modelling exercise indicates that zero tariff access in the USA would have increased Bangladesh's export of apparels to USA market by about US\$1 billion or by 50% in 2004.<sup>104</sup>

Through NAMA negotiation, tariffs can be brought down to a zero tariff if the textile and apparel market is brought within the sectoral negotiation. This may result in positive as well as negative impacts on textile dependent exporters like Bangladesh. Bangladesh will encounter preference erosion in the European Union market where its textile products are enjoying duty free and quota free (DFQF) market access under the Everything But Arms (EBA) initiative of the European Union.

## 6.6 Lack of Finance and Technology

There are supply side constraints that the developing countries often face in the form of low human capital marked by low labour wages, lack of safety standards and severe skills deficit due to lack of training opportunities for garment workers.<sup>105</sup> Developing countries are committed to production of basic items with low value that are less profitable but characterised with high competition.<sup>106</sup> The other supply side constraints are: substandard quality of infrastructure, communication technologies, power supply and port services;<sup>107</sup> inefficient trade facilitation measures;<sup>108</sup> increased cost of inputs;<sup>109</sup> and finally access to flexible credits.<sup>110</sup>

## 6.7 Lack of Coordinated Approach

Chapter 15 of the Textile Policy discusses human resource development to meet the challenges of the increasing demand for qualified technical staff/resources in the textile industries in Bangladesh through establishing textile related institutions. However, the Policy fails to propose methods to monitor or implement its objectives. Proper implementation of this Policy is a major challenge for Bangladesh that needs to adopt coordinated approach.

The *Cotton Industries (Statistics) Act 1926* was enacted to provide for the regular submission of the returns of quantities of cotton goods manufactured and cotton yarn spun in Bangladesh. This is also an old Act that does not reflect much about the current trade issues that are creating market access barriers. However, the Act is useful in that it provides data regarding the cotton goods manufactured in Bangladesh based upon which it is contributing in increasing export basket. Nevertheless despite this useful aim, the Act lacks up-to-date information and the specifics of coordination needed to properly to achieve its target. The *Textile Policy 2011* is the improved version of the previous policies of 1989 and 1995. This

<sup>102</sup> M and Shadat Rahman, 'NAMA Negotiations in the WTO and Preference Erosion: Concerns of Bangladesh and Regional LDCs' (2005) *CPD Occasional Paper 51*. Dhaka: Centre for Policy Dialogue(CPD)

<sup>103</sup> M Rahman, 'NAMA Negotiations in the WTO and Preference Erosion: Concerns of Bangladesh and other Regional LDCs' (2005) *Research Report*. Dhaka: Center for Policy Dialogue(CPD)

<sup>104</sup> Ibid

<sup>105</sup> IMF, 'Bangladesh : Selected Issues' (IMF Country Report No7/230,IMF,2007)

<sup>106</sup> Ratnakar Adhikari, 'Textile and Clothing in South Asia: Current States and Future Potential'(2007) 8(2) *South Asian Economic Journal*, 183,185

<sup>107</sup> Ibid, p186

<sup>108</sup> Ibid

<sup>109</sup> Ibid, p188

<sup>110</sup> Ibid

Policy specially mentioned its implementation strategy (in Chapter 4) by ensuring environmental friendly Effluent Treatment Plant (ETP) in the wet processing units of the textile industries and it outlined the need for an advisory committee that could implement, monitor and evaluate this sector through proper coordination among the relevant stakeholders.

## **7 GREATER MARKET ACCESS FOR BANGLADESH TEXTILE AND CLOTHING PRODUCTS: WAYS FORWARD**

### **7.1 Negotiations Strategy for Bangladesh**

At Doha, Ministers agreed to initiate negotiations to further liberalise trade on non-agricultural goods.<sup>111</sup> The Doha decision adopted the framework for modalities for negotiations on non-agricultural products.<sup>112</sup> The Doha Development Agreement also reiterated the commitment of the developed WTO members for granting of duty-free and quota-free market access for products originating from developing countries. It recognised that integration of developing countries into the multilateral trading system requires meaningful market access,<sup>113</sup> support for diversification of their production and export base,<sup>114</sup> and trade-related technical assistance and capacity building support.<sup>115</sup> Although the revised February 2008 draft is an improvement on the 2007 draft, it needs to be further improved in light with the Maseru Declaration<sup>116</sup> in order to fully reflect developing countries' concerns and interests.

### **7.2 Reform in the Domestic Policy, Laws and Monitoring**

The Government has created a single oversight Ministry -the Ministry of Environment and Forest. Within this Ministry, a new Department of Environment, along with a Forest Department, has been created. However, this does not mean that appropriate monitoring will be automatically ensured. Recognising the importance of environmental protection and sound management practice for long term sustainable development, the Government should adopt policy measures to ensure proper implementation.

The *Environment Protection Act* of 1995 (EPA) has been enacted to prevent the escalation of pollution problem in the country and to make the general people and the concerned agencies aware about its implications. Although there are some programs carried out through radio and television broadcasting and the Department of Environment monitors the environmental level and imposes regulatory measures on the industrial units, automotive vehicles and other concerned bodies, these are not sufficient in terms of reducing pollution.

The Department of Environment must collect the river water samples at random and continuously examine in their laboratories, even while they have limited expertise and resources. They must enforce environment related compliance issues without disturbing the development of the industrial sector. The industries are listed in three different categories -

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<sup>111</sup> WTO, Doha Development Agenda, Doha Round< [http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm)> [31 (iii)]

<sup>112</sup> Products other than agriculture as mentioned in WTO, Doha Ministerial Declaration 2001 (WTO Publications 2001) Annex B

<sup>113</sup> Ibid [16]

<sup>114</sup> Ibid [27]

<sup>115</sup> Ibid [38-40]

<sup>116</sup> Declaration from the LDC Trade Ministers' Meeting, Maseru, Lesotho, 27-28 February 2008 available at <[wto\\_LDC\\_declaration\\_maseru\\_28Feb08.pdf](#)> accessed on 29 November 2013

Green, Orange and Red - in accordance to the pollution related factors particularly for the new or proposed industrial units both for local or overseas investors.<sup>117</sup>

Greater awareness should be developed among industrialists regarding environmental protection measures under legislation and policy. Industries should be aware of environmental protection legislation and policy as the industries will be identified and developed without affecting environment and residential and agricultural land.<sup>118</sup> The Industrial Policy<sup>119</sup> also states that industrial development is subject to all environmental pollution controls other precautionary measures are included in the project proposals. Although these statements are reflected adequately in the Policy and procedures at the time of taking approval of any industrial proposal, there are difficulties encountered by industry at the time of their implementation and enforcement of such measures. Thus, environment protection implementation is still at its infancy.<sup>120</sup>

The other major impediment for implementation and enforcement of the Act is faced by the department of the Sector Corporation of Government. Government has accepted in principle the necessity of incentives for environment protection measures that are under process with respective government offices. This could bring a definite improvement and change in anti-pollution measures.<sup>121</sup> The problem lies in the highly competitive market. Entrepreneurs are not very interested in environmentally friendly technology. However, all Bangladesh small and cottage industries and corporate industrial estates have been designed and set up covering the pollution protective measures. The Pollution Prevention Demonstration Project for Small and Medium Entrepreneurs (SMEs) does not mention anything except some program of the concerned Department organised in association and supporting the local trade bodies. The Pollution Prevention Demonstration Project needs to be introduced through local trade bodies like Dhaka Chamber in association with Bangladesh small and cottage industries (BSCIC) to create better awareness about the problems and prevention measures from and among the SMEs of both public and private sectors.

### **7.3 Assistance Provided by the Government for Environmental Protection Measures**

Government assistance is necessary to make environment friendly products. No mentionable assistance is given to the public or SMEs except that the Forest Department provides a range of attractive and costly tree saplings at a nominal token price to individuals and free of cost through official functions during the season. The most important aspect of this initiative is that it demonstrates proper plantation process through television broadcasts in simple language via its special bulletin. Free posters, printed stickers and banners are also given to institutions organising such programs for display and distribution in their localities.

## **8 CONCLUSION: WHERE TO GO FROM HERE?**

This article has addressed the textile and apparel market access challenges and opportunities of developing countries in general and in Bangladesh in particular. Paragraph 16 of the Doha Declaration mandates the NAMA negotiations to be conducted on the principle of 'non-reciprocity,' 'less than full reciprocity' and 'S&DT' for LDCs and also by taking into

<sup>117</sup> The Environment Protection Act, 1995

<sup>118</sup> Section 13, Chapter xiv of the National Industrial Policy, 2010

<sup>119</sup> Ibid, Section 12

<sup>120</sup> However, some local social organizations, in association with some NGOs, are engaged in afforestation programme in the far-flung and remote rural areas, wherein they encounter occasionally with the Fundamentalists as the NGOs make local young women folk, irrespective of their education level, to work for them.

<sup>121</sup> Among these incentives measures, financing for industries causing no environmental hazard is one of them. In this type of industry special allocation may be done for advanced technology.



consideration their special needs and interests. Accordingly, the special needs of developing countries have been taken into account for providing market access, promises for technical and financial assistance and exempting them from the reduction commitments in the NAMA negotiations. Although these seem to be positive, these depend on how these provisions are implemented.

