

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

NON-TARIFF MEASURES: Evidence from Selected Developing Countries and Future Research Agenda

DEVELOPING COUNTRIES IN INTERNATIONAL TRADE STUDIES



UNITED NATIONS

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

NON-TARIFF MEASURES: Evidence from Selected Developing Countries and Future Research Agenda

DEVELOPING COUNTRIES IN INTERNATIONAL TRADE STUDIES



UNITED NATIONS
New York and Geneva

NOTE

The views expressed in this report are those of the authors and do not necessarily reflect the views of the United Nations Secretariat. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Secretariat concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. This publication is under the *Developing Countries in International Trade Studies*.

Symbols of United Nations documents are composed of capital letters with figures. Mention of such a symbol indicates a reference to a United Nations document.

Material in this publication may be freely quoted or reprinted, but full acknowledgement is requested. A copy of the publication containing the quotation or reprint should be sent to the UNCTAD secretariat at: Palais des Nations, CH-1211 Geneva 10, Switzerland.

UNCTAD/DITC/TAB/2009/3

UNITED NATIONS PUBLICATION

ISSN 1817-1214

© Copyright United Nations 2010
All rights reserved

FOREWORD

The severe contraction of world trade volume during the current global economic and financial crisis – the steepest since the Great Depression – put pressure on the trade policies of many importing and exporting countries around the world. One result of the crisis in developed and developing countries has been the contemplation or use of trade policy instruments, mainly taking the form of non-tariff measures (NTMs), to protect domestic producers.

In spite of their growing importance in regulating trade, the exact implications of NTMs on trade flows, export-led growth and social welfare are not very well understood. There are significant gaps in the existing knowledge of NTMs and their effects on international trade. It is for this reason that, in 2006, I established a Group of Eminent Persons on Non-Tariff Barriers (GNTB) to consider the definition, classification, data collection and quantification of NTBs, identify data requirements, as well as gain a better understanding of the implications of NTMs on international trade. A Multi-Agency Support Team (MAST) was also formed to work on a new classification of NTMs and advise on the feasibility of data collection.

In addition, UNCTAD, in collaboration with the International Trade Centre (UNCTAD/WTO), fielded a pilot project in seven developing countries (Brazil, Chile, India, Philippines, Thailand, Tunisia and Uganda) to gauge how firms in those countries were affected by NTMs. The project tested the new classification of NTMs prepared by MAST under the overall leadership of UNCTAD. This new classification is a significant breakthrough for researchers and policymakers who now have a homogeneous instrument that can facilitate data collection and play a supporting role in trade negotiations.

The principal financial support for the project was received from the Swiss Agency for Development and Cooperation (SDC), Government of Switzerland, and contributions were also received from the Department for International Development (UK-DFID) and the Global Trust Fund of the International Trade Centre (UNCTAD/WTO).

The present publication brings to a culmination a four-year multi-agency effort to better understand NTMs. I am confident that such an initiative will provide practical help to UNCTAD member States, particularly developing countries. Such help can strengthen their capacity to understand non-tariff measures and the potentially negative spill-over effects of NTMs in trade, as well as support countries in formulating and implementing sound trade and development policies and strategies.



Supachai Panitchpakdi
Secretary-General of UNCTAD

ACKNOWLEDGEMENTS

This publication, *Non-Tariff Measures: Evidence from Selected Developing Countries and Future Research Agenda*, was prepared by the Trade Analysis Branch, Division on International Trade in Goods and Services, and Commodities (DITC), UNCTAD Secretariat with contributions from Sudip Ranjan Basu, Hiroaki Kuwahara, Samuel Munyaneza, Alessandro Nicita, Victor Ognitsev, Denise Penello Rial, Khalilur Rahman, Fabien Dumesnil, Guillermo Abramowitz and Fatoumata Keita. Some useful comments were also received from other staff members of UNCTAD. Sudip Ranjan Basu coordinated the publication of this report.

The UNCTAD-NTM team thankfully acknowledges intellectual support and encouragement from the members of the Group of Eminent Persons on Non-Tariff Barriers (GNTB): Alan V. Deardorff, Professor of Economics and Public Policy, University of Michigan; Anne O. Krueger, Former First Deputy Managing Director, International Monetary Fund (IMF); present Professor of International Economics, Johns Hopkins School of Advanced International Studies; Amit Mitra, Secretary-General, Indian Federation of Chambers of Commerce and Industry; Marcelo de Paiva Abreu, Professor of Economics, Pontifical Catholic University of Rio de Janeiro; L. Alan Winters, Former Director, Development Research Group, World Bank; Chief Economist, Department of International Development (DFID), UK; and Rufus H. Yerxa, Deputy Director-General, World Trade Organization (WTO).

The team also expresses appreciation to the participants from the MAST agencies including: Noriko Iseki, Hansdeep Khaira, Masashi Kusukawa, Kazuaki Miyagishima, Gladys Morales and Jamie Morrison of the Food and Agriculture Organization of the United Nations (FAO); Annamaria Kokeny, Hans Peter Lankes, Brad McDonald, Dustin Smith and Stephen Tokarick of the International Monetary Fund (IMF); Anders Aeroe, Carolin Averbeck, Mondher Mimouni, Willem van der Geest and Poonam Mohun of the International Trade Centre UNCTAD/WTO (ITC); Barbara Fliess and Frank van Tongeren of the Organisation for Economic Co-operation and Development (OECD); Otto Loesener, Emilio Vento and Bernardo Calzadilla-Sarmiento of the United Nations Industrial Development Organization (UNIDO); Elsa Gamberoni, Bernard Hoekman, Richard Newfarmer and Peter Walkenhorst of the World Bank (WB); Marc Bacchetta, Lee Ann Jackson and Ludivine Tamiotti of the World Trade Organization (WTO); Maryse Coutsouradis and Joakim Reiter of the European Commission (EC); Michael Ferrantino, Katherine Linton, Christopher Johnson and José Signoret of the United States International Trade Commission (USITC); and Donna Roberts and John Wainio of the United States Department of Agriculture (USDA).

The Country Reporting Officers (CRO) of the Pilot Project were instrumental in providing guidance and logistics at the national level that helped complete this initiative included: Roberto Iglesias, Brazil; Ronald Fischer and Pablo Serra, Chile; Abhijit Das and Samir Gandhi, India; Gloria Pasadilla and Mike Palma, Philippines; Mr. Santi Chaisrisawatsuk, Thailand; Ahmed Cheikh-Rouhou, Tunisia; and Noreen Kamoti Balibali, Uganda.

The work has also received support and comments from the following regional organizations: Blanca Brisci-Brause of ALADI, Uruguay; Susanna Manurung of ASEAN, Indonesia; and Subash Sharma of the SAARC, Nepal.

The Pilot project would not have seen daylight without the support of the Swiss Agency for Development and Cooperation (SDC) which provided financial support to carry out the “Pilot Project on Collection and Quantification of Non-Tariff Measures (NTMs) Database” (Project number: INT0T7BA) in four developing countries: Brazil, Chile, the Philippines and Thailand. In addition, the India project which was funded by the Department for International Development (UK-DFID). The International Trade Centre (UNCTAD/WTO) subsequently joined in this global initiative, and obtained resources from its Global Trust Fund.

Acknowledgements are also due to the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), as well as the national research institutions such as Philippines Institute of Development Studies (PIDS), National Institute of Development Administration (NIDA), and the University of Chile and Centro de Estudos de Integraçãoe Desenvolvimento (CINDES). And, valuable support was received from Trade, Commerce and Industry Ministries of Brazil, Chile, India, Philippines, Thailand, Tunisia and Uganda during several national workshops and official briefings, both in national capitals and Geneva.

Desktop publishing was done by Jenifer Tacardon-Mercado. Mark Bloch edited the publication. Thanks are also due to the UNCTAD Printing Unit, Communication and Press Office for providing overall logistical, administrative and web-related support.

TABLE OF CONTENTS

	Page
FOREWORD	iii
ACKNOWLEDGEMENTS	v
OVERVIEW: UNCTAD initiatives on non-tariff measures	xi
PART I	
COUNTRY REPORTS ON NON-TARIFF MEASURES	1
BRAZIL	3
I. General Overview	3
A. Current economic structure and growth	3
B. Trade structure	4
C. Recent trade and tariff policies	5
1. Tariff policy	5
2. Tax policy on imports.....	7
3. Export policies	8
D. Recent and new commitments and regulations related to SPS and TBT	9
1. Technical regulations and standards	9
2. Sanitary and phytosanitary measures.....	11
3. Bilateral and regional trade agreements.....	14
II. NTMs applied by Brazil	16
A. National data sources	16
B. NTMs applied by Brazil	16
III. Challenges	16
A. Business survey: Challenges faced and lessons learned.....	16
IV. Conclusions	17
CHILE	19
I. General Overview	19
A. Country profile.....	19
B. Trade and trade policies.....	19
C. Trading partners	20
D. Recent and new commitments and regulations related to SPS and TBT	21
II. Business Survey	22
A. Survey methodology	22
1. Criteria for sample selection.....	22

B.	Survey implementation.....	22
1.	Recruitment and selection of interviewers	22
2.	Training	22
3.	Obtaining interviews.....	23
4.	Application of the interviews.....	23
5.	Reception and revision on the survey	23
6.	Supervision	23
7.	Coding.....	23
C.	Survey results	23
1.	Profile of interviewed companies	23
2.	Reports on trade barriers	24
3.	Specific aspects related to sanitary and technical regulations	25
4.	Summary of results	26
III.	NTMs applied by Chile.....	26
IV.	Challenges.....	28
A.	Business survey: Challenges faced and lessons learned.....	28
V.	Conclusions	29
INDIA	31
I.	General Overview.....	31
A.	Overview of Indian economy.....	31
B.	Foreign trade.....	31
C.	Tariff policies	32
D.	Policies related to SPS and TBT measures.....	33
E.	India's mutual recognition agreements/arrangements on trade in goods	34
II.	Business Survey	34
A.	Criteria for sample selection.....	34
B.	Survey implementation.....	36
C.	Survey results	37
1.	Profiles of interviewed exporting companies.....	37
2.	Profiles of importing companies	37
3.	Reported trade barriers	38
4.	Reports of NTMs by exporting companies.....	38
5.	Cases of NTMs reported by importing companies.....	40
D.	Summary of results	41
III.	NTMs applied by India	43
A.	Introduction.....	43
IV.	Challenges.....	43
A.	Business survey: Challenges and lessons learned.....	43
V.	Conclusions	44
A.	Conduct of the business survey.....	44
B.	Intensifying collaboration among stakeholders.....	46
1.	Appointment of a single SPS enquiry point.....	47

2. Addressing the issue of inadequate information dissemination.....	47
3. Consultation and feedback on SPS and TBT notifications.....	47
4. Enquiry of complaints lodged by industries	48
5. Resolving SPS and TBT measures	48
C. Impact assessment of NTMs	49
D. Capacity-building and technical assistance.....	49
PHILIPPINES	51
I. General Overview.....	51
A. Current economic structure and growth	51
B. Trade structure	51
C. Recent trade and tariff policies	52
D. Recent and new commitments and regulations related to SPS and TBT	52
II. Business Survey	53
A. Criteria for sample selection.....	53
B. Survey implementation.....	54
C. Survey results	54
1. Profiles of interviewed companies	54
2. Reports on trade barriers	55
3. Specific aspects related to sanitary and technical regulations ...	58
4. Summary of results	59
III. NTMs applied by the Philippines.....	60
A. National data sources	60
B. NTMs applied by the Philippines	60
1. Types of NTMs	61
2. Affected products.....	61
3. Recent trends	61
C. Preliminary assessment of applied NTMs.....	62
D. Summary of results	62
IV. Challenges	63
A. Business survey: Challenges faced and lessons learned.....	63
B. Inventory on NTMs applied by the Philippines: Challenges faced and lessons learned	65
V. Conclusions	66
THAILAND	69
I. General Overview.....	69
A. Current economic structure and growth	69
B. Trade structure	69
C. Recent trade and tariff policies	70
D. Recent and new commitments and regulations related to SPS and TBT	71

II. Business Survey	71
A. Survey methodology and implementation	71
B. Survey results	72
1. Profiles of interviewed companies	72
2. Report on trade barriers	72
3. Specific aspects related to sanitary and technical regulations ...	74
III. NTMs applied by Thailand	74
IV. Challenges	75
A. Business survey: Challenges faced and lessons learned.....	75
B. Inventory of NTMs applied by Thailand: Challenges faced and lessons learned	75
V. Conclusions	76

**PART II
QUANTIFICATION AND RESEARCH AGENDA
ON NON-TARIFF MEASURES..... 77**

Quantitative Strategies for Non-Tariff Measures: Methodological Approaches and Ways Forward with the Pilot Project Data	79
I. Quantitative methods for assessing the effects of NTMs	79
II. Characteristics of the pilot project data	88
A. The new categorization scheme for NTMs	88
B. Characteristics of the survey data	88
C. Characteristics of the official data	89
III. Opportunities for quantification using the pilot project	90
A. An underlying issue – counting vs. economic effects	90
B. Uses of the survey data	90
C. Uses of the official data	91
D. Cost-benefit analysis.....	92
References	93

**PART III
REPORT OF THE GROUP OF EMINENT PERSONS
ON NON-TARIFF BARRIERS (GNTB) 95**

Annex 1. Summary of meetings on non-tariff measures (Geneva, 4-6 November 2009).....	101
Annex 2. Multi-Agency classification of non-tariff measures, November 2009	119
Annex 3. Classification of Procedural Obstacles	143

UNCTAD Initiatives

on Non-Tariff Measures¹

Introduction

The United Nations Conference on Trade and Development (UNCTAD) has been actively involved in research and programmatic activities on issues related to non-tariff measures since the early 1980s. In 1994, it began to collect and classify non-tariff barriers (NTBs) according to a customized **Coding System of Trade Control Measures (TCMCS)**. This coding system classified tariffs, para-tariffs and non-tariff measures (NTMs) into over 100 sub-categories. Concurrently, a Trade Analysis and Information System (TRAINS) database was developed by UNCTAD, which subsequently grew into the most complete collection of publicly available information on NTBs. Later, in collaboration with the World Bank, TRAINS became accessible to researchers through the World Integrated Trade Solution (WITS) software application.

The TRAINS database contains a brief description of each NTB, affected or excluded countries and footnotes on the exact product coverage, where available. This database was also a result of close collaboration with a number of regional organizations, including the Associação Latino-Americana de Integração (ALADI), the Secretaría de Integración Económica Centroamericana (SIECA) and the South Asian Association for Regional Cooperation (SAARC), as well as with the Inter-American Development Bank (IADB). Among these partner organizations, ALADI developed a comprehensive NTB database of its member countries, and these data were included in the TRAINS database. UNCTAD-TRAINS does not, however, provide any measurement of the restrictiveness of any specific measure, and needed further improvements, notably with respect to coverage, updatedness and data quality.

To be more precise, the old UNCTAD NTMs classification had six core categories according to the nature of the measure: (a) price control measures; (b) finance measures; (c) automatic licensing measures; (d) quantity control measures; (e) monopolistic measure; and (f) technical measures. These were further subcategorized in accordance with the types of measures under consideration. Only “sensitive product categories” and “technical regulations” were further subcategorized according to the objectives of the measure (for example, protection of safety, human health, animal health and life, plant health, environment and wildlife). Measures were listed in accordance to the Harmonized Coding classification² (see Annex 2 for more information).

¹ This part of the report was prepared by Sudip Ranjan Basu, Hiroaki Kuwahara and Victor Ognitvsev.

² See also http://r0.unctad.org/trains_new/tcm.shtm.

While the UNCTAD TRAINS database remains the most comprehensive database on NTBs, it required substantial improvements, both in terms of country coverage, as well as current data coverage. At the same time there was a perceived need to update the UNCTAD Coding System of Trade Control Measures (TCMCS) to reflect new practices. This work was all the more necessary in the light of the growing relative importance of non-core NTBs as an instrument of trade policy.

The steady decline of tariff rates as the result of eight GATT rounds of multilateral trade negotiations (MTNs) raised the relative importance of NTBs as both protection and regulatory trade instruments. Internal research within the UNCTAD Secretariat underscored the mismatch between the reduction of tariffs arising from WTO multilateral agreements and the numerous regional and bilateral level preferential trade agreements (PTAs) that were concluded over the past two decades, on the one hand, and the proliferation of NTMs, on the other. As levels fell in tariffs, non-tariff barriers increasingly took centre-stage in market-access concerns.

Available evidence indicates that NTMs are often applied as alternative trade policy instruments, as multilateral trade agreements impose limits on the use of traditional trade policy instruments, such as tariffs. So, the result is that NTMs are rapidly gaining importance in regulating trade, and have almost replaced tariff barriers in manufacturing sectors. One major point of discussion within the Secretariat during this period was how to reach a common understanding on the relative importance of the different types of NTBs and their impact on the trading activities of developing countries.

It should be noted that the process of formulating a new strategy to develop and update a new NTMs database with a new classification system was delayed towards the beginning of the 2000s due to a shortage of resources; difficulties in identifying NTBs; and a growing perception that the TCM coding system did not adequately reflect new measures in certain subcategories. One of the limitations of the TRAINS database is that it only covered product-related NTMs and ignored NTMs on services trade. Research aimed at arriving at a more complete and updated analysis of the impact of NTBs in the period following the Uruguay Round. Current knowledge of such barriers, both empirically and conceptually, has been rather limited and hampered by the lack of common methodologies and inadequate quality of available data, country coverage and updated information.

At the UNCTAD XI conference, the São Paulo Consensus (2004), Member States requested the Secretariat to seek a better understanding and assess the impact of NTMs to facilitate the extension of market access liberalization for non-agricultural products under the Doha Work Programme, and eventually reduce or, as appropriate, eliminate, *inter alia*, non-tariff barriers (NTBs), in particular on products of export interest to developing countries. Subsequently, the Secretariat sought to further strengthen the work in this area by developing a publicly available standardized database of NTBs in collaboration with other international partners, which could be used by all interested parties, and a relevant classification system to reflect the complex nature of today's international trading arrangements and mechanisms.

It was recognized at São Paulo that in spite of their importance in regulating trade, there is little understanding of the exact implications of NTMs on trade flows, export-led growth and social welfare in general. This lack of understanding was in large part due to the fact that, with the exception of the UNCTAD-TRAINS database, there is no global mechanism to obtain comprehensive and continuously updated information on NTMs. The UNCTAD TRAINS database has not been updated regularly since 2001, and the data is based on an obsolete classification which does not adequately and accurately reflect new forms of NTMs.

The Commission on Trade in Goods and Services, and Commodities at its Ninth Session, held in Geneva on 14-18 March 2005, while acknowledging that UNCTAD should examine the effects of NTBs, decided in accordance with the São Paulo Consensus, to convene an Expert Meeting on Non-Tariff Barriers. In the same year, the Expert Meeting on Methodologies, Classifications, Quantification and Development Impacts of Non-Tariff Barriers, held in Geneva from 5 to 7 September 2005, addressed a comprehensive agenda related to NTBs and was attended by a large number of government officials at the senior and expert level from developed and developing countries, and countries with economies in transition, representatives of the World Trade Organization (WTO), the World Bank, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), Food and Agriculture Organization (FAO), International Trade Centre (UNCTAD/WTO) ITC, United Nations Industrial Development Organization (UNIDO), ALADI, IADB, SARC, SIECA, making this event a truly multi-stakeholder event.

The focus of the Expert Meeting was primarily on technical and research issues (such as classification and quantification of NTBs) and on strengthening/forming partnerships with relevant international organizations and other stakeholders to deal with NTBs on a comprehensive and long-term basis. In sum, the key objectives of the Expert Meeting were:

- To identify ways to improve, both in terms of country coverage and data quality, the NTB database contained in the UNCTAD TRAINS database;
- To clarify methodologies for defining and classifying NTBs according to their nature and source, including clusters of NTBs that are already subject to WTO disciplines;
- To review econometric approaches to quantify NTBs that could be applied to improve understanding of the role of NTBs in world trade;
- To look at experiences of other international organizations in dealing with NTBs, including the WTO, World Bank, IMF, OECD and others; and
- To assist developing countries, including LDCs, in building their analytical and statistical capacities in assessing NTBs affecting their exports.

At this same meeting, Supachai Panitchpakdi, Secretary-General of UNCTAD, expressed his intention to set up a Group of Eminent Persons on NTBs drawn from governments, international organizations, academia and civil society. In 2006, the Secretary-General of UNCTAD established the Group of Eminent Persons on Non-Tariff Barriers (GNTB). The main purpose of the GNTB is to discuss the definition, classification, collection and quantification of non-tariff barriers so as to identify data requirements, and consequently to facilitate our understanding of the implications of NTMs. To advance the activities on NTBs, the GNTB met for the first time in UNCTAD Geneva on 12 July 2006, and adopted the following terms of reference:

(a) To make recommendations on the definition, classification and quantification of NTBs;

(b) To define elements of and draw up a substantive work programme relating to the collection and dissemination of NTB data, with a special focus on issues and problems faced by developing countries;

- (c) To provide guidance on the further strengthening of UNCTAD's Trade Analysis and Information System (TRAINS) database;
- (d) To review and make recommendations on capacity-building and technical cooperation activities in favour of developing countries in the area of NTBs;
- (e) To provide policy advice on inter-agency collaboration and coordination on activities relating to NTBs;
- (f) To promote cooperation with the donor community; and
- (g) To prepare comprehensive recommendations on follow-up to its work.

The GNTB was composed of the following eminent persons: Dr. Alan Deardorff, Professor of Economics and Public Policy, University of Michigan; Dr. Marcelo de Paiva Abreu, Professor of Economics, Pontifical Catholic University, Rio de Janeiro; Mr. Alan Winters, Director, Development Research Group, World Bank; Mr. Rufus H. Yerxa, Deputy Director-General, World Trade Organization, Dr. Anne O. Krueger, First Deputy Managing Director, International Monetary Fund (IMF), and Mr. Amit Mitra, Secretary-General, Indian Federation of Chambers of Commerce and Industry.

To carry out the technical work of the GNTB, a **Multi-Agency Support Team (MAST)** was also set up by the GNTB. In addition to UNCTAD, the MAST is composed of the following organizations: the Food and Agriculture Organization of the United Nations (FAO), International Monetary Fund (IMF), International Trade Centre UNCTAD/WTO (ITC), Organisation for Economic Co-operation and Development (OECD), United Nations Industrial Development Organization (UNIDO), World Bank and World Trade Organization (WTO). It was also represented by observers from the United States Department of Agriculture (USDA), the United States International Trade Commission (USITC) and the European Commission. The team is composed of experts drawn from the above international organizations dealing with substantive analysis of NTMs.

Under the general guidance of UNCTAD, MAST had the following objectives:

- (a) to provide a clear and concise definition of NTMs;
- (b) to develop a classification system of NTMs to facilitate data collection process and analysis;
- (c) to devise ways to collect efficiently the information on NTMs, taking into account existing mechanism of collecting specific elements of NTMs by each member agency; and
- (d) to provide guidelines for the use of data, including their quantification methodology.

Since 2006 MAST has held five meetings to discuss the NTMs classification, identify data sources and data collection mechanisms. Seven developing countries were identified as pilot countries to test the updated NTM classification and the data collection procedures. The first meeting of MAST was hosted by the World Bank on 18 October 2006 in Washington DC. This meeting was followed by further meetings hosted by FAO on 5 April 2007 in Rome; UNIDO on 28 September 2007 in Vienna; OECD on 5 May 2008 in Paris; and ITC on 27 January 2009 in Geneva.

Meanwhile, UNCTAD submitted a request to the Swiss Agency for Development and Cooperation (SDC) to support the pilot project to prepare a systematic methodology, definition and identification of NTMs through the collection of information from official sources, as well as the barriers faced by traders in the pilot countries. The project sought to: (a) determine the types and sources of non-tariff barriers to trade; (b) test feasibility and/or operationalization of the preliminary template of NTMs classification; (c) explore the range of data collection options, such as web-based portal and survey-based study, under the new classification format to maximise the data coverage; (d) help identify and suggest possible options to increase accuracy and maintaining such complex database; and (e) increase our general understanding of NTMs.

In January 2008, UNCTAD received funding from SDC to carry out a **Pilot Project on the Collection and Quantification of Non-Tariff Measures (NTMs) Database** (Project number: INT0T7BA) to work in four developing countries: Brazil, Chile, the Philippines and Thailand. The International Trade Centre (UNCTAD/WTO) (ITC) subsequently joined in this global initiative, and obtained resources from its Global Trust Fund to extend the pilot project activities to Tunisia and Uganda. In addition, the UNCTAD India project was involved in activities in India which was funded by the Department for International Development (UK-DFID). Two United Nations regional commissions, the Economic Commission for Latin America and the Caribbean (ECLAC) and the Economic and Social Commission for Asia and the Pacific (ESCAP), supported the pilot project, as did several other national research institutions, such as Philippines Institute of Development Studies (PIDS), National Institute of Development Administration (NIDA), The University of Chile and Centro de Estudos de Integração e Desenvolvimento (CINDES). The pilot project was jointly conducted by UNCTAD and ITC and collected data in seven developing countries (Brazil, Chile, India, Philippines, Thailand, Tunisia and Uganda). In parallel, UNCTAD and ITC also identified data sources and collected official data for some of the leading importing countries.

At the outset of the pilot project, an operational prototype of a web-based NTB data collection portal – the Trade Barriers Reporter (<http://ntb.unctad.org>) – was developed by UNCTAD. The Trade Barrier Reporter is a global online reporting system for companies involved in international trade to report NTMs they face and to allow them to compare their experiences with other reports. This website portal and associated database are expected to consolidate data from various datasets, and allow end-users to access a complete overview of existing non-tariff measures to trade. This portal was presented in all the pilot countries so as to encourage an exporters or importers to populate NTMs information with any problem or difficulty they may face when exporting into, or importing from, a foreign country.

The pilot project was designed to achieve the goals in several phases such as:

- (a) Organization of initial workshops/training sessions with the Country Reporting Officer (CRO), national partner institutions, Ministry officials, Chamber of Commerce and other stakeholders.
- (b) Testing of NTMs classification and collection of data and preparation of country reports.
- (c) Presentation of country reports at the national workshop to initiate discussion arising from the classification, codification and storing of NTMs database.
- (d) Introduction of an analytical framework on the basis of pilot studies to systematically monitor and quantify NTMs for policymakers to better understand impacts of NTMs.

- (e) Convening of a multi-stakeholders' Expert Meeting in Geneva to invite donors to expand the pilot project to the global project on NTMs, which could include a proposal for sustainability.

The UNCTAD Secretariat organized an informal information session on NTMs with pilot project country delegates to discuss the importance and feasibility of the project in their respective countries on 24 September 2007 in Geneva. The first seminar on NTM-related activities was co-organized by the UNCTAD India project, the Ministries of Finance and Agriculture and UK-DFID on 9 August 2007 in New Delhi/India. A series of pilot project workshops took place in Manila/Philippines on 24 January 2008; Bangkok/Thailand on 29 January 2008; Rio de Janeiro/Brazil on 29 February 2008; and Santiago/Chile on 6 March 2008. These meetings were attended by officials from the Ministries of Foreign Affairs, Commerce, Industry and Trade, representatives of the private sector or traders' associations concerned about non-tariff barriers, as well as by public institutions working with exporters, and research communities. Two further workshops were held in Tunisia and Uganda in late May 2008.

A Country Reporting Officer (CRO) was selected for all the seven developing countries in order to lead the activities of the pilot project in that country. It was decided that a business survey would also be conducted in each of these countries by a specialized agency. It was envisaged that the CRO and the survey agency would become solid local partners in the pilot countries, and would eventually assist in identifying relevant official documents and information on domestic rules and regulations.

Meanwhile, the Accra Accord resulting from the UNCTAD XII conference (Accra, Ghana, 20–25 April 2008) emphasized that “meaningful trade liberalization will also require addressing non-tariff measures... where they may act as unnecessary trade barriers... International efforts should be made to address non-tariff measures and reduce or eliminate arbitrary or unjustified non-tariff barriers” (para. 73). In this regard, UNCTAD was requested to “address the trade and development impact of non-tariff barriers” and “further improve and disseminate its analytical tools, such as the Trade and Development Index, as well as databases and software, such as TRAINS/WITS” (para. 96).³ All of these international events have provided UNCTAD with a solid footing to convince other international partners to converge to an equitable and rule-based multilateral system to foster common prosperity through international trade.

After a series of MAST meetings and consultations, this technical group proposed the following definition of NTMs:

Non-tariff measures (NTMs) are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both.

MAST recognized that a precise and balanced definition of NTBs posed substantial difficulties, and that a distinction between NTBs and NTMs should not be attempted. At the same time, MAST agreed that NTMs cannot be simply qualified as NTBs on the basis of a single piece of regulation and can only be unequivocally identified as such following analysis of detailed data. The group later also agreed that a comprehensive database should be built to only collect data on NTMs. This would leave open the judgment of whether a given measure constitutes a trade barrier and whether the measure has protectionist or discriminatory intent.

³ Available at: www.unctad.org/en/docs/iaos20082_en.pdf

MAST concluded that an updated and modified version of the old UNCTAD Coding System of Trade Control Measures (TCMCS) classification on NTMs was needed to take into account both the economic significance of an NTM, as well as the difficulty in collecting and properly classifying the data. The group also recognized that since information on NTMs needed to be collected from various (and often heterogeneous) sources, there was a trade-off between the cost of collecting data and the degree of detail provided by the classification. The classification of NTMs proposed by MAST and several external experts on NTMs is therefore suited for collecting information at different level of detail to reflect the current recourse to the use of NTMs in international trade. It follows a hierarchical “tree” structure where NTMs are differentiated according to 16 “branches” or chapters (denoted by alphabetical letters), each comprising of “sub-branches” (1-digit), “twigs” (2-digits) and “leaves” (3 digits).

It must be emphasized that with respect to the TCMCS, the updated classification includes a substantial number of new sub-categories on sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT), and introduced a few new categories of NTMs, such as “export measures”, “trade-related investment measures”, “distribution restrictions”, “restrictions on post-sales services”, “subsidies”, “measures related to intellectual property rights” and “rules of origin”. Another innovative part of the new classification is that it introduced the concept of “procedural obstacles”, which refers to issues related to the process of application of an NTM, rather than the measure itself. MAST agreed that in a number of cases, it is not the NTM per se that is discriminatory or creates an obstacle to trade, but the actual implementation of the NTM. It was decided that information on problems or other excessive burdens related to implementation of NTMs were to be collected through survey data under the broad term of procedural obstacles (see Annex 2 for the structure of the new classification and Annex 3 for procedural obstacles).

At the data collection stage of the project, the group underscored the need to improve the collection of the official data collection mechanism by relying on national official documents, as well as on existing data provided by international or regional agencies. Data on NTMs applied by a country are typically drawn from different national sources, for example Ministries of Trade, Ministries of Agriculture, National Standards Bodies, as well as from international organizations, for example WTO notifications, FAO CODEX Alimentarius, etc. As different sources use different NTMs classification, official data is put through a standardization process before being entered in the new NTMs database. On the other hand, the private sector data was collected through two channels: firm-level surveys and the web-based portal. Survey data collection was conducted by specialized agencies on the basis of a questionnaire prepared by UNCTAD and ITC. Following this, the Trade Barrier Reporter, an online reporting system was used by exporters and importers willing to report trade barriers which they encountered (<http://ntb.unctad.org>).

This UNCTAD NTM initiative, including the new classification system and data collection obtained through the pilot project with ITC, revealed several critical points as lessons learnt for any future work in this area:

- (a) The complexity of collecting official data varied from country to country. The time required in collecting the data, and the quality and comprehensiveness of this data, were largely contingent upon the availability of existing databases, and the format in which data are stored within several ministries at the national level. An additional layer of complexity often came from the fact that there were multiple sources of similar data. For example, it is not uncommon to have multiple institutions issuing overlapping regulations on the same set of products. In some cases the information could be accessed free of charge in an electronic format; in other cases regulations were only available in a hard format and/or for a fee or subject to formal authorization.

A further problem is that the agencies that are currently repositories of data on NTMs have adopted different classifications; hence, a substantial effort is required to harmonize the various data, to the extent possible, in accordance to the new MAST classification. MAST also agreed that the official data will be collected only for all the categories of NTMs present in the new classification, except for government procurement, subsidies, intellectual property rights, distribution restrictions, and restrictions on post sales services. The reason being that, although these categories represent important NTMs, official data on these categories is likely to be poor and very costly to collect. Data for these categories is collected only through private sector complaints.

(b) For the survey-based data collection effort, the major confusion was the categorization of measures in SPS and TBT. In general, SPS and TBT are broadly assigned depending if the product was an agricultural or a non-agricultural product, but some exceptions exist. According to the WTO, an SPS is defined according to the objective of the measure, while TBT is defined depending on to the type of measure. Procedural obstacles classification were not properly identified in several instances, for example, numerous exporters' complaints were often classified as measures imposed by the importing country. However, in reality these complaints were often related to a procedural obstacles originating at customs in the surveyed country. Furthermore, in many cases the poor understanding of NTMs of some data collectors, in combination with the weak general understanding of NTMs among the firms surveyed, often resulted in misclassification and discrepancies in the quality of data collected across and within countries. It was also found that interviews should ideally be conducted face-to-face so as to minimize communication problems and misunderstandings.

Finally, on 5 November 2009, the Secretary-General of UNCTAD convened the meeting in Geneva of the GNTB to finalize the work on the definition, classification and the proposal for a multi-year global joint programme on NTMs of UNCTAD, World Bank, WTO and ITC. The GNTB meeting discussed the MAST report, in particular regarding the newly re-worked NTMs classification, and exchanged opinions on the future NTMs data collection programme. At the meeting, the GNTB members endorsed the definition and new classification system proposed by UNCTAD in conjunction with MAST members. The November 2009 GNTB meeting represents a landmark in the work on NTMs conducted by UNCTAD since the 1980s. Under UNCTAD's umbrella seven international organizations, namely FAO, IMF, ITC, OECD, UNIDO, the World Bank and WTO, experts from USDA, USITC, EC, and governments, regional organizations and academics, paved the way for global consensus-building on the definition, classification, collection of NTMs, as well as to facilitate understanding and awareness of such measures among the developing countries.

Part I of this publication contains the five country reports (Brazil, Chile, India, Thailand and the Philippines). Each of the country reports follows a similar structure: General overview (growth, trade, tariff and non-tariff measures); business survey (methodology, data collection and description); official NTMs data (national data sources, application of NTMs); challenges (sample selection, NTMs concept, web-portal) and conclusions (resources required, awareness of NTMs and impact assessment and sustainability). These papers provide clear data on some of the current issues that the exporters and importers in these countries are facing.

Part II contains a research paper on the methodological approaches to the NTMs quantification by one of the leading experts in the field, Michael J. Ferrantino of USITC. The paper provides a valuable survey of available methodologies on the quantification of the effects of NTMs and provides evidence of empirical linkages between trade and non-tariff measures. It then examines the data obtained through the pilot project, both through survey and official sources and proposes a set of alternative options for analysis and quantification using the data from the pilot project.

Part III contains the report by the **Group of Eminent Persons on Non-Tariff Barriers (GNTB)** to the Secretary-General of UNCTAD which was made available at the meeting held on 5 November 2009 in Geneva. The report highlighted the key issues of the UNCTAD initiative in collaboration with international partners in United Nations organizations and agencies, regional organizations and national governments and other partners, and provided policy and technical guidance and recommendations on the implementation of a possible multi-year programme to raise the profile of NTMs activities.

This current publication is one of the first attempts by the United Nations to address in a comprehensive manner the issues relating to NTMs in this age of current global economic turmoil. One of the principal objectives of this report is to stimulate the discussion on NTMs and subsequent impact assessment of the trade strategies on the developing countries market access opportunities, and to contribute to UNCTAD's overarching mission of upholding an open, equitable, rule-based, predictable and non-discriminatory multilateral trading system, as enshrined in the UN Millennium Declaration, as well as to assuring development gains from international trade and trade negotiations.

PART I

COUNTRY REPORTS ON NON-TARIFF MEASURES

BRAZIL¹

I. General Overview

A. Current economic structure and growth

Between 2004 and 2006, Brazil's growth rate was rather disappointing compared with the growth rate experienced by other fast-growing emerging countries. While emerging economies as a group were growing at 7.6 per cent per year,² Brazil's growth rate was well below average, and stood at about 4 per cent. However, in the first quarter of 2007, growth rates started to accelerate, achieving annual rates of 6.3 per cent in the third semester of 2008, just before the world financial crisis broke out. The main impact of the world economic meltdown affected the Brazilian economy in the fourth quarter of 2008, and reduced the GDP annual growth rate to 5 per cent.

The slower growth between 2004 and 2006 is explained by government efforts to control inflation rates through tight monetary policies and uncertainties related to the stability of macroeconomic policies which affected private investment decisions. To overcome this credibility problem, the Brazilian government maintained macroeconomic policies which focused on achieving primary fiscal balance and inflation goals. Annual inflation rates decreased from 14.7 per cent in 2003 to 3.6 per cent in 2007, but picked up to nearly 6 per cent at the end of 2008. Despite this primary surplus, the overall consolidated public sector budget has remained in deficit. The country maintains a floating exchange rate regime and nominal exchange rate appreciated around 60 per cent between 2004 and mid-2008. In order to offset this trend and to modernize foreign exchange transactions, regulations have been liberalized but without full convertibility of the Real.

Brazil's GDP per capita was about US\$7,000 in 2007 and increased to US\$8,300 in 2008 due to economic growth and real exchange rate appreciation. Despite GDP per capita growth, income inequality and poverty levels remain high.

Between 2004-2006, growth rates were led by a positive international context and private consumption recovery. After that, macroeconomic stability and greater credibility resulted in interest rate reductions and credit expansion, which further accelerated private consumption and stimulated higher private investment decisions. This demand behaviour resulted in increasing shares of consumption and gross fixed capital formation to GDP.

¹ This part of the report was prepared by Roberto Iglesias of the Centro de Estudos de Integração e Desenvolvimento (CINDES).

² World Economic Outlook database. The group includes emerging and developing economies.

Reflecting better growth performance, unemployment rates decreased in 2007-2008 from about 11 per cent to about 8 per cent. Employment and real wages grew during the period, reflecting nominal increases over inflation of average and minimum wages.

Brazil's reaction to the world crisis was short and recovery has been firm. After two quarters of contraction, seasonally adjusted GDP started to grow at almost 2 per cent per quarter. The reason for this fast recovery was due to private consumption behaviour and short-run macroeconomic policies implemented by the government. Fiscal and monetary policies eased at the beginning of 2009 in order to further stimulate private consumption of durable goods and to sustain construction and non-tradable activities.

Fiscal stimulus has been based on public employment expansion combined with public sector salary increases and tax rebates on durable goods. These policies lead to a fall in the public sector primary surplus which subsequently decreased in comparison to the performance of 2003-2008. Despite the positive effects on current output, it is important to note that current fiscal policies will have to be restrained in the near future because of fiscal compromises, particularly on the expenditure side, are creating a permanent burden for medium-term fiscal balance.

Brazil repaid all its outstanding debt of SDR10.79 billion (or about US\$15.5 billion) to the IMF in December 2005. The net public debt ratio fell considerably from 53.7 per cent of GDP after 2002 to 40.3 per cent in September 2008. This partly reflects the repayment of the outstanding debt to the IMF and payments to other creditors, higher GDP growth, lower interest rates, the posting of a private sector primary surplus and the appreciation of the real during the period, which lowered the domestic value of foreign external debt.

Foreign-exchange reserves and greater confidence in economic policies allowed smaller controls on external transactions. In March 2005, foreign exchange markets were unified and the requirements for residents transferring foreign exchange abroad were reduced. Moreover, limits and restrictions for the purchase and sale of foreign exchange and for international transfers in reals were eliminated in August 2006. Central Bank foreign currency controls on export proceeds and import payments were abolished. Exporters were allowed to keep up to 30 per cent of their export proceeds abroad; this limit was increased to 100 per cent in March 2008. In April 2007, regulations on investments abroad by investment funds were liberalized further.

B. Trade structure

Between 2003 and 2008, exports grew at an average annual rate of 21.9 per cent, reflecting partly higher commodity prices and imports at 24.2 per cent, during the same period. As a result, Brazil's trade flow grew significantly, at a nominal annual average rate of 22.9 per cent between these years. In value terms, exports increased from US\$73.2 billion in 2003 to US\$198 billion in 2008, and imports rose from US\$48 billion in 2003 to US\$173 billion in 2008. While the value of exports was over 50 per cent higher than the value of imports during 2003-2006, the gap had been shrinking since 2006 due to the faster expansion of imports. This resulted in the contraction of the trade surplus in 2007 and 2008, reaching less than US\$25 billion in 2008.

Although Brazil's export structure remained relatively stable over 2003-2006, in 2007 primary products displaced manufactured products as the major export category, both as a result of strong demand and high prices for commodities. Exports of primary products were valued at US\$80 billion in 2007 (more than twice the 2003 level). The value of agricultural exports reached US\$48 billion in 2007, twice their level in 2003. Exports of mining products tripled over the period, reflecting in particular strong demand from other emerging markets, to reach US\$32 billion in 2007, while exports of manufactured

goods totalled almost US\$76 billion. Due to the strong export performance of primary products, the share of manufactured products in total exports decreased from 50.9 per cent in 2003 to 47.2 per cent in 2007, despite doubling in value terms (from US\$37.3 billion to US\$75.8 billion). Machinery and transport equipment was the main export sub-sector among manufactures, followed by automotive products and chemicals.³

According to Brazil's Trade Policy Review (TPR), imports of primary products increased faster than imports of manufactures during the period 2003-07, with annual average growth of 27.8 per cent and 24.8 per cent, respectively. The share of primary products increased by almost 2 percentage points over the period and rose to 29.4 per cent in 2007. However, manufactures remained the largest importing sector, accounting for 70.6 per cent of total imports in 2007 (72.5 per cent in 2003). Machinery and transport equipment was the single most important import category, representing more than 36 per cent of total imports. Fuels and mining products comprised the second largest import category, and accounted for over 23 per cent of total imports. Those two categories, together with chemicals, amounted to 79 per cent of 2007 imports.

Changes with respect to market destinations and sources of Brazilian trade occurred during the period between 2003 and 2007. Exports to the United States lost considerable market share, partly reflecting the strength of the Real vis-à-vis the United States dollar. Despite a significant decline of the United States' share of total exports between 2003 and 2007, it remained the most important single destination for Brazilian exports, representing 15.8 per cent of total exports in 2007 (down from 23.1 per cent in 2003). Exports to Argentina were three times higher in value terms in 2007 than in 2003; they represented 9 per cent of total exports in 2007, making Argentina Brazil's second largest single export destination. The European Union remained the main destination for Brazil's merchandise exports.

Exports to China increased at an annual average rate of 24 per cent between 2003 and 2007, but their share of total exports increased only marginally by 0.5 per cent. Brazil's exports to Africa rose almost three-fold from US\$2.9 billion to US\$8.6 billion, partly reflecting higher economic growth in this part of the world.

Brazilian imports from the United States lost market share, while those from China and Africa increased significantly. Although Brazil's imports from Europe increased in value terms from US\$20 billion in 2003 to US\$43 billion in 2007, their share declined from 27.2 per cent in 2003 to 22.9 per cent in 2007; but maintaining its status of main Brazilian supplier.

The United States remained the largest single origin of imports, accounting for more than 15 per cent of total imports, followed by China with more than 10 per cent of total imports and Argentina (8.6 per cent). The share of imports from Africa increased to more than 9 per cent in 2007, up from 6.8 per cent in 2003, mostly on account of a substantial increase in oil-related imports, particularly from Nigeria.

C. Recent trade and tariff policies

1. Tariff policy

The formulation, adoption, coordination and implementation of trade policy in goods and services is the responsibility of the Chamber of Foreign Trade (CAMEX) which was established in 1995.⁴ Its main decision-making body is the Council of Ministers, comprising the Minister of Development, Industry and Foreign Trade, who chairs it;

³ Trade Policy Review (TPR) – Brazil, WTO (2009).

⁴ Its functions are specified by Decree No. 4,732 of 10 June 2003.

and the Ministers of the Civil House, Foreign Affairs Finance, Planning, Budget and Administration, Agriculture and Supply, and Agrarian Development.⁵

In 2008, the Brazilian MFN tariff schedule applied rates ranging from duty free to 35 per cent. All tariffs are ad valorem, levied on the c.i.f. value of the imports. Brazil grants at least MFN treatment to all its trading partners. It does not impose seasonal, temporary or variable import levies. In addition to tariffs, imports are subject to four non-cumulative domestic taxes – two of these taxes were extended to imports in 2004.

Brazil has applied the MERCOSUR Common External Tariff (CET) since 1 January 1995. The CET is expressed in the Common MERCOSUR Nomenclature (NCM), which is based on the Harmonized System (HS 2007). Each MERCOSUR member was allowed to prepare a list of exceptions to the CET, comprising capital goods (BK list), information technology and telecommunications equipment (BIT list), and a basic list of national exemptions. The exceptions may result in applied tariffs above or below the CET, but they are not allowed to break WTO tariff binding commitments. Brazil eliminated its BK list during the period under review and its BIT list contains 376 tariff lines corresponding to products that are not produced in Brazil.⁶

The basic list of national exemptions includes products for which the immediate adoption of the CET may pose difficulties. In 2007, the deadline for the elimination of the basic exception list of Brazil was extended until 31 December 2010. Brazil is allowed to maintain its 100 tariff headings up to 31 December 2008, and is required to reduce them gradually until 2010. Up to 20 per cent of the headings in the basic list of exemptions may be altered upwards every six months. In June 2009, Brazil retired seven steel products from the exemption lists to increase its tariffs from 0 per cent to 12-14 per cent.

Brazil also applies exceptions to the CET in the form of MFN tariff quotas. Exceptions to the CET for a number of medicines and pharmaceutical products, as decided by the Minister of Health, were eliminated recently.

The 2008 simple average applied MFN was 11.5 per cent, up from 10.4 per cent in 2004. This is mainly due to an increase of 1.1 percentage points in the average tariff of non-agricultural products (WTO definition) to 11.6 per cent, since the agriculture sector average remained practically constant at 10.1 per cent. More specifically, between 2004 and 2008, Brazil increased its applied tariffs for chemical products, footwear and textiles and clothing. Brazil's tariff structure still shows low dispersion, as measured by a coefficient of variation of 0.7.⁷

Brazil reduced its highest duty rates from 55 per cent in 2004 to 35 per cent in 2008. However, at the end of 2008 it increased the tariff applied to one tariff line (peaches otherwise prepared or preserved) to 55 per cent. Duty-free tariff lines represent 8.3 per cent of the total tariff. If only dutiable lines are considered, the tariff average rose to 12.5 per cent in 2008.

More than one-third of tariff lines have rates between 1 and 10 per cent. Some 58 per cent of tariff lines have rates of 10-20 per cent; 661 lines are subject to tariffs higher or equal to 20 per cent but lower than 35 per cent, most of which are applied to cotton, man-made staple fibers, beverages, nuclear reactors and electrical machinery. The most frequent duty rate is 14 per cent, accounting for some 22 per cent of total lines, followed by the 2 per cent duty rate, representing about 18 per cent of total tariff lines. The highest rate of 35 per cent applies to 424 tariff lines (4 per cent of the total), including garlic, tires, carpets and textile floor coverings, textiles, footwear, articles of apparel and

⁵ Website of the Ministry of Development, Industry and Foreign Trade.

⁶ MDIC online information.

⁷ TPR- Brazil, WTO (2009), page 31.

clothing, and motorized vehicles. The highest average rate applies to the textile and clothing product group, which recently increased (from 17.2 per cent in 2004 up to 25.1 per cent in 2007), followed by dairy products and transport equipment.

According to Brazil's TPR, the tariff continues to show signs of escalation in most industries, with a higher tariff average on processed items than on semi-processed goods, which are themselves higher than raw materials.

Tariff concessions may be obtained through the "Ex Tarifário" mechanism, a temporary reduction in import duties for products in the BK and BIT lists. Tariff rates are normally reduced to 2 per cent, or 0 per cent in a few cases. The reduced tariff rates may be used for two years; the objective of the concessions is to reduce investment costs.

Goods imported under the temporary admission regime are eligible for total or partial tariff exemptions, while goods and services imported into a free-trade zone or export zone are eligible for exemption (or reduction) from all taxes and duties levied on imports. Goods in transit are subject to the suspension of import duties. They must enter through specified ports designated as transit zones for each neighbouring country.

Tariff concessions are also granted through a number of customs regimes, such as the Distribution Customs Deposit (DAC), the Guaranteed Deposit (DAF) and the Special Deposit (DE), which allow for the warehousing of imports without prior payment of customs duties.

In the case of shortages within MERCOSUR, its members are allowed to temporarily reduce the CET applied rate on up to 20 products at a time. The reduction must be coupled with quantitative restrictions in the form of tariff quotas, and must not cause an intra-MERCOSUR trade reduction, nor alter competitiveness conditions in the region; in any case, other MERCOSUR members must always be consulted before a reduction is enacted. In 2008, Brazil applied CET reductions in the form of tariff quotas to 12 tariff lines.⁸

Under the Agreement on Agriculture, Brazil may apply an MFN tariff quota (10,000 tons) for pears and apples (HS 0808.2010 and 0808.1000). But, this quota was not opened because the MFN tariff applied during 2004-2007 (ranging from 10 to 13 per cent) was lower than the in-quota tariff rate of 15 per cent.

2. Tax policy on imports

As mentioned above, in addition to tariffs, the following internal taxes are levied on imports: the industrial products tax (IPI); the tax on the circulation of merchandise and on the supply of interstate transportation and communication services (ICMS); and contributions to the social integration programme (PIS), which were used to finance social security (COFINS). The application of the PIS and COFINS to imports was introduced in 2004. Internal taxes are applied to different product groups at diverse rates, with the ICMS also varying from state to state, all of which adds complexity to the tax system. Moreover, certain states establish ICMS exemptions for goods produced and sold within that state, but apply the full ICMS rate to imported goods and goods from other states. Imports of certain commodities, semi-manufactures and equipment

⁸ The products subject to tariff quotas are: sardines (0303.71.00); almond oils (1513.21.10 and 1513.29.10); disodium sulphate (2833.11.10); other phosphinates (2835.31.90); cumene (2902.70.00); terephthalic acid (2917.36.00); flat-rolled products of iron of a thickness exceeding 10mm (7208.51.00); other flat-rolled products of other alloy steel (7225.40.90 and 7225.99.90); other structures and parts of structures (7308.90.90); and other carbon electrodes, brushes, lamps and batteries (8545.90.90).

by companies established in the Manaus Free Trade Zone are exempt from IPI, ICMS, PIS and/or COFINS.⁹

The importation and commercialization of gasoline, diesel, kerosene, fuel oil, liquefied petroleum gas (LPG), and combustible ethylic alcohol are subject to a contribution for “interventions in the economic domain” (CIDE). This tax is charged as a specific rate per import unit. Brazil applies two special charges on transportation, including imports, namely: the additional airport tax (ATAERO), and the additional tax for the renovation of the merchant marine (AFRMM).

3. *Export policies*

Brazil implements a number of schemes to encourage exports, including a drawback regime, export-processing zones, public export financing, insurance and guarantee programmes. Brazil provides other incentives and government assistance to domestic producers both at the federal and at the state level. Export taxes are levied on cigars, leathers and skins.

The Brazilian drawback system provides for the suspension, exemption or restitution of tariffs. The system also allows for the suspension of taxes, such as the IPI, PIS, COFINS, ICMS and AFRMM, paid on imported inputs or parts used to produce exportable goods or to package them.¹⁰ The requirement that the f.o.b. value of exports be at least 40 per cent higher than the value of imported inputs was eliminated in 2007. The drawback regime as applied by the SECEX has two modalities: suspension and exemption. A third modality, restitution, is granted by the Ministry of Finance Secretariat of Federal Revenue of Brazil (RFB), and it may imply the reimbursement of indirect taxes paid on imported goods used in the production or assembly of exported goods. In September 2008, as part of the strategy to stimulate exports, the government exempted the payment of taxes on domestic inputs to be used in the production of exports.

Companies established in export-processing zones (EPZs) are allowed to acquire or import goods and services with suspension of import duty and the tax on industrial products (IPI), and the contribution to social security financing (COFINS), the contribution to the social integration programme (PIS), and the additional freight for the renewal of the merchant marine (AFRMM). The suspension applies to new and used capital goods for use by enterprises authorized to operate in the EPZ. To benefit from the scheme, firms must export 80 per cent of the turnover related to the sales of goods and services. Products and services sold in the internal market, as well as the services and goods used as inputs in the production of those domestic sales, are subject to all taxes imposed on domestic acquisition or importation.

Brazil implements a number of export financing, insurance, and guarantee schemes aimed at helping producers and exporters to access credit.¹¹ The export financing programme (PROEX) is one of Brazil’s main tools to support exports. The programme is aimed at providing access to credit at preferential conditions to companies that would otherwise have difficulties obtaining it, or would only be able to do so at the high market interest rates in the domestic economy. The manner in which PROEX was applied to aircraft exports was challenged in the WTO, and its procedures has been modified twice since 2004. In addition, the BNDES-EXIM programme provides preferential export credits linked to domestic content.

⁹ SUFRAMA online information.

¹⁰ Decree No. 4,543 of 26 December 2002, Articles 335, 336 and 337; Decree No. 4,544 of 26 December 2002, Article 42; Law No. 10.865, of 30 April 2004, Article 14.

¹¹ Brazil has a relatively low credit to GDP ratio; it was 34.7 per cent in December 2007. Central Bank of Brazil (2008).

The PROEX has two modalities: direct financing (PROEX financing) and interest rate equalization support (PROEX equalization). In 2007, it supported exports of approximately US\$4.4 billion, or 2.7 per cent of total Brazilian exports, covering 1,986 transactions of 460 exporters; disbursements by the Banco do Brasil were US\$331.6 million for financing and US\$183.8 million for rate equalization.¹² During the present crisis, the government implemented several measures to enlarge the scope of the PROEX, including measures aimed at increasing the upper level of firms to be financed and reducing the requirement of direct financing modality.

The BNDES-EXIM programme, operated by the BNDES, provides export credits for products included in all NCM chapters, except chapters 01,10,11,12. Products with a domestic content, in value terms of at least 60 per cent are automatically eligible for financing; products not meeting this requirement may also benefit from the programme subject to a non-automatic analysis procedure. The total financial cost for the borrower is the relevant interest rate plus the BNDES' remuneration plus the financial institution's remuneration. All exporting companies, regardless of the origin of the capital, are eligible to use the programme. There are six financing modalities. In June of this year, the BNDES reduced the interest rates of BNDES_EXIM lines from 12 to 4.5 per cent.

D. Recent and new commitments and regulations related to SPS and TBT

1. Technical regulations and standards

There have been only a few recent changes in the legal and institutional framework governing technical regulations measures; but it is important to note that guidelines were introduced for the adoption of technical regulations, and new rules were issued for genetically modified organisms.

According to Brazil's TPR, a large number of agencies issued technical regulations at the federal level, each following its own procedures. The adoption in 2007 of guidelines (Good Regulatory Practice Guide- CONMETRO) for the elaboration of technical regulations is thus a valuable measure because it brings more transparency and consistency to the elaboration process. Brazil is also taking steps to ensure that the notification of technical regulations is in all cases made within the multilaterally recommended periods. Technical regulations are always published in the Official Journal and, according to the authorities, are mostly based on international standards.

All ministries and agencies follow similar general procedures to adopt technical regulations.¹³ Public hearings may also be organized to promote public consultation. In parallel, if the proposed technical regulation is considered to have trade effects, the draft is sent to the WTO to allow Members to present comments. INMETRO is in charge of handling international comments. The private sector, both domestic and foreign, may participate in the discussions. After all comments and suggestions are taken under consideration, the ministry or agency decides whether to adopt the technical regulation, with or without modification.

Technical regulations take the form of laws, decrees or resolutions, as appropriate, and are published in the Official Journal and, in some cases, on the ministry's website. Brazil normally allows a period of six months between the publication of the measure and its entry into force. Brazil's TPR noted that the period of comments for WTO members is too short in practice, but it is expected that Good Regulatory Practice Guide adopted in 2007 would raise the average number of days allowed for comments.

¹² Banco do Brasil (2008).

¹³ TPR- Brazil, WTO (2009), pag.48.

According to Brazil's TPR, the Brazilian authorities claimed that the vast majority of Brazil's technical regulations are established on the basis of international standards. In the exceptional cases where this is not the case, they are based on performance criteria.

INMETRO maintains a computerized database system that contains all the technical regulations notified to the WTO since 2001. While there is no central inventory of all technical regulations in force in Brazil, an exporter may use SISCOMEX to find out if the product being exported to Brazil is subject to any technical regulation. According to the TPR, "no statistics were available to the WTO Secretariat on the number of technical regulations currently in force, nor the percentage notified to the WTO".

Brazil notified 181 technical regulations to the WTO during the period between 2005 and 2008.¹⁴ The notifications cover regulations in several areas and by different federal authorities, and include MERCOSUR regulations. The number of notifications issued each year has decreased, although Brazil notified 48 technical regulations in the first ten months of 2008. Almost one fifth of the technical regulations notified were with respect to health and pharmaceutical products; other significant product groups were consumer goods, agricultural products, foodstuffs, electrical and electronics, chemicals, machinery and beverages. The Good Regulatory Practice Guide of 2007 dealt with issues, such as regular revision of technical regulations which were not contemplated in the previous legislation.

Imported products must carry clear information about the products' quality, quantity, composition, price, guarantee, shelf life, origin, and risks to consumers' health and safety. This information has to be in Portuguese, and indicate the country of origin. In addition, all labels must contain the brand or name of the manufacturer. Medicines, textiles, pharmaceutical specialties, and certain foodstuffs are subject to specific labelling regulations. Labels for a group of processed food products, including all products of animal origin, require approval by the Ministry of Agriculture. In addition, ten groups of electrical products are subject to mandatory labelling as part of a government energy-saving programme. Importers, exporters or manufactures of pharmaceuticals, cosmetics, and foodstuffs must be authorized by and registered with ANVISA.¹⁵

INMETRO and ANVISA are responsible for the adoption of conformity assessment procedures. Conformity assessment procedures that differ from international standards, or have considerable economic importance or impact on health, are notified to the WTO through INMETRO. Depending on the specific characteristics of the product, conformity assessment may be through certification, labelling, inspection, sampling, and/or a conformity declaration by the supplier. Certification is mainly carried out by accredited third parties and is generally voluntary.

As at October 2008, 59 products were subject to mandatory certification, including baby bottles and dummies, buses, electrical cables, electrical appliances, fuel tanks, gas containers, matches, parts for vehicles, preservatives, steel tubes, and toys and tyres. Certification is also mandatory for eight types of services, mostly linked to motor-vehicle and gas distribution, and for the process of manufacturing food baskets.¹⁶ Motor-vehicle safety and the transport of dangerous products are subject to mandatory inspection.¹⁷

Under the Brazilian System for Conformity Assessment, conformity declaration by the supplier is only applied to products or services of low to medium risk to human health and safety. Eight products are subject to mandatory conformity declaration by

¹⁴ Ibid, page 49.

¹⁵ Registration requirements are contained in ANVISA Resolution No. 79 of 28 August 2000, as amended.

¹⁶ INMETRO online information.

¹⁷ TPR – Brazil, WTO (2009), Page 49-50.

suppliers, and three products are subject to mandatory verification of performance (advance signal registration equipment, liquefiers, and hair dryers).¹⁸

Brazil recognizes product and system certification from foreign certification agencies that have a memorandum of understanding with a Brazilian certification body, or with whom INMETRO has signed an agreement. Brazil notified to the WTO five multilateral recognition agreements (MRAs) on conformity assessment between INMETRO and agencies of: the EC, Canada and the United States and Mexico, and two other agreements with some 30 countries each.¹⁹ In general, under these agreements, each signatory recognizes the operation of the other signatories' quality management systems within programmes defined as equivalent to its own. INMETRO has memoranda of understanding with Argentina, Cuba, France, Germany, India, Paraguay, Ukraine, the United Kingdom, and LAIA countries; and cooperation agreements with the Plurinational State of Bolivia, Costa Rica, Guatemala, Mozambique, the Russian Federation and Uruguay.²⁰ Additionally, INMETRO has signed various multilateral recognition agreements on certification and accreditation.²¹ One of INMETRO's strategic goals is to promote the use of provisions set out in Brazil's MRAs, which according to INMETRO are not fully exploited.²²

INMETRO is the national accreditation body and there are 33 certification bodies accredited for quality systems, 29 of which are Brazilian and 4 foreign (from Italy, the United States, Uruguay, and Venezuela); 48 bodies are accredited for product certification (of which only three are foreign, from Argentina, Costa Rica and Venezuela); and 17 environmental systems management and four forest accreditation bodies (two are foreign, from Italy and the United States). Since 2003, ten accreditations granted to foreign bodies have been suspended.²³

Responsibility for the development of (voluntary) standards has been vested in the ABNT, a non-governmental body that receives financial support from the Federal Government, and which has the authority to accredit sectoral standardization bodies (ONSS) related to specific industrial and economic sectors. The ABNT represents Brazil in the ISO/IEC and in regional normalization fora. Since 2004, Brazil has developed approximately 2,130 standards, of which some 38 per cent were adoptions of ISO or IEC standards without any change. The remainder were either purely domestic initiatives or adaptations of international standards.

2. Sanitary and phytosanitary measures

Since 2004, there have been only a few changes in the legal and institutional framework governing the adoption of sanitary and phytosanitary (SPS) measures, with new regulations introduced, inter alia, for genetically modified organisms. Brazil prohibits the importation of hormone-treated meat and poultry. During the 2004-2008 period, Brazil made 392 notifications under the SPS Agreement. According to Brazil's TPR, the authorities note that, while most notified SPS measures being based on international standards, they are taking steps to improve the notification procedures in order to allow more time for comments.

The administration of regulations on animal and plant health for domestic goods, imports and exports is the responsibility of the Ministry of Agriculture, Livestock and Supply (MAPA), through the Secretariat of Agricultural Protection (SDA). The SDA is responsible for controlling the sanitary and phytosanitary (SPS) aspects of production

¹⁸ INMETRO online information.

¹⁹ TPR – Brazil, WTO (2009), page 47.

²⁰ INMETRO online information.

²¹ For a complete list of these agreements see INMETRO online information.

²² INMETRO online information.

²³ INMETRO online information.

and trade of all livestock, fruits, vegetables, grains, plants, veterinary drugs, pesticides and their components, including, inspecting their manufacture, import, and storage, administration and application of SPS regulations, and the implementation of actions agreed upon with international agencies and foreign governments. The SDA is also responsible for issuing safety certification for food exports.

The Brazilian Health Surveillance Agency (ANVISA), which is an autonomous government body related to the Ministry of Health, is responsible for administering sanitary regulations designed to: protect human health and related to imported and locally produced foodstuffs, tobacco, cosmetics, pesticides, and pharmaceutical products; and to avoid or reduce the risk of entry, establishment or spread of epidemics of human diseases.

The Secretariat for International Relations of Agribusiness of the MAPA, and the Office of International Affairs (formerly the Assistance Unit for International Issues) of ANVISA are the Brazilian enquiry points.²⁴ The Ministry of Foreign Relations is Brazil's notification authority for SPS-related matters.²⁵

The Ministerial Act No. 183 of 9 October 1998 remains the main legislation with respect to the sanitary requirements for imports of animal products. This Act prescribes the conditions for recognition of inspection systems and certification of foreign establishments. The Resolution RDC ANVISA No. 81/08 of 2008 establishes the rules for sanitary surveillance of imported goods, including processed foodstuffs. With regard to plant products, several regulations apply to each specific type or family of plant.

Among the legislation passed during 2004-2008, Decree No. 5,591 of 22 November 2005 regulates the use of genetically modified organisms and Decree No. 4,954 of 14 January 2004 establishes rules for the inspection and surveillance of the production of and trade in fertilizers. A number of regulations affecting specific animal and plant products, were also introduced during the 2004-08 period.²⁶

ANVISA and the SDA are the only Brazilian authorities that can issue and adopt SPS measures. Both issue directives, when necessary, that list the products subject to sanitary requirements, as well as non-automatic import licences in their respective area of competence.²⁷

Proposed SPS measures are published in Brazil's Official Journal and notified regularly to the WTO. Brazil's TPR stated that, compared with the 47 SPS-related notification made during 2000-03, Brazil submitted eight notifications in 2004, 39 in 2005, 116 in 2006, 125 in 2007 and 104 in 2008. During 2004-2008, Brazil notified two emergency measures, taken in April and July 2008.²⁸ The majority of the 392 notifications made during the period between 2004 and 2008 provided less than 60 days for comments by WTO Members. Moreover, a significant number of the measures notified did not allow for an adaptation period of six months between the dates of publication and entry into force. According to the report, the authorities note that, although not indicated in the notifications, most of the measures notified were equivalent to international standards and/or used for trade facilitation. They also indicate that steps are being taken to improve the notification procedures in order to allow more time for comments.

²⁴ WTO document G/SPS/ENQ/23, 27 March 2008.

²⁵ WTO document G/SPS/NNA/14, 18 September 2008.

²⁶ MAPA online information.

²⁷ The latest versions of these documents are: MAPA Normative Instruction No. 40 of 30 June 2008, ANVISA Resolution RDC No. 217 of 15 December 2006, and Ministerial Act SVS/MS No. 344 of 1998 re-issued in 1 January 1999.

²⁸ WTO documents G/SPS/N/BRA/397, 7 April 2008; and G/SPS/N/BRA/460, 13 August 2008.

Analyses (e.g. sampling) are carried out to determine conformity with SPS measures. They must take into account the place of origin and the characteristics of the product.

Brazilian SPS regulations require all companies exporting products of animal origin to Brazil to be registered with the Animal Origin Products Inspection Department (DIPOA) at the MAPA; all products must also be registered.²⁹ Importers and domestic manufacturers of foodstuffs, cosmetics and pharmaceutical products subject to sanitary requirements must obtain a licence to operate, from the state or municipal sanitary authority, as well as authorization to operate from ANVISA.³⁰ Importers are also required to register certain products with ANVISA.³¹ Imports of products already registered with ANVISA only require notification to the Agency.

All imports of products subject to SPS requirements must obtain a non-automatic licence (via SISCOMEX), in most cases before departure from the country of origin.³² Where the good is already at the border, ANVISA takes no longer than 72 hours to issue the licence.

Brazil accepts phytosanitary and zoosanitary certificates issued by official sanitary services in countries that follow the guidelines of Codex, IPPC, OIE and other international scientific organizations. Import prohibitions for the protection of animal health are in place for a number of products; they are established under various regulations, and there is no unified list.

All imports of animal products and their sub-products that are subject to SPS requirements must be inspected at the port of entry. In principle, physical inspection should be carried out on 1 per cent of packages that constitute the tariff line, and from a minimum of two to a maximum of ten packages. For products in bulk, five samples should be collected separately for inspection; different rules apply for containers. Samples from the packages that were physically inspected may also be used for the laboratory testing.

Recognition of pest or disease-free areas, or of areas of non-dangerous pest and disease prevalence, is subject to an on-site inspection, as well as an analysis of the exporting country's relevant procedures. Based on questionnaires sent to the SPS authorities of the exporting country, Brazilian authorities evaluate whether the inspections systems, accrediting procedures and product/label approval mechanisms are equivalent to those applied in Brazil. On-site inspections of the exporters' establishments are undertaken at the cost of the interested party.

Decree No. 5,591 of 22 November 2005 regulates the new Law No. 11,105 of 24 March 2005 on the production, storage, transport, research and trade of genetically modified organisms (GMOs). Any product containing GMOs may only be imported with prior authorization from the National Technical Commission of Biosecurity (CTNBio), which is responsible for formulating and implementing Brazil's national biosecurity policy. CNTBio comprises representatives of various ministries and specialists in the relevant scientific areas. It may organize public hearings on important issues before it makes a decision. Decree No. 4,680 of 24 April 2003, makes compulsory the labelling of

²⁹ For product requirements (in Portuguese) see MAPA online information. Available at: <http://www.agricultura.gov.br/>.

³⁰ MRE and FUNCEX (2006).

³¹ Products that require registration are listed in ANVISA Resolution RDC No. 278 of 22 September 2005 (foodstuffs); ANVISA Resolution RDC No. 211 of 14 July 2005 (cosmetics); and ANVISA Resolution RDC No. 132 of 29 May 2003, as amended (pharmaceuticals).

³² Normative Instruction MAPA No. 40 of 30 June 2008 contains the list of products that require a non-automatic licence before departure.

food products for animal and human consumption containing over 1 per cent of GMOs. Brazil is reportedly the largest exporter of non-GM soy beans.

Brazil prohibits the importation, exportation and the domestic commercialization of meat and other products from bovines fed with hormones. Trade and commercialization of substances, natural or artificial, with anabolic characteristics are also banned, unless intended for therapeutic and research use.³³ The use of hormones in poultry production, as well as imports of poultry fed with hormones, is prohibited.³⁴

Brazil is an original Member of the WTO, and one of its most active participants. As such, Brazil has submitted numerous proposals to various WTO bodies and took part in the GATS negotiations on telecommunications and on financial services. However, Brazil did not ratify the Fourth Protocol on telecommunications, and, is still in the process of ratifying the Fifth Protocol on financial services.³⁵

Brazil is a full Member of the Southern Common Market (MERCOSUR) and has preferential trade agreements with the Plurinational State of Bolivia, Chile, Colombia, Cuba, Ecuador, Mexico, Peru and the Bolivarian Republic of Venezuela. Brazil also has a number of bilateral preferential agreements with other LAIA members. An FTA between MERCOSUR and Israel is pending ratification. As part of MERCOSUR, Brazil has signed a partial scope agreement with India, concluded negotiations of a partial scope agreement with the South African Customs Union (SACU), and is negotiating preferential trade agreements with Egypt, the Gulf Cooperation Council (GCC), Jordan, Morocco and Turkey. The negotiation of an Association Agreement between MERCOSUR and the European Union, including a bi-regional FTA, remains on MERCOSUR's agenda.

MERCOSUR's Common External Tariff (CET) entered into force on 1 January 1995, with a number of sector and country-specific exceptions. Under Decisions CMC 21/02, 31/03, 38/05 and 59/07, Brazil maintains an exception list comprising 100 tariff lines until 31 December 2009, to be trimmed to 50 tariff headings in the second half of 2010 and eliminated by 31 December 2010.³⁶ These exceptions together represent 0.7 per cent of Brazilian tariff lines [Chapter III(2)(iv)(a)].

3. *Bilateral and regional trade agreements*

MERCOSUR is by far Brazil's most important preferential agreement in terms of value of trade, although only some 10 per cent of Brazil's merchandise trade takes place with the three other MERCOSUR members (Argentina, Paraguay and Uruguay).

MERCOSUR's Common External Tariff (CET) entered into force on 1 January 1995, with a number of sector- and country-specific exceptions. Brazil maintains, exception lists comprising 100 tariff lines until 31 December 2009, which will be trimmed to 50 tariff headings in the second half of 2010, and eliminated by 31 December 2010.³⁷ These exceptions together represent 0.7 per cent of Brazilian tariff lines.

Since 2004, Brazil has extended its preferential regime to the Andean Community countries (Colombia, Ecuador and the Bolivarian Republic of Venezuela), Cuba and Peru via preferential agreements, and Suriname via a partial scope agreement. In addition to

³³ MAPA Normative Instruction No. 10 of 27 April 2001.

³⁴ MAPA Normative Instruction No. 17 of 18 June 2004.

³⁵ TPR – Brazil WTO (2009), page 13

³⁶ Paraguay and Uruguay were authorized to maintain lists of exceptions of 150 and 125 tariff headings, respectively, until 31 December 2010 (MDIC online information).

³⁷ TPR – Brazil, WTO (2009). Paraguay and Uruguay were authorized to maintain lists of exceptions of 150 and 125 tariff headings, respectively, until 31 December 2010 (MDIC online information).

MERCOSUR members, Brazil extends tariff preferences to imports from the Plurinational State of Bolivia, Chile and Mexico through MERCOSUR's FTA; and to Guyana via the partial scope agreement under the framework of LAIA.

According to Brazil's TPR, summary statistics could not be calculated for preferential tariffs under Brazil's various FTAs because the WTO Secretariat did not have access to the tariff-line level rates actually applied under these agreements in 2008.

Brazil participates in the Global System of Trade Preferences among Developing Countries (GSTP). Like other MERCOSUR members, Brazil grants preferences to participating countries on some 98 HS96 tariff headings. The preferences range from 10 to 50 per cent and include agricultural products, fuels, chemical products, hides and skins, ferrous and steel products, among others.

The FTA between MERCOSUR and Israel was signed on 18 December 2007. The agreement establishes the gradual elimination of tariffs, based on a schedule with four categories, within a 10-year timeframe. The agreement has provisions on rules of origin; dispute settlement; safeguards; technical regulations, standards and conformity assessment procedures; sanitary and phytosanitary measures; and technical and technological cooperation, as well as an annex on the promotion of mutual assistance in customs matters.³⁸ The agreement provides for its entry into force, bilaterally, after ratification by Israel and one of the MERCOSUR states. The agreement is not yet in force in Brazil.

Trade negotiations between MERCOSUR and the European Union are based on the EU-MERCOSUR Interregional Framework Co-operation Agreement, signed in December 1995. The negotiations were formally launched in 1999 and tariff and services negotiations began in July 2001. Market offers exchanged in September 2004 included goods, services, government procurement and investment, but were not deemed enough for an agreement.³⁹ Since then, there have been a number of ministerial and senior official contacts but no formal resumption of negotiations.

In May 2007, the EU recommended the launch of a strategic partnership to further deepen its ties with Brazil. The first EU-Brazil Summit was held in Lisbon in July 2007.⁴⁰ Topics to be addressed under the new partnership include effective multilateralism, climate change, sustainable energy, strengthened trade and economic relations, and the fight against poverty.⁴¹

MERCOSUR and India signed a framework trade agreement on 17 June 2003, which provided for the negotiation of a partial scope agreement, signed on 25 January 2004 (annexes were signed on 19 March 2005). The agreement contains disciplines on safeguards, anti-dumping and countervailing measures, technical barriers to trade, and sanitary and phytosanitary measures, as well as dispute settlement procedures. The trade agreement covers 450 tariff lines for India and 453 lines for MERCOSUR, with reductions of between 10 per cent and 20 per cent on the MFN tariff. As at September 2008, the agreement was not yet in force, pending ratification by Uruguay.

MERCOSUR and South Africa signed a framework agreement in December 2000; its main objective is the conclusion of a free-trade agreement. The other four member countries of the Southern African Customs Union (SACU) joined the negotiations in 2003, and a preferential trade agreement between MERCOSUR and SACU was concluded in

³⁸ For the text of the agreement, see: <http://www.desenvolvimento.gov.br>

³⁹ For the details of the offer, see: <http://www.mre.gov.br>.

⁴⁰ 1st EU-Brazil Business Summit. Lisbon 4 July 2007, Joint Declaration of Brazilian and European Business..

⁴¹ European Commission External Relations online information. .

April 2008. The authorities note that, as at November 2008, the parties are working on a date for the signature within 2008.

Brazil is negotiating preferential trade agreements with Egypt, the Gulf Cooperation Council (GCC), Jordan, Morocco and Turkey. Discussions on the possible conclusion of a MERCOSUR-CARICOM trade agreement have also started.

II. NTMs applied by Brazil

A. *National data sources*

The Secretariat of Federal Revenue of Brazil, in the Ministry of Finance, is responsible for customs administration, including duty collection. There were no significant amendments to Decree No. 4,543 of 26 December 2002, which establishes the framework for customs procedures. Ministerial Act SECEX No. 36 of 22 November 2007 consolidates the main regulations on import procedures, some of which were introduced during the review period. During the review period, Brazil continued to take gradual steps to simplify and modernize its customs procedures.

B. *NTMs applied by Brazil*

The database created and maintained by the Latin America Association of Integration (ALADI) was used in the course of the preparations for the survey. The measures are classified according to the previous NTM classification of UNCTAD.

The database has information on 75,525 cases of NTMs applied to 8-digit products. The stock of barriers is evenly distributed with slightly higher proportion of SPS measures. In the SPS group, the main measure is product characteristic standards which define the characteristics requested for products and contribute to the safety and suitability of products.

III. Challenges

A. *Business survey: Challenges faced and lessons learned*

1. The survey took place during the global financial crisis which made it difficult to successfully complete it. Another reason was that many firms showed no interest in participating in the survey as the numbers of NTMs that they faced was too small and therefore did not show a great deal of interest in providing further information.
2. The application of the questionnaire was difficult because some firms reported that they had difficulties with the complexity of the classification that had been used.
3. The length of the questionnaire was also a problem for some firms as they didn't want to take time off to patiently answer to the questions on NTMs.

Together, these problems proved to be a major obstacle to obtaining information from the firms. The survey results were not presented in this report due to the lack of comparable information across firms.

IV. Conclusions

It was not possible to obtain firm-level data by means of a business survey as the business sector didn't show much enthusiasm to come up with a clear answer to the NTMs survey questions; the timing of the survey was also a major source of challenge for collecting information.

Brazilian firms believed that the problems related to NTMs could be solved through other means and not by answering questions. A major issue was also that of coordination between the survey company and the exchange of information with the private sector. It was also recognized that many firms were not keen to share information with UNCTAD.

Constant updates on NTMs imposed by Brazil in order to keep track of new regulations. Furthermore, strengthening of cooperation between the concerned ministry and the ALADI would be helpful in providing more frequent information to exporters and importers.

A long-term and sustained investment is required to build capacity at the national level to obtain NTMs information regularly. UNCTAD, along with other international organizations, should continue to provide technical assistance to help reduce the challenges related to NTMs in Brazil.

CHILE¹

I. General Overview

A. Country profile

Chile's open economy has not been spared the country from the full effects of the global economic crisis. Nevertheless, due to the availability of foreign reserves accumulated during the natural resources boom, it has been able to implement expansionary fiscal policies to moderate the effects of the global shock and is expected to recover by the end of 2009 and to grow fairly rapidly in 2010.

Economic growth in Chile over the past decade (2000s) has been slower than in the previous decade (1990s), but still managed to achieve a growth rate of 4.7 per cent in the period from 2004 to 2008. Chile is a middle-income country with a PPP income of US\$14,510; however, the World Bank estimates that income distribution is skewed as the Gini coefficient in 2000 was 57.1. Nevertheless, due to the highly focused use of social policies, Chile is a country with a high human development index (HDI); in fact, it has the highest HDI in Latin America and has an index level comparable to that of Poland.

Chile switched from an import-substitution approach to development, which led to stagnation in the 1960s and early 1970s, to an export-oriented approach starting in 1975. The switch led to a deep economic crisis, followed by a further deep crisis in 1981-82. Since then, growth has been rapid, with fairly shallow recessions approximately every decade. In the process of changing its approach to development, public utilities were privatized and the government adopted an arms-length approach to the economy. Among the few state-owned firms in the country is one of the largest copper mine producer, an oil refining company and a few smaller companies.

B. Trade and trade policies

Ever since 1975, Chile has had an export-oriented economy. Up until 1997, the almost uniform MFN tariff was 11 per cent, but has since been lowered to 6 per cent. According to the Chile's Trade Policy Review (2004), Chile is distinguished by:

¹ This part of the report was prepared by Ronald Fischer and Pablo Serra of the University of Chile.

“The uniform treatment of all sectors of the economic activity remains a key-feature of Chile’s policies, as witnessed by an almost uniform applied MFN tariff, the absence of significant programmes to assist specific activities, and the granting of national treatment to foreign investors in all but a few cases.”

In the past few years, Chile has signed free trade agreements (FTAs) with a diverse group of countries representing about 70 per cent of its trade.² There are also special (partial) trade agreements with a number of Latin American countries and with India. The value of the average tariff imposed on goods came to US\$702.74 million in 2008, representing an average tariff of 1.22 per cent of the US\$57,609 million imported; the value of Chilean exports came to US\$66,455 million.³

The growth of trade over the past 12 years indicates that the expansion in trade volumes over this period is in part due to a large increase in the price of commodities, both those imported (Chile has no oil or gas and little coal), as well as mineral exports.

The few exceptions to the uniform tariff are related to agricultural products. The most important exception is the special tariff on chicken pieces at 25 per cent and 31.5 per cent on wheat, wheat flour and sugar. There have been safeguards on meat imports from Argentina and on milk imports, and phytosanitary restrictions on chickens and meat.

Eighty-nine per cent of Chile’s exports are natural resources, which corresponds to 89 per cent of exports. The high relative importance of copper is in part a reflection of the high price of the metal in 2007.

The most important component of imports is intermediate goods. The relatively high proportion of intermediate products in imports is in large part due to the high price of oil and related goods in 2008.

C. Trading partners

Chilean exports partners are widely dispersed. About 35 per cent of exports to Asia are destined for China. This dispersion has a portfolio effect and adds stability to the export sector. The composition of imports is somewhat different, indicating that even at this aggregate level, there is no trade balance. Nevertheless, there is a large dispersion in the origin of imports.

The low relative value of exports to Latin America is probably due to high transport costs, as well as the production of similar export baskets. Another explanation for the low levels of exports to South America could be due to the existence of trade barriers, given that import levels are much higher.

² In 2008, 75 and 64 per cent of Chile’s exports and imports, respectively, are covered under FTAs.

³ Data for tariff revenue from the Chilean Customs agency, available at: http://www.aduana.cl/prontus_aduana/site/artic/20070417/asocfile/20070417185742/242_ingresos_tributarios_enerdiciembre_2008.xls.

D. Recent and new commitments and regulations related to SPS and TBT

Chile is a founding member of the WTO and was a contracting party to the GATT. It has been an APEC member since 1994. In the past 15 years Chile has actively pursued bilateral trade agreements, and has signed 20 trade agreements with 56 countries. Of the total number of agreements, 11 are free trade agreements (FTAs) with 17 countries, three are economic association agreements (EAAs). Chile has also signed FTAs with Nicaragua and Guatemala, but they still have to come into effect. FTA negotiations are ongoing with Malaysia, India and Panama, and the FTA with Turkey is undergoing parliamentary approval.

All the agreements that Chile has signed, with the sole exception of the FTA with Canada, include SPS chapters. The declared aim of these chapters is to uphold and enhance the WTO SPS Agreement and other international standards, in order to facilitate bilateral trade in food, plant and animal products, while at the same time protecting human, animal or plant life or health in the territory of each Party.

Agreements also attempt to increase transparency relating to implementation of SPS measures. Parties consent to exchange information on their respective SPS measures to ensure transparent implementation of the measures. The importing Party is required to inform the exporting Party of its SPS import regulations, and amendments or proposed amendments of import conditions are subject to notification procedures.

SPS chapters in the agreements establish that each party shall identify an overall contact point relating to SPS measures. In addition, they establish a SPS Committee, with the sole exception of the agreements with Australia, EFTA and the Chile-Japan treaty which set up a working group. The contact points, or the SPS Committees, are responsible for implementing the SPS chapter and for making notifications; reviewing progress on SPS matters that may arise between the parties; facilitating the consideration of requests for information and clarification of issues with the other Party; and exploring opportunities for cooperation and collaboration.

The Parties acknowledge the importance of transparency in decision-making, including providing a meaningful opportunity for persons to provide comments on proposed technical regulations and conformity assessment procedures. Some agreements state that on request of the other Party, a Party shall provide the other Party information regarding the objective of, and rationale for, a standard, technical regulation or conformity assessment procedure that the Party has adopted or is proposing to adopt.

All trade agreements, with the exception of the EFTA treaty, establish a Committee on Technical Barriers to Trade (TBT) to implement and monitor the operation of the TBT Chapter. The Committee's functions include monitoring the implementation and administration of the TBT chapter, enhancing cooperation in the development and improvement of standards, technical regulations and conformity assessment procedures, exchanging information on these procedures, and facilitate technical consultations to resolve any matter arising under the TBT chapter.

As a result of trade negotiations, the Ministry of Economic Affairs issued a decree (77/04) in 2004, which establishes the steps that Chilean authorities need to follow to elaborate, adopt and apply technical regulations and conformity procedures. They are required to publish in the national press or in their institutional web pages any new regulations and amendments before they come into force to allow all interested parties, either domestic or foreign, to have an opportunity to provide meaningful comments.

II. Business Survey

A. Survey methodology

1. Criteria for sample selection:

The sampling frame corresponds to data provided by ProChile, the government bureau specialized in export promotion which administers a database of all Chilean companies involved in importing and exporting products and services. The product data provided by ProChile was recorded according to the HS code used by the Customs Agency. The second stage consisted of grouping firms according to generic categories. In the following stage, a random sample of firms was selected. After discussions with UNCTAD, the sample had to satisfy the following criteria:

Case distribution: The sample is composed of 250 exporting firms and 50 importing firms.

Geographic coverage: The survey focused on the region of Greater Santiago and Valparaíso because they have the largest concentration of firms.

Sectors: The chemical, mining and service sectors were excluded from the survey because it was unlikely that they faced the type of problems which the study addresses.

Size of firms: Firms with operations for less than US\$200,000 were excluded, so as to not sample firms that are created for a very short period under favourable conditions and then cease to exist.

The information held by ProChile was not up to date, so the sample incorporated additional cases in case they were needed. For each group there were three additional forms. This led to the following sample universe among exporters:

B. Survey implementation

The field work activities consisted of:

1. Recruitment and selection of interviewers

Interviewers were selected according to whether they had any experience with similar survey methodologies and whether they had been exposed to issues raised in the survey in the course of their university studies. A total of 20 interviewers were chosen for the survey.

2. Training

MORI developed two educational tools: one for the application of the questionnaire, and the second on the classification of NTMs. Interviewers were trained separately from supervisors.

3. Obtaining interviews

The processes of arranging and applying the interview were kept separate. For the first stage, MORI used its “contactors”, who were trained on the objectives of the study and its content, and were provided with a dialogue with specific instructions for the successful arrangement of interviews. Each contactor was given a list of firms and the name of the person to be interviewed. Once arranged, the contactor provided the information to the Zone Chief, who coordinated and distributed the interviews among the team.

4. Application of the interviews

A day before the interview, the interviewer called the person to remind him/her and confirm the meeting. The next day, the interviewer asked the questions in the questionnaire and wrote the answers down immediately. Given the difficulty in applying section 2 of the questionnaire, each interviewer was given a tape recorder which he or she could use if the interviewee agreed. This was used to clear up any doubts, or remember details in order to complete the section on NTMs. On average, the interviews lasted 23 minutes.

5. Reception and revision on the survey

After the interviewer fielded 2 or 3 surveys, he or she returned to the office to hand in the material, and met with the Zone Chief, or the executive in charge of the project, to review the replies to the questions and verify survey answers. One important task was to clarify any queries on the classification of NTMs. Even before coding, it was important to register as clearly as possible the type of NTM, in order to facilitate the task of coding.

6. Supervision

MORI checked 20 per cent of the interviews by calling the respondent and checking the application and duration of the interview.

7. Coding

The codifiers were trained with the manual on NTMs, and could ask questions when they had doubts. Codification was a slow process, taking 30 minutes on average. Once the data entry was completed, STATA was used to detect data inconsistencies, which were then checked against the paper questionnaire and corrected. Furthermore, the simple frequencies of the data were checked for anomalies. The original SPSS database was finally exported as an Excel database.

C. Survey results

1. Profile of interviewed companies

A large percentage of the companies surveyed were active in the agricultural and forestry sector, and some of the manufacturing firms processed forestry products.

With regard to foreign ownership, most of the companies (77 per cent) had no foreign ownership. Only 14 per cent had more than 50 per cent foreign ownership. In 8 per cent of cases, foreign owners held minority participation.

The majority of firms (90 per cent) had been operating for more than 5 years, reflecting the fact that trade liberalization occurred more than 30 years previously. Less than 10 per cent were new firms.

Half of the firms (50 per cent) had more than 50 employees and could be considered to be fairly large. Firms with 21-50 employees accounted for 17 per cent of the firms that were surveyed. The percentage of firms with 10-20 employees was 14 per cent.

Across sectors, 53 per cent of firms exported more than 60 per cent of their production and were therefore, in essence, export-oriented firms. Seventy per cent of agricultural or food companies belong in this category, followed by trading companies with 59 per cent, and industry at 31 per cent. About 18 per cent of the firms exported only 1-20 per cent of their production, which meant that they were marginal exporters. This category includes 30 per cent of manufacturing firms in the sample.

2. *Reports on trade barriers*

The average number of reported case per company was 2.67. Given that the pairs of firms-destination countries is 2,479, the rate of NTM per firm-destination was 32.6 per cent. However, it should be noted that these results were historical cases and did not correspond to NTMs that were active at the time the interviews were held.

Twenty-seven per cent companies had not experienced a single NTM, while 40.7 per cent have experienced between 2 and 5. Only a small percentage (2 per cent) had more than 10 experiences. This group was composed almost exclusively of food exporters, with the exception of a single trading company that exported construction materials. They were almost all fairly large exporters, with several million US dollars in exports, except for one firm which no longer exported its products, but which was also in the food sector.

Forty-six per cent of the barriers faced by Chilean exports are SPS measures, which may be related to the export composition of the firms that were interviewed. Technical barriers to trade represented 24 per cent of all NTMs, and the third item in the rank was inspection before loading on board, with 14 per cent of the cases included in the "other technical measures" chapter. The other measures were relatively less important.

Basically, most of the products facing the highest frequency of NTMs were related to the food industry. For example, there were 105 NTMs (around 13 per cent) affecting edible fruits (category 800). Forestry products and their manufactures (cellulose, paper, cardboard) began to appear towards the end of the list.

Europe and the Netherlands both appear on the list. Most, if not all, of Chilean exports to Europe go through the port of Rotterdam, and therefore, there was some confusion on the part of the interviewer on whether the NTM is imposed by the Netherlands or the European Union. The 'all countries' variable meant all the countries with which the firm trades, without being more specific.⁴

⁴ It was impossible to determine which country or countries were affected by NTMs. Nevertheless, the data provides details on the companies involved, even if the home country of these companies was kept confidential.

Analysis

The data shows that the more Chile trades with a country, the higher the probability that it had faced an NTM. The percentage of exports of Chile with a country is a significant explanatory variable of the number of NTMs facing exports. For each 1 per cent increase in the proportion of total trade with a country, the number of NTMs increases by about 0.5 per cent, so that on average, Chile trades with the country that imposes relatively fewer trade barriers.

In general, Latin American countries impose the largest numbers of NTMs as a proportion of Chile's trade. For instance, only 1.5 per cent of Chile's exports go to Argentina, but it imposes 9 per cent of all NTMs. The relation between the percentage of exports to a country and the number of non-tariff barriers is not a clear relationship, although it is clear that as the percentage of exports increases, the number of NTMs increases.

However, it could be that the results were due to the fact that the trade composition was different vis-à-vis different countries. A better representation of the NTMs is given by the number of NTMs as a function of the number of firms and goods being exported to a country. Clearly, a higher number of firm-product pairs exported to a country leads to a higher number of NTMs.

The effect of FTAs on NTMs

The research carried out indicates that FTAs are effective in reducing the number of NTMs that a country may face. Firm-country pairs trading with a country with which it has concluded an FTA experience about 50 per cent fewer NTMs.

3. Specific aspects related to sanitary and technical regulations

Sanitary and phytosanitary requirements

None of the voluntary procedures were considered to be important as they only represented 3 per cent of the trade barriers encountered. The most important category were statutory SPS requirements, which represented about 25 per cent of NTMs, in particular, labelling and packaging requirements which represented 10 per cent of the NTMs in this category. The remaining issues under this category were traceability, hygiene and quarantine issues.

- (a) Most of the NTMs were related to SPS requirements and affect certain products, notably agricultural and forestry products.
- (b) Most of the NTMs seemed to be fairly easy to adjust to. Adaptation was difficult or very difficult in 30 per cent of 327 cases; the costs were high or very high in 37 per cent of these cases.
- (c) In 23.5 per cent of the 327 cases there was an international standard, but the importing country had a different standard.
- (d) About 15 per cent of respondents in 289 cases claimed that they observed frequent changes in technical restrictions in the country they had problems in. In general, procedures became more complex in 55.6 per cent of 142 cases when the changes were introduced. Finally, only 12 per cent of respondents stopped exporting due to the change in technical barriers.

4. Summary of results

- (a) There was a clear relationship between the number of goods exported and the number of barriers. The relationship with the extent of imports is much less relevant.
- (b) Firms were informed of changes in technical barriers by the export facilitator (*agencia de aduana*) in 28.7 per cent of 630 cases, by the customers in 18.6 per cent of cases, through web pages in 8 per cent and through the SAG (*Servicio Agrícola y Ganadero*) in 7 per cent of cases. Therefore, in 35.5 per cent the source was international. Firms were satisfied with their source of information in 89 per cent of cases.
- (c) In 26 per cent of cases firms experienced positive effects from adapting to foreign technical rules. Among these, 20 per cent experienced higher sales, 53.8 per cent experienced higher sales in other external markets, and the remaining 24.3 per cent (corresponding to 19 answers) indicated a widely dispersed variety of other benefits, among others, easier customs procedures, learning, happier customers, etc.
- (d) With respect to the type of norm that affected products, 73 per cent knew that there was an international standard that applied to the product, while in the remaining 23.5 per cent, the norm applied in the country differed from the international standard, and could be considered a true barrier to trade.
- (e) In general, Chile does not appear to face a great many problems related to NTMs.
- (f) Sixty per cent of NTMs are targeted at plants and animals.
- (g) FTAs were effective in reducing the number of NTMs facing Chile.
- (h) NTMs did not seem to be interfering extensively with Chilean trade. Chilean exporters were still facing a total of 93 NTMs, or around 10 per cent of the total NTMs detected, at the time of the survey. This represented about 3 per cent of the firm-country pairs. Interviewees were asked to provide more information on their exposure to NTMs in the past because of the low numbers of NTMs they had been affected by.

III. NTMs applied by Chile

A fairly in-depth review of the many NTMs mentioned in the UNCTAD database and consultations of various other sources, for example laws, ministerial decrees, official resolutions indicated that:

1. Most of the NTMs related to the introduction of live animals, meat and other foods that could result in the introduction of diseases.
2. The procedures seemed to be SPS-compliant as they depended on declarations of the corresponding sanitary bureaux in foreign countries, and contained non/discriminatory procedures.
3. A second important area was related to alcohol and drugs, but again there was no difference between the treatments of domestic or foreign products, except when traceability was at stake.

4. Restrictions existed in the number of entry points for certain products, but this was because of a requirement to have SAG officials present at these entry points.

Special procedures existed on wheat, flour, chicken pieces and sugar, more details can be found below.

Special procedures

In 1986, Chile established a price band system (PBS) for wheat, wheat flour, sugar and edible vegetable oils (Law No. 18.525 “Normas sobre Importación de Mercancías al País”), with the declared purpose of reducing the impact of international price fluctuations on domestic prices. The methodology for the calculation of the price bands was established in Article 12. If the international reference price fell below a price floor or rose beyond a price cap, the system worked by adjusting tariffs. The caps of the band also moved with international prices, but as a moving average of several years, dampening price shocks.

In November 2001 (law 19.772), Chile added a paragraph to Article 12 of Law No. 18.525 stating that the rates resulting from the application of the PBS could not exceed Chile’s bound rates. It also increased the final bound rate for sugar from 31.5 to 98 per cent and introduced a 60,000 tons annual zero-rated import quota for sugar (21,000 tons are reserved for Argentina, 16,700 tons for Guatemala, 9,700 tons for Brazil and 12,600 tons for other countries). This quota resulted from an amendment to Article XXVIII in the schedule of commitments for sugar. In the Uruguay Round, Chile bound all its tariff at a uniform rate of 25 per cent, with a few exceptions. A number of agricultural products that include dairy products, wheat, wheat flour, vegetable fats and oils and sugar are subject to a bound rate of 31.5 per cent.

The PBS is the most contentious trade measure that Chile has adopted. In October 2000, Argentina asked for consultations with Chile on this matter. These did not lead to a solution, and Argentina requested the WTO Dispute Settlement Body (DSB) to establish a panel to review the case. The panel was set up in March 2001. Australia, Brazil, Colombia, Costa Rica, the European Union, Ecuador, El Salvador, Guatemala, Honduras, Japan, Nicaragua, Paraguay, the United States and the Bolivarian Republic of Venezuela all reserved third-party rights.

The Panel Report was circulated on 3 May 2002. Argentine and Chile both challenged this report. The Appellate Body upheld the Panel’s finding that Chile’s price band system was designed and operated as a border measure sufficiently similar to “variable import levies” and “minimum import prices” and is therefore prohibited by Article 4.2 of the Agreement on Agriculture. It therefore recommended that the DSB request Chile to bring its price band system in conformity with its obligations under that Agreement. At its meeting on 23 October 2002, the DSB adopted the Appellate Body Report.

At the DSB meeting of 11 November 2002, Chile stated that it intended to comply with the recommendations and rulings of the DSB, and on 2 October 2003 made it known that a modified version of Article 12 would come into force on 16 December 2002 (Law N° 19.897). The amended PBS fixes the floor and the cap of the price bands. For sugar, the caps were set at US\$310 and US\$339 per ton, respectively. Both thresholds would diminish by 2 per cent annually from December 2007 to November 2011, and by 6 per cent annually from December 2011 to November 2014. For wheat the band limits were set at US\$128 and US\$148 per ton. These limit would be reduced annually by 1.5 per cent from December 2007 to December 2014. In 2014 the government would have to evaluate the PBS and decide whether they should be maintained. The Law also increased the zero-rated sugar annual import quota by 45.000 tons.

Argentina argued that the new system did not comply fully with the recommendations and rulings of the DSB. After prolonged unsuccessful negotiations between Chile and Argentina, the latter requested a new Panel. This was established in January 2006 and circulated its report in December 2006. The Panel found that the amended price band system continued to be a border measure similar to a variable import levy and a minimum import price and was therefore inconsistent with Article 4.2 of the Agreement on Agriculture. The Panel accordingly concluded that Chile had failed to implement the recommendations and rulings of the DSB in the original dispute. These findings were upheld by the Appellate Body that was adopted by the DSB on 22 May 2007.

Some FTAs authorize Chile to maintain the PBS. Both the FTAs with Australia and the P-4 countries stipulate that Chile may maintain its PBS. However, Chile cannot incorporate new products in the PBS, or modify the method by which it is calculated and applied in a manner that makes it more trade restrictive.

Under most of Chile's preferential agreements, various agricultural products are subject to longer phase-out periods and face higher average tariffs than non-agricultural goods.

IV. Challenges

A. *Business survey: Challenges faced and lessons learned*

1. One of the difficulties in fully understanding the phenomenon through this sample is that successful sectors probably face fewer NTMs. In particular, the mining sector, which is very important in Chile, faces few NTMs. Moreover, in general, the number of firms facing active NTMs is small (only 3 per cent of country-firm pairs). Therefore, a blind survey would only have found a few cases. For that reason, we selected vulnerable sectors (food exports, for instance) and asked about past NTMs and not only current cases. We also had to consider the size of firms and decided to have a minimum export size.
2. The application of the questionnaire was difficult because of the complexity of the classification, so it was hard to ascribe a particular conduct to a classification. This is especially the case when the questions included past experiences.
3. The length of the questionnaire and the fact that some questions required the same answers for different countries led to problems, especially in the case of European countries. Eventually, many respondents just mentioned Europe as a whole in order not to have to repeat the answer again for another European country.
4. The survey was too long and the interviewees tended to get impatient after half an hour.
5. The trade barrier web portal was not accessed.
6. The fact that the interview was conducted under the auspices of the United Nations was not terribly helpful. Apparently, the fact that MORI is respected was more influential in obtaining access.

7. Many interviewees felt that some of the TBT and SPS barriers were “fair” and should not be considered as NTMs.

It is important to recall that Chile has a database that contains all the NTMs that are applied in different countries and a web-based procedure for adding new entries by firms. This tool is more helpful for traders that need to find precise information on the problem they may be currently facing, rather than consulting these survey results because the information on relevant legislation is more precise.

V. Conclusions

The experience with the survey has convinced us that the approach adopted for the survey could only be used for exploratory analysis and not to obtain a full picture of NTMs that a country may or not face. The main problem is that a survey that requests information on historical NTMs is not going to be very precise regarding specific details of NTMs. This means that it will be difficult to link the NTMs that were mentioned to specific measures in the importing country. On the other hand, the survey procedure was found to be useful in determining the responses of firms to NTMs, their relative importance, potential solutions, etc., but not for classification purposes.

A better approach would consist of developing a real-time system which allows firms facing NTMs to log onto a website where they can describe the problem in detail. The information entered into the system will therefore be up-to-date and be more precise and will make it possible to match the problem to measures imposed by the importing country. Chile has a system that works in this manner, with apparent success. This procedure also eliminates the problem we had with the data from European countries which were sometimes grouped as one country, Europe, or individual countries. It should be noted that UNCTAD’s website (<http://ntb.unctad.org>) also provides relevant information.

From the point of view of the survey itself, it is interesting to note that Chilean firms have, in the past few years, faced relatively few NTMs, and that most of them were TBT and SPS measures, usually related to labeling requirements. Only 3 per cent of country-firm pairs faced an NTM, although over time, the number rose to about 30 per cent of current firm-good pairs. Another feature of the data is that there are a very close linear relationship between the numbers of exported goods-firm pairs in a country and the number of NTMs the same country imposes on Chilean imports, i.e. the wider the source of imports, the greater the frequency of NTMs.

INDIA¹

I. General Overview

A. Overview of Indian economy

The Indian economy is today the second fastest growing economy among the large economies of the world. In terms of purchasing power parity (PPP) GDP, India is the fourth largest economy after the United States, China and Japan. India's share in world GDP (PPP) basis has increased from 4.3 per cent in 1991 to almost 6 per cent in 2005.²

India's GDP growth over the past few years has been impressive, averaging over 7 per cent between 2001/02 and 2006/07. GDP growth has been particularly rapid since 2003/04, averaging over 8.5 per cent, thereby making it the second fastest emerging economy, after China, in the world. At this rate of sustained growth many economists forecast that India will, over the coming decades, have a more pronounced economic effect on the world. India's economy is diverse and encompasses agriculture, handicrafts, textile, manufacturing and a multitude of services.

B. Foreign trade

According to the WTO, in 2006 India accounted for 1.2 per cent of world trade. Until 1991, the country had largely kept itself isolated from the world economy, primarily with the aim of protecting its fledgling economy and to achieve greater economic self-reliance. Foreign trade was subject to import tariffs, export taxes and quantitative restrictions, while foreign direct investment was restricted by upper-limit equity participation, restrictions on technology transfer, export obligations and government approvals; these approvals were needed for nearly 60 per cent of new FDI in the industrial sector.

The post-liberalization measures taken by India since 1991 has lead to a steady integration with the world economy. India's greater integration with the world economy is reflected by the trade openness indicator, the trade-to-GDP ratio, which increased from 22.5 per cent of GDP in 2000/01 to 34.8 per cent of GDP in 2006/07. If trade in services is included, the increase is higher at 48 per cent of GDP in 2006/07 from 29.2 per cent of GDP in 2000/01, reflecting a greater degree of openness.³ Since liberalization, the value of India's international trade has become more broad-based. India's major

¹ This part of the report was prepared by Samir Gandhi of the Economic Laws Practice (ELP) and Abhijit Das of the UNCTAD-India.

² World Bank. 2006. India Inclusive Growth and Service Delivery: Building on India's Growth.

³ Ministry of Finance. 2008. Economic Survey of India.

trading partners are China, the United States, the United Arab Emirates, the United Kingdom, Japan and the European Union. The total value of exports during April 2007 was US\$12.31 billion up by 16 per cent and the value of total import was US\$17.68 billion with an increase of 18.06 per cent over the previous year.

Trade structure: India's imports and exports have grown at a compounded annual growth rate (CAGR) of 32 and 26 per cent respectively over the past five years. The growth in select export sectors, such as agricultural products, engineering products, ores and minerals, cotton and petroleum products have registered impressive growth during the past five years.

The United States, the United Arab Emirates, China, Singapore and the United Kingdom are the major export markets for Indian goods. In terms of major export commodities, crude petroleum, gems and jewellery, machinery and instruments, cotton, readymade garments and pharmaceutical products occupy a large share in India's export basket.

The prominent import sources of India include countries such as Australia, China, Germany, Islamic Republic of Iran, Kuwait, Nigeria, Saudi Arabia, Switzerland, Singapore, United States and the United Arab Emirates. Major items of imports into India include petroleum product, electronic goods, engineering goods and gold.

India has been active in promoting trading opportunities by concluding or negotiating a number of free trade agreements (FTAs). To date, India has concluded eight FTAs and is negotiating a further 22.

C. Tariff policies

In India, both the MFN and bound tariffs are based on the Harmonized Commodity Description and Coding System (recently aligned to HS 07) and are applied at the HS eight-digit level. Over 75 per cent of India's tariff is bound, 100 per cent for agricultural (WTO definition) and 71.6 per cent for non-agricultural products.⁴ In general, bindings range from zero to 40 per cent for non-agricultural products, and to 150 per cent for most agricultural products; some edible oils are bound at 300 per cent. India also renegotiated bindings on some agricultural products (mainly cereals) that were previously bound at 0 per cent; the current average bound tariff for cereals (HS Chapter 10) is 86.3 per cent, and ranges from 60 to 100 per cent. India has not made any commitments in Chapters 3, 42, 46, 64-67, 74, 76, 78-79, 82-83, 92-94 and 97, and partial bindings are mainly in Chapters 48, 51-55 and 85.

The current applied MFN tariff extends to 11,695 lines, of which 93.9 per cent are ad valorem; of the non-ad valorem rates, two are specific rates (for almonds, shelled and in shell) while 716 (6.1 per cent) are alternate rates (in textiles and clothing). In 2006/07, the standard rate of tariff ranged from 2 to 182 per cent (up to 150 per cent if exemptions are included) (from 2 to 354 per cent including AVEs). The largest number of lines (7,519 or 64.3 per cent) are at the "peak rate" of 12.5 per cent, followed by 10.4 per cent of lines at 25-30 per cent; 300 lines are duty free (2.6 per cent of the tariff).

India is a signatory to a number of free trade and regional trade agreements whereunder it offers tariff preferences to its trading partners. The most significant tariff preferences offered by India are to Sri Lanka under the Indo-Sri Lanka Free Trade Agreements and to least developed country members of SAFTA. Under the Indo-Sri Lanka FTA, India has eliminated tariffs on most products except on 429 items,

⁴ WTO. 2007. Trade Policy Review of India.

including garments, plastics and rubber, alcoholic spirits and coconut oil, all of which fall under the negative list. Under SAFTA, India has offered tariff concessions on 2,576 lines at the HS six-digit level, additional concessions on 364 lines to the least developed country members. Similarly under the Asia-Pacific Trade Agreement, India offers tariff preferences on some 570 tariff lines at the six-digit level, and an additional 48 tariff lines to LDC members.

India signed the Comprehensive Economic Cooperation Agreement with Singapore (CECA) on 29 June 2005 and offers India offers tariff preferences at the HS eight-digit level on some 5,111 lines. A number of products, including agricultural products, alcoholic beverages, minerals, chemicals, rubber products, textiles and clothing products are excluded from commitments (6,551 tariff lines), and remain subject to MFN duties.

D. Policies related to SPS and TBT measures

The Bureau of Indian Standards (BIS) was established under the Bureau of Indian Standards Act (1986); it has been operational since 1 April 1987 and is responsible for formulating and enforcing standards for 14 sectors.⁵ It has also been designated by India as the WTO-TBT Enquiry Point, while the Ministry of Commerce and Industry is responsible for implementing and administering the WTO Agreement on Technical Barriers to Trade. In addition to the standards developed by the BIS, these are sector-specific standards for the automobile industry, pollution, food, drugs and cosmetic, as well as atomic energy and civil aviation.

A product certification scheme under the Bureau of Indian Standards Act (1986) and its accompanying regulations and rules are operated by the BIS. Products meeting the requirements of relevant Indian standards are granted by the Bureau of Indian Standard Mark (ISI). ISI certification is voluntary on most of the products, but is mandatory for 66 products related to health and consumer safety. Both imported and domestically produced goods on this list must conform to certification requirements. The BIS also operates other certification schemes, such as the Hazard Analysis and Critical Control Points (HACCP), the Environmental Management Systems (EMS), the Food Safety Management System (FSMS), certification of Public Service Organizations for Service Delivery according to IS 15700:2005.

SPS standards in India are governed and enforced through a number of laws and agencies. The Prevention of Food Adulteration Act (1954) is the main law on food safety and quality. Imports and quarantine are regulated through additional legislation, such as the Livestock Importation Act (1898), which was most recently amended in 2001; the import of plants and plant materials is regulated under the provisions of the Plant Quarantine (Regulation of Import into India) Order 2003, issued under the Destructive Insects and Pests Act (1914). Implementation of these Acts and subordinate legislation is carried out by different central government ministries, making the system relatively complex.⁶

In order to consolidate and unify the legal regime pertaining to the regulation of food safety and standards, the Government of India enacted the Food Safety and Standards Act in 2006. The Act seeks to repeal eight different food-related legislations in India. It also seeks to establish the Food Safety and Standards Authority of India,

⁵ The sectors are: production and general engineering; chemicals; civil engineering; electronics and information technology; electrotechnical standards; food and agriculture; mechanical engineering; management and systems; medical equipment and hospital planning; metallurgical engineering; petroleum, coal and related products; transport engineering; textiles; and water resources (BIS online information. Available at: <http://www.bis.org.in/sf/sfp1.htm>. Accessed on 19 May 2006.

⁶ WTO (2007), Op. cit.

which will lay down science-based standards for food items, regulate the manufacture, storage, distribution, sale and import of food item, and ensure the availability of safe and wholesome food for human consumption.

E. India's mutual recognition agreements/arrangements on trade in goods

In order to facilitate its trade with other countries, India has entered into many mutual recognition agreements (MRAs) at multilateral and bilateral levels. At the multilateral level, India is signatory to MRAs, such as Asia-Pacific Laboratory Accreditation Cooperation (APLAC), International Laboratory Accreditation Cooperation (ILAC) and Pacific Accreditation Cooperation (PAC). These MRAs primarily deal with laboratory accreditation.

In the context of bilateral agreements, India's MRAs include those with Singapore and Sri Lanka where the parties have agreed to facilitate bilateral trade in select commodities, such as telecom equipment, agricultural goods, electrical and electronic equipments, steel and steel products and pharmaceutical products, etc.

II. Business Survey

A. Criteria for sample selection

The following steps were followed in the Indian survey while preparing the list of target respondents.

Step 1: Sampling the export/import sectors and respondents: Analysis of trade statistics from the Directorate General of Commercial Intelligence and Statistics (DGCIS) to identify major items imported in and exported out of India. The following criteria were taken into account while choosing the products, which in turn formed the basis for sampling exporting and importing companies for the survey:

- Export/import significance (existing and potential)⁷ of the product in India's trade basket;
- Likelihood of the product being subjected to a NTM; and
- Products should represent a diverse set of sectors-industrial and agricultural so as to capture a wide-range of NTMs.

⁷ In order to select the most relevant and adequately representative set of products being exported from India, the survey focused on NTMs affecting the top 400 products in terms of export value (at HS 6-digit level), which our research revealed, span over 68 HS chapters. These 68 HS Chapters define 83.6 per cent of India's export basket. Since such a selection would have ignored those products, which could potentially be exported, but cannot because of the prevalence of factors, such as NTBs, ELP also looked into items of potential export interest to India. This was achieved while identifying the list of the top 400 export products (at HS 6-digit level), we fixed a low value-based threshold of US\$40 million, which ensures that wherever a product is being exported and is able to achieve annual exports of US\$40 million, that product will be included in the list of 400 items. The assumption being that potentially exportable items will be able to achieve a low annual export threshold of US\$40 million.

In order to select the most relevant and adequately representative set of products being exported from India, the project focused on the top 400 products in terms of export value (at HS 6-digit level). These 400 products span over 68 HS chapters and define 83.6 per cent of India's export basket. Similarly for eliciting 100 responses from importing companies, the top 100 products in terms of import value (at HS 6-digit level) were considered. These 100 commodities span over 31 HS chapters and define 72.2 per cent of India's import basket. Further, while choosing the appropriate respondents for the survey of NTMs affecting both exports as well as imports, the following factors were given due consideration:

- Geographical location of export clusters;
- Size of firm;
- Type of firm.

The major export/import sectors targeted for the identification of NTMs through field survey and survey of databases included the following:

Agricultural commodities, auto ancillary, food and beverages, chemicals, construction material, cosmetics, electrical and electronic equipment, engineering goods, furniture, gems and jewellery, glass, handicraft, leather, medical equipment, mineral, pharma, plastics, rubber components, stationery and textiles.

Step 2: Identification of non-tariff measures: In order to identify the NTMs on selected commodities, the project adopted a two-pronged approach which incorporated a field survey of exporters and importers; and identification of existing reportage on NTMs from other national, regional and international sources through a desktop study (see Part III of this report).

Step 3: The industry groups identified in the first step were identified according to their presence in various clusters and geographical locations within India, for example jewellery exporters were concentrated primarily in Surat in Gujarat, garment exporters were located primarily in Tirupur in Tamil Nadu. Certain respondents, who were not located in clusters but were sources of significant feedback, such as the Tobacco Board located in Guntur in Andhra Pradesh, were surveyed in remote locations. Efforts were thus made to tap all important industry sectors contributing to Indian trade basket across the length and breadth of the country. The thrust was primarily to tap the SMEs in different industry categories. Based on the identification of key export/import sectors and other relevant considerations, a list of over 2,500 importers and exporters was generated. Each of these listed potential respondent companies were then contacted individually, briefed about the survey and its objective and their willingness to participate in the survey was sought. Those potential respondents who were willing to participate in the survey were short-listed and their names and contact details entered into a final list comprising 450 exporters and 125 importers, which was then handed over to Nielsen for carrying out the primary (face-to-face) survey.

While the respondents that were selected to participate in the survey were identified randomly, they were chosen from a list of exporters and importers on the basis of the industrial groups to which they belong and the specific geographical location in which they were located. Additionally, the respondents invited to participate in the survey were also filtered on the basis of the size of their industrial undertaking, and their willingness to participate in the survey. This process of selection was adopted to ensure that the survey was adequately representative of India's export basket, and included different sized enterprises across the country. To ensure maximum reportage of

NTMs, the respondents interviewed were also those who had indicated a willingness to participate in such a survey. The filtering process detailed above could result in greater-than-usual reportage of NTMs by respondents, since the emphasis was on interviewing those respondents who were willing to participate in such a survey. Further, the NTMs reported are likely to be concentrated in a few pre-determined industrial sectors given the sectoral selection of the survey. These two potential biases must be kept in mind while interpreting the results of the survey.

B. Survey implementation

An interactive briefing session was organized in New Delhi on 27 June 2008 to explain the legal origin, administration and economic impacts of NTMs. The documents were distributed to the field staff to gain a better understanding of NTMs and to assist them to conduct effective field survey.

A short presentation on NTMs, the UNCTAD manual on NTMs, examples of NTMs, a letter of introduction from UNCTAD India Programme introducing the Nielsen-ELP team, and a list of 450 exporters and 125 importers along with their contact details and products traded.

A training session was later organized in which the research and operations professionals carried out after the training session, the interviewers were asked to carry out mock interviews, and the best interviewers were selected to carry out the interviews. The performance of the interviewers was monitored by the regional field heads during the first five calls to understand whether the response was in accordance with the desired objectives. After the briefing session, a pilot survey was conducted by a team of researchers which included some of the key operations officials from Nielsen. The pilot survey covered a few exporters and importers (in the national capital region).

Field surveyors were given a full document set comprised of a contact list, presentation on NTMs, manual on NTMs and list of examples, a letter of introduction and the newly prepared flash card. The regional field heads of Nielsen then embarked upon the task of identifying the interviewers that would carry out the survey.

Following this, another joint teleconference was organized between the Economic Laws Practice (ELP) and the team from Nielsen. The purpose of the teleconference was to ensure that the entire briefing task was repeated and certain doubts in the mind of the interviewers were clarified.

The procedure followed by interviewers included:

- *An appointment was taken to speak to the respondents over the phone to explain the objective of the study. In those cases where respondents required the letter of introduction, it was emailed across to them prior to confirming the appointment to personally visit. In most of the cases, responses were collected from the owner/ proprietor or manager (exports) of the responding companies.*
- *Visiting the respondents at the appointed time to administer the questionnaires.*
- *Each interviewer filled up the questionnaire in front of the respondents.*
- *It took approximately 30 minutes for a respondent with 2-4 cases, while for respondents with more than 5 cases it usually between 45 minutes and 1 hour to complete the*

interview. Both interviewers and respondents found the flash card to be extremely helpful.

C. Survey results

The outcome of the survey has been discussed in the following section. This is divided into three distinct sections: (a) profile of the interviewed companies; (b) reportage on trade barriers; and (c) probe on awareness issues.

1. Profiles of interviewed exporting companies

The majority (70 per cent) of the responding companies were manufacturers of products/commodities. About 30 per cent companies traded various export items. The major manufacturing companies belonged to engineering equipment and textiles followed by chemical, electronic and electrical equipment. Trading companies dealt in with textiles, food in addition to metal and agricultural products.

An overwhelming majority of the responding companies (94 per cent) indicated that they had no foreign stake in their company. Only 3.5 per cent respondents indicated that they had more than 50 per cent foreign ownership in the company. 2.5 per cent of respondents indicated that they had less than/equal to 50 per cent foreign ownership in their company.

Nearly 86.5 per cent of the responding export companies indicated that they had been in business for more than 5 years, while the rest indicated that they had been in operation for less than 5 years. 16.25 per cent of responding companies indicated that they had up to nine employees, 28.75 per cent respondents indicated that they had between 10-20 employees. 22.75 per cent respondents indicated that they had 21-50 employees working in their organization, while 32.25 per cent respondents indicated that they had more than 50 employees.

2. Profiles of importing companies

Fifty-five per cent of the importing companies stated that they manufactured various products/commodities, while 45 per cent companies traded various items. Major product categories covered under the field survey of importers included chemicals, gems and jewellery, metals, and engineering products. The survey included both manufacturers as well as traders.

A large majority of the responding companies (88 per cent) indicated that they did not have any foreign stake in their company. Only 7 per cent respondents indicated that they had more than 50 per cent foreign ownership in the company. 5 per cent of respondents indicated that they had less than/equal to 50 per cent foreign ownership in their company. 80 per cent of the responding import companies indicated that they have been in business for more than 5 years, while the rest indicated that they had been in operation for less than 5 years. 35 per cent of the import companies indicated that they had up to 9 employees, 19 per cent had between 10-50 employees, and 27 per cent had more than 50 employees.

The summary statistics of the surveyed import and export companies amply show that the survey sample contained reasonable diversity in terms of product coverage,

geographical spread, nature of business, ownership and size in terms of number of employees.

3. *Reported trade barriers*

The barriers to trade reported by respondents are presented below: 216 companies reported single cases while the rest reported multiple cases; 21 companies reported more than 5 cases.

Four hundred exporting companies reported 787 cases, while 100 importing companies reported about 289 cases. The average number of cases reported per exporting company was 1.96 and 2.89 for importing companies. Thus, the average reportage of NTMs was higher for imports than on exports.

4. *Reports of NTMs by exporting companies*

This section will discuss the incidence of NTMs experienced by exporting companies. As discussed above, the most prevalent NTMs faced by Indian exporters were TBT measures, followed by SPS measures, finance measures and other technical measures. Significant numbers of other measures involving price control, quantity control, para-tariffs and export-related measures were also reported.

Further reports on the procedural obstacles faced by the exporters revealed that *“inefficiency or cases of outright obstruction”* and *“arbitrary or inconsistent behaviour”* were the key obstacles associated with various NTM categories, such as SPS and TBT measures. Similar trends could be observed for *“finance measures”* and *“other technical measures”*.

NTM cases as per export markets: The major export markets reported to have applied the identified NTMs included the United States, the United Arab Emirates, United Kingdom, Germany, Australia and China.

Industry segments vis-à-vis reported NTMs: Textiles, leather, electrical and electronic equipment as well as food, pharma and chemicals reported the highest numbers of NTMs. SPS and TBT were the major NTMs reported in food textile, pharmaceutical products and leather industry segments. The results also indicated that the average number of cases of NTMs reported was highest in pharmaceutical and leather products, in that order.

Industry segments vis-à-vis reported procedural obstacles: The industry segments and the procedural obstacles they faced were identified in the database. Arbitrary or inconsistent behaviour seemed to be the most important procedural obstacle with textile, leather, chemical, electrical and electronic equipment segments recording the highest reportage.

Major products subjected to NTMs: Leather products and electrical equipment, followed by garments, pharmaceuticals and textiles were subjected to the largest number of NTMs and procedural obstacles.

Product vis-à-vis NTM reportage: The feedback from exporters that:

- Leather and leather products, incense sticks as well as for garments faced SPS measures

- Leather and electrical equipment parts faced higher levels of TBT;
- Higher price control measures were reported for electronic component and women's wear;
- Para-tariffs barriers were reported for women's garments;
- Export-related measures were higher for garments.

Obstacles faced by exporting companies: The major procedural obstacles faced by exporting companies include arbitrary or inconsistent behaviour, in addition to inefficiency or cases of outright obstruction.

Top products vis-à-vis procedural obstacles: Most product categories were affected by arbitrary or inconsistent behaviour. Exported products, such as leather products, chemicals, pharmaceuticals and castor oil, were subjected to a large number of procedural obstacles in export markets. Electrical products were subjected to the most significant instances of discriminatory behaviour, as compared to any other product categories. Inefficiency and outright obstruction were reported to be major procedural obstacles for finished leather, incense sticks and optical fibres. Non-transparent practices were reported to affect electronic components, leather articles, etc.

Countries involved in NTM cases: The countries that reported large numbers of measures related to SPS were the United States, the United Arab Emirates and the United Kingdom, Germany, New Zealand and Japan.

- Countries involved in cases of TBTs included the United States, the United Arab Emirates, the United Kingdom, Germany, Kenya and Singapore.
- Other technical measures were reported to be imposed by the United States, the United Arab Emirates and the United Kingdom. Quantity control measures have a higher reportage for the United Arab Emirates and South Africa.
- Para-tariff measures were relatively high for Egypt, United States, the United Kingdom and Italy.
- Anti-competitive measures were only observed in Pakistan.
- Relatively high numbers of export-related measures were observed for the United States and Australia.

Countries imposing procedural obstacles: The top trading nations imposing procedural obstacles (as reported by exporters) indicated that arbitrary or inconsistent behaviour constituted the predominant procedural obstacle faced by exporters to the United States, the United Arab Emirates, the United Kingdom, Germany, France, Japan, Kenya and New Zealand. The highest level of discriminatory behaviour was reported for the United States and the United Arab Emirates. Inefficiency seemed to be the most important obstacle for exports to the United States, the United Arab Emirates, the United Kingdom, Germany, Australia, China and Singapore. Non-transparent practices were reported for exports to the United States, the United Arab Emirates, Australia and New Zealand. Significant numbers of cases of legal obstacles were reported for Italy.

Specific aspects related to sanitary and technical regulations: The feedback on the feasibility of complying with SPS and TBT requirements indicated that the majority of exporters felt that for most countries it was feasible to comply with existing SPS and TBT measures. Exporters were reported that for a few countries, such as Bangladesh, the Russian Federation, South Africa and Singapore, the norms were so stringent that it was increasingly becoming unfeasible for them to comply financially.

5. *Cases of NTMs reported by importing companies*

As reported by importing companies, TBT measures followed by SPS and para-tariff measures were the most frequently applied NTMs in India. Other categories of NTMs facing Indian imports were finance measures, other technical measures and export-related measures (applied by the country of origin on goods being exported from there). These NTM policies were reported to be coupled with arbitrary implementation in most TBT policies, and outright obstruction in the case of SPS measures and lack of transparency in the case of para-tariff measures.

NTM cases reported as per import sources: Imports from following countries were reported to have faced NTMs in India. These countries included China, France, Germany, Thailand and the United States.

Industrial sectors affected by NTMs: As indicated earlier, TBT measures were the largest reported NTM which affect imports of gems and jewellery, metal and textiles. In the case of SPS measures, imports of food and medical equipment were reported to be affected. Furniture and engineering equipment were subjected to high para-tariff measures.

Industry sectors faced with procedural obstacles: Sectors experiencing the highest number of cases of arbitrary behaviour were the food, textiles, gems and jewellery, medical equipment and metals sector. Inefficiency was the most commonly reported procedural obstacle, particularly in the case of imports from the food, metal and medical equipment sectors.

Cases of NTMs reported against major products: Medical equipments, broaching machines, semi-precious stones, wooden furniture recorded the maximum number of NTM cases and procedural obstacles.

Procedural obstacles faced by importing companies: The major procedural obstacles faced by importing companies included arbitrary or inconsistent behaviour, in addition to inefficiency or cases of outright obstruction and non-transparent practices. As the total number of reported procedural obstacles (236) was exactly equal to the number of reported NTMs (236) by importing companies, it is possible to infer that importers were affected equally by the requirements and procedural obstacles.

Top products affected by procedural obstacles: Arbitrary or inconsistent behaviour affected most products imported into India; these obstacles were particularly important in the case of medical surgical instruments/appliances, broaching machines and rice. Discriminatory behaviour appeared to affect the import of self-adhesive tapes and plates more than any other product category. Inefficiency seemed to affect medical equipment the most. Non-transparent practices were reported to affect wooden furniture more than any other category.

NTMs vis-à-vis import sources: The analysis of NTM vis-à-vis import sources reveals that:

- SPS measures were reported on products sourced from Myanmar, the United States, China and Malaysia;
- TBT measures were mostly implemented on products from the United States, China, Thailand, and the United Kingdom;
- Other technical measures were reported for products imported from Australia, South Africa, China and the United Kingdom;
- Quantity control measures were reported for products imported from the Islamic Republic of Iran, South Africa and the United Arab Emirates;
- Products imported from the United States, Thailand, Germany, Italy and Indonesia were reported to have faced para-tariff measures.

Countries affected by procedural obstacles on imports: The top trading nations vis-à-vis reported procedural obstacles (as reported by the importers) showed that the arbitrary or inconsistent behaviour affected imports into India from United States, China, Thailand, Germany, Myanmar and Singapore. Discriminatory behaviour was reported as being the most significant factor affecting imports from the United States. Inefficiency seemed to be the most prevalent factor affecting imports from the United States, China, Myanmar, Australia and Italy. Non-transparent practices appeared to affect imports from France and China.

Imported products affected by NTMs: A large number of SPS requirements were reported on medical equipment and rice being imported into India. Significant numbers of TBT measures were also observed for precious stones. Quantity control measures affected tea and nickel products and para-tariff measures affected broaching machines and wooden furniture.

The majority of importers that reported SPS/TBT requirements indicated that it was financially not feasible for them to comply with the SPS/TBT norms imposed by India.

More than three-quarters of importers were not familiar with the international norms affecting trade. About three-fourths of respondents concurred that the technical regulations of destination countries on the international trade of products had not changed in the past few years.

None of the importers who were interviewed had stopped importing as a consequence of changed technical regulations of India.

D. Summary of results

The survey has thrown up the following important findings. The review of the NTMs facing exports from India revealed that the key industrial sectors which reported NTMs were the textile, leather, electrical and electronic equipment and chemical products sectors. SPS and TBT accounted for the majority of the NTMs reported, with textiles, leather and chemical products being more prone to health-related SPS standards, and with electrical and electronic equipment was the most vulnerable to TBT technical regulations and standards.

It is interesting that the sectors in which Indian exports faced the largest number of NTMs were also the sectors which together constituted a significant part of its export

basket in terms of both value and volume. This could partially be due to an inherent bias in the survey, which only surveyed respondents from those sectors that were significant contributors to Indian exports. However, it could equally be true that Indian exports tended to experience the greatest number of NTMs in sectors in which they were the most competitive. The fact that India continues to enjoy significant exports in these sectors, despite the prevalence of the NTMs, may indicate that Indian exporters are frequently able to meet requirements imposed by importing countries and continue to stay competitive. It is also interesting to note that the countries responsible for imposing the greatest number of NTMs are the United States, the United Arab Emirates and the European Union, amongst several others such as Bangladesh, Brazil and Canada. This trend could be due to a wide variety of reasons, such as higher standard of protection resulting in more stringent import requirements in developed countries, such as the United States and in the European Union. Furthermore, the top products affected by NTMs include footwear, chemicals, leather products, garments and pharmaceuticals and it is possible that India's competitors, which includes developing countries such as Bangladesh, China and Brazil, also account for a significant number of NTMs, thereby reflecting a protectionist tendency in these export destinations.

The survey also reveals that NTMs that affect imports into India are most prevalent in the food, engineering equipment, medical equipment, metal and gems and jewellery sectors. Some NTMs, such as the SPS standards imposed by India on food products, could be due to the relatively stringent food safety regime in India, and could also be indicative of India's reluctance to encourage sub-standard imports in agricultural products, given its own domestic farm sector. It is also possible that TBT standards which are likely to be imposed on products, such as gems and jewellery, are explained by the need to ensure consumer protection, but could also be in part an effort to protect India's own strong gems and jewelry industry from cheap and sub-standard exports from low-cost competitors. Apart from SPS and TBT standards, the survey reveals a host of para-tariff measures which could be anti-dumping and anti-subsidy measures against imports of aluminium and steel; if this is the case, it would be in keeping with India's track record as the most prolific user of anti-dumping remedies.

The survey also shows that most respondents identified arbitrary or inconsistent behaviour and inefficiency or cases of outright obstruction as being the most significant procedural obstacles impeding exports from and imports into India. The arbitrariness and inconsistent behaviour which plague Indian exporters (and importers) could be the result of frequent changes in procedures and a lack of access to information on procedure, regardless whether such information is related to requirements in export destinations, or the domestic market. In all likelihood, SMEs that export and import goods that are not located within major city centres, and have with little access to market intelligence or information, are the most likely to suffer from a lack of such information. Since the survey targeted several respondents from SMEs, it is quite possible that information deficit is the most prolific procedural obstacle to exports from and imports into India and is reported so widely because SMEs are least likely to be able to bear the cost entailed in complying with these arbitrary and inconsistent behaviour.

The survey clearly points towards SPS and TBT standards as being the burdensome requirement they have to comply with in exporting to countries across the world. Given the varying levels of protection in countries across the world and the difference in the resultant standards and conformity assessment procedures, it is unsurprising that NTMs, such as SPS and TBT, are used so widely. However, the absence of stringent domestic standards and MRAs or equivalency agreements with important trading partners, makes it all the more likely that Indian exporters will continue to view SPS and TBT requirements as being the most common NTM. A greater emphasis on harmonization of standards, compliance with international standards and equivalency agreements with trading partners would be advisable for India.

III. NTMs applied by India

A. Introduction

This section summarizes the findings on NTMs applied by India on imports and exports, but does not provide information on NTMs applied by India that were reported by respondents in the course of the business survey. Instead, it presents the findings on NTMs that have been reported in various documents and databases, such as the United States National Trade Estimates, the European Union market access database, as well as recent notifications by India to the SPS Committee and WTO's TBT Committee. SPS/TBT and measures affecting quantity of imports into India were the most frequently used NTMs on imports into India. In terms of procedural obstacles reported in various documents/databases, transparency in practices is the largest obstacles followed by arbitrary behaviour and unusually high fees or charges against imported products.

An analysis of India's recent notifications to the SPS Committee and WTO's TBT Committee shows that within the broad categories of SPS measures, SPS regulations followed by SPS certification requirements for imported goods and prohibition of certain imported items on account of SPS concerns were the most prominent measures used by India that affect its imports. With respect to the category of TBT measures, regulations governing product certification, conformity assessment and labelling have been reported as affecting imports. Products, such as agricultural and food items, drugs, meat and animal products and generator sets, etc., have been subject to recent SPS and TBT measures.

National data sources: In order to set up a sustainable data collection framework that allows for regular, annual updates of the available information on NTMs and to increase their transparency in the long run, the following agencies and their publications may be tracked and reviewed. The Ministry of Agriculture is responsible for overseeing issues related to SPS; the Bureau of Indian Standards (TBT Enquiry Point) collects information on TBT on a regular basis.

IV. Challenges

A. Business survey: Challenges and lessons learned

There were no challenges involved in the selection of a representative sample of the import and export product baskets as trade statistics from the Directorate General of Commercial Intelligence and Statistics (DGCIS) are readily available. However, the preparation of a list of exporters/importers from the identified product categories (for example, by HS codes or industry sectors) was an immense challenge. Hence, various sources, including the websites of trade chambers, export promotion councils, were consulted to generate a preliminary list of 2,500 contacts representing the targeted export and import sectors. Inactive/unwilling exporters and importers in the preliminary list were then eliminated through a process of personal calls.

Another major challenge was the availability of respondents. The survey period took place during a lean business period and several exporters and importers were unavailable for interviews as they involved in business development activities. Hence,

an additional list of exporters had to be generated to arrive at the requisite number of exporters and importers.

- During the pilot stage, it was observed that it was difficult to obtain an adequate number and quality of responses from respondents. After a few initial calls, the survey team found that respondents were unable to identify non-tariff barriers affecting their products. The survey team then changed their approach and started asking respondents to name the “measures they faced”. This approach was adopted following a discussion with UNCTAD officials who indicated that “requirements of importers and exporters” needed to be tapped, rather than problems. This approach was successful in eliciting the required information from the respondents.
- While the length of the survey questionnaire was manageable, it was aimed at “barriers” faced by respondents; this created the initial confusion indicated above. Apart from this, the questionnaire was flawless and well structured and captured the information that was sought.
- Indian exporters and importers, except for large corporations, were unaware of the NTM web portal, as the survey findings indicate. No major administrative or technical problems were faced in carrying out the survey.
- The respondents, especially senior managers were quite cooperative and agreed to participate in the survey after the initial telephone call to set up an appointment. Once the letter from UNCTAD was provided to them, they were ready to assist the survey team.
- It usually makes a difference if the interviewer introduces the survey as a part of a joint effort between the United Nations and the Government of India. After this introduction (during the preliminary telephone call to set up an appointment), the respondents were more willing to learn about the study objective and to share the information that was sought.

V. Conclusions

Recommendations for moving forward

The recommendations below broadly pertain to how the NTM survey and impact assessments were conducted. They also touch on the questions of how collaboration among stakeholders could be enhanced and how to respond to their capacity-building needs.

A. *Conduct of the business survey*

The pilot study sought to capture information on the NTMs facing major products in India’s imports and export basket, while focusing on the geographical spread as well. The existing sample size indicated a fair amount of representation in terms of NTMs and procedural obstacles, nevertheless it may be desirable to cover more sectors and geographical areas in future projects of this nature. Thus, it would be a good idea to expand the respondent base, include more products and cover a larger geographical area for future studies in order to obtain a clearer picture.

As the laws underpinning NTMs are changed on a regular basis, a web-based system, as proposed by UNCTAD, can be very useful in recording them and seeking feedback from the stakeholders. It is suggested that by creating appropriate web links to all other relevant websites, awareness could be enhanced amongst various categories of stakeholders. However, our experience of eliciting information from respondents shows that better results are achieved with trained field surveyors who conduct face-to-face interviews with exporters/importers facing such NTMs. Information collected through the web portal may be insufficient and may lack critical details relating to the NTM.

In order to overcome the limitations of a web-based information collection system, we recommend that an email-based survey supplemented by telephone calls should be organized every three months. Participation by the relevant exporters/importers in an exercise of this nature can be encouraged by making the findings of the survey available to them.

However, as the business survey reveals, it is extremely important to extract the right information from respondents. In the process of conducting face-to-face interview, it was possible for the interviewers to remove certain doubts in the minds of respondents and then elicit the information using the questionnaire. Thus, it would be a better idea if a similar survey is carried out on a bi-yearly basis and that information is distributed to respondents in order to let them know of the importance of the project and provide national updates on NTMs, etc.

Another issue faced by the survey team was the inability of several respondents to respond to the questionnaire when asked whether they faced any “problems” while importing or exporting goods. This issue came to light at the initial stages of the survey when conducting “pilot interviews”. Not only were the respondents unable to identify NTMs which affected the import/export of their product, but even where they were able to identify a problem, they were unable to make a link between the problem and a specific NTM imposed by an importing/exporting country. In order to rectify this situation and elicit a greater number of responses from the respondents, the survey team focused on asking the respondents to identify the requirements they needed to comply with in order to export/import their goods, rather than identify specific barriers. The survey team found it immensely useful to approach the respondents with a flash card, in addition to the UNCTAD questionnaire. The flash card highlights the types of NTMs that the respondent may face, thereby making it easier for them to be more specific when answering the questionnaire.

In order to capture the dynamic nature of NTMs, it is recommended to carry out a similar tracking exercise every 6 months. It would be a better idea to carry out the survey on a face-to-face basis rather than a web-based survey as the latter might result in weak response rate. A face-to-face survey covering a larger base of respondents needs to be considered, as well as longitudinal research (i.e. obtaining a response from the same set of respondents after a specified period of time. This would help in discerning the changing nature of NTMs.

The study has been instrumental in building the capacity of investigators and research professionals on the new UNCTAD NTM classification. After the initial hitches, the investigators were able to convey information on the NTMs they had encountered while interviewing other industrial sectors. Thus, it became easy for respondents to relate their experience with NTMs. In the light of this experience, it would be useful if the respondents were kept informed of the NTMs faced by other industrial sectors and the steps taken by the government, if any, to remove such NTMs. This will motivate them to participate more willingly in the survey. A training programme of the exporters could be organized by industry associations to make them more aware of NTMs, their changing nature and benefits they will derive by participating in the survey. In this way, future surveys can be more comprehensive.

B. Intensifying collaboration among stakeholders

The results of our survey indicate that SPS and TBT measures account for the majority of non-tariff measures (NTMs). The WTO Agreements on SPS and TBT allow a WTO member country to impose technical barriers and SPS measures in order to suit their specific requirements. Also, in order to strengthen transparency of the operation of SPS and TBT measures, each WTO member country is required by the SPS and TBT Agreements to notify such measures to the WTO and appoint enquiry points for TBT and SPS-related matters.

Multiple agencies are participating in the process of setting product and process standards, health and safety regulations. With respect to TBT measures, the Bureau of India Standards (BIS) acts as the nodal enquiry point for India. For SPS measures, the Ministry of Health and Family Welfare, Department of Animal Husbandry, Dairy and Fisheries and the Department of Agriculture and Cooperation function as nodal enquiry points for food safety, animal health and plant health domains, respectively.

The multiplicity of enquiry points, particularly for SPS measures, has been a cause of some concern to Indian companies and other WTO member countries as well, on account of the possible diffusion of information. In order to address the difficulties arising out of multiple SPS enquiry points, it is worth considering establishing a single unified agency which would be responsible for communicating and disseminating all information pertaining to SPS standards in India. In this regard, it is relevant to note that the Government of India enacted a new law in 2006 which seeks to consolidate the different laws governing the food sector and establishes the Food Safety and Standards Authority (FSSA) to regulate the sector. The Act proposes to strengthen the food and allied regulations through reorganizing scientific support pertaining to the food chain through the establishment of an independent risk assessment body, merging eight separate Acts governing food and allied sectors and a new clarification of the relevant central ministries' responsibilities. The Government could therefore consider utilizing the machinery created around the FSSA to centralize the collection and dissemination of information pertaining to SPS standards. However, some SPS related standards are administered by sub-federal state governments on products, such as alcoholic beverages. In such cases, the single-point collections and dissemination of information, even through the apparatus created under the FSSA may not capture all standards-related information and the Union Government may need to put into place some additional processes.

SPS and TBT enquiry points are expected to serve two broad purposes: (a) provide and disseminate information pertaining to SPS and TBT standards to domestic stakeholders; and (b) respond to queries pertaining to such standards raised by other WTO member country. In its interaction with domestic stakeholders, national enquiry points interact with numerous agencies and corporations, and are responsible for the dissemination of information to exporters, Export Promotion Councils, trade chambers, autonomous research/technical institutions and other relevant government departments and ministries. National enquiry points are also expected to be the point of first contact for enquiries raised by India's trading partners pertaining to SPS or TBT requirements and they serve an important function of receiving a query and then forwarding it to the appropriate standard-making organization/department for an appropriate response which it then transmits back to the country raising the query. The national enquiry points are the conduits for information pertaining to SPS and TBT standards in India.

However, notwithstanding the existence of these national enquiry points, several respondents complained that they had inadequate information on the existence of certain SPS and TBT requirements. There are various reasons why there appears to be a perception that the administration of SPS and TBT measures in India is sub-optimal. These include:

- Complex and layered legal regimes and multiplicity of government agencies responsible for exports and imports;
- Diversified export product portfolio of India; and
- Geographical location of export clusters in India.

Therefore, it would appear that there are three essential problems: (a) multiplicity of SPS enquiry points leading to sub-optimal administration of SPS measures; (b) absence of adequate information dissemination by the national enquiry points; and (c) once the information is received by the exporters, there is no mechanism for dialogue with the Government which allows such exporters to address the existence of such barriers. In light of these issues and as a result of our interactions with various exporters during the course of this study, the following proposals are suggested.

1. Appointment of a single SPS enquiry point

In view of the overlapping areas of regulation in plant and animal health and agricultural products, it is recommended that an appropriate agency including, but not limited to, the Food Safety and Standards Authority (FSSA) should be established to act as a single enquiry point for all SPS measures enacted by the Union Government. It is not necessary that the FSSA should itself be the enquiry point, but the machinery created around it may be used to feed or coordinate information through or to a single enquiry point. Such a consolidation will facilitate efficient administration of all SPS measures which affect India's inbound and outbound trade.

2. Addressing the issue of inadequate information dissemination

With respect to information dissemination, while the BIS maintains an updated database of all TBT notifications of both India and other countries, the web-portals of all the three SPS enquiry points do not maintain such a database. Hence, we suggest the creation of a web-based information dissemination application for the dissemination of early information of SPS notifications issued by Indian authorities, as well as notifications issued by other trade partners. This web-based mechanism will automatically distribute the notifications or relevant information to all subscribers, and allow exporters to have access to information on new export requirements. It will also afford exporters the possibility of providing comments to such notifications within the comment period permitted in the TBT Agreement and seeking clarifications if necessary, through the SPS Committee. Such comments and requests for clarifications could be aggregated by the relevant export promotion councils constituted by the Government of India and transmitted through the national enquiry point to the country concerned.

3. Consultation and feedback on SPS and TBT notifications

From the feedback received during the course of our survey, it appears that there is no formal or institutionalized framework to facilitate consultations amongst exporters once they have identified an NTM on the basis of a SPS or TBT notification. This takes us to the second basic problem, i.e. the absence of an institutionalized process through which Indian exporters can address trade issues arising out of SPS or TBT measures that have been notified to the WTO. In some select cases, Indian exporters are able to use the platform provided by their representative trade associations to discuss the effects of an NTM and provide their comments to the national enquiry point. However, this seems to be on a purely ad-hoc basis and there exists no formal process or procedure for such

consultations. Thus, it is often not possible to receive any feedback on potentially trade restrictive measures.

We therefore suggest that once a national enquiry point receives an SPS or TBT notification from the WTO, it should immediately be disseminated among the relevant exporters and their representative associations. In this scenario, each association should be responsible for conducting time-bound consultations with its members and provide comments to the national enquiry period within the comment period prescribed under the TBT and SPS agreements. Such a consultation among exporters would not only facilitate greater understanding of measure per se, but also provide an institutionalized mechanism for the communication of such comments to the national enquiry point.

4. Enquiry of complaints lodged by industries

After having identified and discussed the relevant NTM notified by a WTO member country, the next step involved identifying those NTMs that are “more trade restrictive than necessary” and which are likely to significantly affect Indian exporters. Such trade-restricting NTMs may be addressed through the relevant SPS and TBT Committees at the WTO and efforts can be made on a bilateral basis to resolve the issues arising from the use of such NTMs. However, where such NTMs cannot be resolved bilaterally, affected exporters must have recourse under domestic Indian law to a mechanism which will look into the merits of their complaints and the operation of the NTM, and thereafter take up the issue as a trade dispute at the WTO, if necessary.

Here, the EU Trade Barriers Regulation (TBR) may serve as a useful model for the creation of an institutional mechanism for addressing those NTBs which Indian industry consider to be more trade restrictive than is necessary. If such a mechanism is adopted, the Ministry of Commerce and Industry may, on receipt of a complaint from an exporter/exporter association, conduct an enquiry into the trade effects and impact of such a measure on Indian exports. Such an enquiry may be conducted through the distribution of questionnaires and field visits to the country in question and the preparation of a “Trade Barriers Report”. The report could also form the basis of a complaint against the country maintaining such a NTB.

5. Resolving SPS and TBT measures

It is recommended that the nodal office within the Ministry of Commerce will try and seek time-bound resolution in the following hierarchy of options:

- Raising the issue during sessions of the SPS or TBT Committee.
- Bilateral consultation: The government may seek bilateral consultation on an SPS/TBT measure, which upon discussion amongst the exporting community is found to be trade restrictive.
- Invoking a dispute at the WTO: If bilateral consultation does not provide the remedy to an issue relating to SPS/TBT measure, India may invoke formal dispute settlement with the country concerned at the WTO.

C. Impact assessment of NTMs

As discussed above, with respect to increasing collaboration on addressing NTMs amongst the stakeholders, it is not feasible for the Indian government to carry out a trade impact assessment of each SPS or TBT measure identified by exporters as being trade restrictive. Consequently, we are of the view that an assessment of the impact of a NTB on an industry is best undertaken through an industry association, or clusters of industries on the basis of their experience. The government may facilitate such an exercise by providing the necessary financial, technical and infrastructural support.

In order to better focus on key NTMs, it is proposed that a systematic assessment of “adverse effect on trade” on products and countries of greatest significance to India on account of NTMs applied by other WTO member country be carried out on bi-annual basis. Such an assessment may focus on a matrix of top 25 product and countries, which define a majority of India’s trade with the rest of the world. This could be modelled along the lines of the annual National Trade Estimate prepared by the United States Department of Commerce.

Exporters who are required to comply with the new or changed NTMs are best qualified to determine the trade restrictiveness of an NTM applied by a WTO Member. While complying with such requirements they may provide quantifiable figures to the Ministry of Commerce on the time and cost burden that an NTM may impose on their businesses. Furthermore, exporters may, on the basis of their own experiences in the export destinations, identify and substantiate any discriminatory treatment that their goods are subjected to on account of an SPS or TBT requirement.

It is expected that individual exporters, particularly small exporters, who constitute the majority of the export community in India, lack the ability to comprehend the technical, economic and legal aspects of an NTM in the framework of WTO rules. Thus, it is recommended that capacity-building at the level of both the individual exporter and the Export Promotion Council be undertaken. Importantly, in order to ensure effective resolution of NTMs with other countries, capacity-building also needs to be carried out among government officials.

D. Capacity-building and technical assistance

During the course of the field survey, it has been observed that exporters and importers possess inadequate skills with respect to quantifying the ‘trade restrictiveness’ of an NTM. While they can identify the NTMs, they lack the ability of conduct sophisticated economic and legal analysis of the identified NTMs and their trade restrictiveness. Indeed, it has been reported that a large number of EPCs fail to provide such assistance to their members. It is suggested that in order to leverage the effectiveness of this effort, qualified consultants with specialized knowledge of international trade should be invited to participate. The participation of a consultant, at least during initial years, will ensure that the consultation and feedback mechanism become institutionalized.

Furthermore, even in those cases where exporters/importers are able to raise an issue with the Ministry of Commerce, the remedy offered to them is ineffective. In order to enhance the administration and resolution of NTMs, the table below identifies areas of capacity-building for individual exporters, Export Promotion Council and the government.

PHILIPPINES¹

I. General Overview

A. Current economic structure and growth

The Philippines did not experience consistent double-digit growth in the same manner as the other Asian tiger countries, but its economic performance since 2001 has been respectable. Growth from 2001-2007 has averaged 5.5 per cent, which is about the same average growth as Thailand and Indonesia, although much less than fast-growing Viet Nam. In 2007, it posted its highest growth rate of 7.8 per cent.

Much of the Philippine economy's growth has come from the services sector. The share of manufacturing has been declining, compared to those of other Asian countries, while the share of services is comparably higher. Well-known major dollar earners are the overseas Filipino workers, who pumped more than US\$14 billion in remittances into the economy in 2007, and outsourced business processes (BPOs).

B. Trade structure

The Philippines is part of the electronics production network in Asia, which explains why electronic products are among its top exports and imports. In 2007, electronic exports represented 62 per cent of total exports and 45 per cent of total imports. Garments occupy a distant second place with less than 5 per cent, or slightly over two billion dollars exports, while woodcrafts and furniture is in fifth place with more than one billion dollar in sales. Together, the top ten exports account for almost 80 per cent of the total value of Philippine exports. It is interesting to note that the combined top ten exports, excluding semiconductors, is worth close to US\$9 billion in 2007, but this sum is significantly dwarfed by remittances of US\$14 billion from overseas Filipino workers.

Most of the Philippine's exports are in manufactures. Coconut and bananas are the only agriculture exports that made it in the top ten. Total agriculture export constitute only a meagre 5.4 per cent to total exports (as of 2005), but it is noteworthy that its growth outpaced that of non-agriculture exports (35 per cent versus 7 per cent between 2000 and 2005). The majority of the country's imports are raw materials and intermediate goods, comprising 66 per cent of total imports. Of this, electronics or semiconductor inputs take up 45 per cent of total imports, while fuel and lubricants accounted for 17 per cent of imports. The Philippines is a net importing country. Exports

¹ This part of the report was prepared by Gloria Pasadilla of the Philippine Institute for Development Studies (PIDS).

are trying to catch up with imports and have grown at an annual average rate of nearly 8 per cent between 2000 and 2007. However, the rapid appreciation of the currency in 2007 due to strong foreign remittances from overseas workers caused exports to falter.

The United States and Japan are the Philippines' top trading partners. But China's increasing role in Philippine trade is highly noticeable. From being ranked 12th, with 1.7 per cent of total Philippine exports in 2000, it rose to fourth place taking 11.4 per cent of exports in 2007. Similarly, in terms of imports, China ranked 12th in 2000 but became 5th in 2007. The Philippines also had the second biggest trade surplus with China of approximately 1.7 billion US dollars in 2007, next only to its surplus with Hong Kong (China). In contrast, the Philippines has a huge bilateral deficit with its top trading partner, the United States. Interestingly, 78 per cent of Philippine exports to China are electronic products and 39 per cent of Philippine imports from China is likewise in electronics, implying that China is also part of the global production network in the electronics industry.

C. Recent trade and tariff policies

As of 2007, under the ASEAN Harmonized Tariff Nomenclature (AHTN), the Philippines had a total of 11,490 tariff lines. Half of these had rates ranging from 0-3 per cent tariff, another 27 per cent ranged between 5-10 per cent, and the rest for 15 per cent tariffs and above. Overall, average tariffs stand at 7.82 per cent. But average tariffs for agriculture, fishery and forestry are 11.82 per cent, while that for manufacturing is 7.82 per cent. The tariffs for the agriculture sector range from 0-65 per cent, 1-5 per cent in mining, and 0-30 per cent in manufacturing. The higher tariff rates are levied on many agriculture products, namely, vegetables, rice, live animals, pork, goat meat, poultry meat, potatoes, coffee, maize and sugar.

Under the ASEAN Common Effective Preferential Tariff (CEPT), almost 80 per cent are already in the 0-3 per cent tariff range; in fact, 71 per cent are already traded tariff-free. Another 20 per cent of tariff lines have 5 per cent tariff and 0.1 per cent with 20 per cent duty. The remaining 0.5 per cent have duty rates greater than 30 per cent (with 40 per cent as maximum). The remaining 46 lines, which include rice, have not yet been placed under the normal AFTA track.

With regard to preferential trade agreements, the Philippines is part of the ASEAN Free Trade Area (AFTA). Under the regional grouping of ASEAN, it has also signed regional trade agreements with China, the Republic of Korea, Japan, India, Australia and New Zealand, while another ASEAN regional trade agreement is currently being negotiated with the European Union. Besides these regional agreements, the Philippines also has a bilateral trade agreement with Japan which was approved by the Senate in September 2008.

D. Recent and new commitments and regulations related to SPS and TBT

SPS and TBT provisions of the trade agreements entered into by the Philippines usually include linking provisions with the WTO agreement on the same. How it usually differs is in the formation of joint committees on SPS and TBT to formulate joint implementation of WTO-consistent SPS and TBT provisions. For one, the committee discusses mutual recognition agreements on various product groups.

The Philippines has signed, under the ASEAN Agreement, mutual recognition agreements (MRAs) on electronics, cosmetics and rubber-based sectors. These MRAs

seek to facilitate the conformity assessment procedures and minimize the duplication of unnecessary testing, certification and inspection of traded products. Under the ASEAN MRA for electronic and electrical equipment, each country designates testing laboratories and certification bodies. The importing country within ASEAN would then accept the certification and test verification results from these designated institutions without having to subject the products to the same tests and local certification procedures.

For cosmetics, ASEAN has agreed on an ASEAN-wide harmonized regulatory scheme which includes guidelines on Good Manufacturing Practice (GMP), labelling requirements, product registration requirements, etc. which will apply to both ASEAN and non-ASEAN imports. The Cosmetic Harmonized Regulatory Scheme is composed of: a) MRA for product registration approval whereby the registration issued by one country is recognized by the countries that signed the MRA; and b) a product notification scheme which involves an upfront declaration of compliance by the company responsible for the product. These are, essentially, two stages of implementation, but countries may opt to proceed directly to product notification scheme without first going through Schedule A. The most significant aspect of the harmonized scheme is that all ASEAN member countries will move from the traditional pre-market approval approach to post-market surveillance system for cosmetic products.

Besides MRAs under the auspices of ASEAN FTA, the Philippines has also signed bilateral MRAs with other countries like Japan, under Chapter 6 of the Japan-Philippines Economic Cooperation Agreement (JPEPA), China and with individual ASEAN countries.

II. Business Survey

A. *Criteria for sample selection*²

The target sample came from registered exporters in sectors which are likely to have significant NTM experiences namely, manufacturing, agricultural products and food. Manufacturing industries included toys, gifts and housewares, garments and furniture sectors. Ideally, the sample should reflect the export structure. However, since more than 60 per cent of Philippine exports are in electronics, it was highly likely that this sampling design would not capture the breadth and scope of available and experienced NTMs. Hence, despite the possible sampling bias, we opted for a sample that would capture a greater variety of non-tariff measures by interviewing many more firms that export non-electronic products.

Neither does the sample reflect the actual geographic source of operations of many export industries. Because of cost considerations, we only initially interviewed export companies from Metro Manila even though we were aware that many exporters were not based in the capital. However, since many head offices are located in Metro Manila, as well as the personnel that deal directly with trade and export issues, it was possible to talk to many people who have knowledge of export and non-tariff issues in the city.

Still, this sampling consideration posed limitations. First, many companies based in Metro Manila, we later learned, had either terminated export operations or relocated to other parts of the country. Second, many agriculture exports of the Philippines, i.e. bananas, mangos, tuna, etc., are definitely exported from outside Metro Manila. Since we wanted to capture the non-tariff measures faced by this important sector for the

² This part of the report benefited from contributions from Mr. Michael Palma.

Philippines, we decided to interview exporters from selected cities, particularly General Santos City, Cebu and Davao, where the bulk of Philippine agriculture exports come from.

B. Survey implementation

We carried out the survey over a period of four months, from May to August 2008. The training of the surveyors started immediately after the launch of the project in January 2008 in Manila. The training, which lasted two weeks, included familiarization with the structure of the survey questionnaire, and detailed classification of NTMs provided by UNCTAD and ITC. The latter aspect was discussed at length, as this was perceived to be crucial in probing the responses.

Next, the team had to generate the list of potential interviewees. We approached government agencies, such as the Bureau of Investments in the Department of Trade and Industry (DTI/BOI), as well as private sector organizations such as Philexport and specific industry associations. We then extracted from the list those companies that are either based or have offices in Metro Manila. As explained earlier, we extended the coverage to regional areas, for example Cebu, Davao, and then at a later stage, General Santos. A few other regional companies were interviewed to add up to the targeted regional companies. We carried out a few pilot interviews with a few companies, from which we developed a survey strategy and interview style. The survey team considered the type of sector/ product, the administration's bureaucracy, etc., in adopting an effective survey strategy.

In terms of gathering confirmed appointments, the team focused in getting appointments by phone. Although we sent some formal letters of requests, we realized that this was too time-consuming administratively. The phone interview request generated almost 99 per cent of actual interviews without the additional need for formal letters of requests and endorsements. It was extremely useful to use the Board of Investments connection and the names of UNCTAD and ITC in attracting the attention of firms.

C. Survey results

1. Profiles of interviewed companies

Of the 303 surveyed companies, 235 considered themselves to be involved solely in manufacturing, 16 solely in trading, and 37 solely in agricultural and agro-food. Ten companies reported joint activities in both manufacturing and trading; three in both manufacturing and agri/agro-food; and one in both trading and agri/agro-food. One company answered "other", but since it was involved in printing and publishing, and it could actually be considered under either manufacturing or trading. Almost all the manufacturing firms were located in Metro Manila, while many agri-industrial companies are either located in Davao or General Santos City.

The manufacturing companies that were included in the survey manufactured toys, gifts and housewares, garments and furniture. Those firms in the agricultural and agro-food sectors exported tuna, bananas, coconut and pineapples. In terms of foreign ownership, more than 80 per cent of the companies surveyed were locally owned. This is most probably due to the fact that the focus of the survey was on small and-medium-sized enterprises. Foreign-owned companies tended to be very large corporations, not small ones. They also tended to be located in special economic zones outside Metro Manila.

Almost all of the surveyed companies had been in the exporting business for more than five years, while only 38 companies, or 13 per cent, were relatively new; one left the answer blank. This indicated that majority of the interviewed companies may already be “survivors” in the exporting field where regulations had tightened over the years. From the sample, it was difficult to glean the possible entry and exit of firms as a result of non-tariff measures. However, as later analysis will show, it was still possible to show entry and exit in specific destination markets.

Although the focus of the survey was on SMEs, more than half of the companies had a large group of employed workers, i.e. about 163 of them had more than 50 employees. Close to 20 per cent of the surveyed companies had 10-20 employees, while 18 per cent have 21-50 employees. Only about 10 per cent employed less than 10 workers. In terms of annual turnover, close to half of the companies had sales of less than 15 million Philippine pesos. Close to 80 per cent of the surveyed companies, or 250 out of 317, export more than 60 per cent of their annual sales while a few had exports that ranged between one to 60 per cent of their sales. Almost 80 per cent of the large exporters, 194 out of 250, were in manufacturing, while only 15 per cent were in the agricultural and agro-food sector.

2. Reports on trade barriers

2.1 Incidence of cases by NTM categories

The incidence of reported cases was classified according to the non-tariff measure category elaborated by UNCTAD. These cases were those reported by both exporters and importers, although almost 99 per cent of the cases are from exporters. The eight importers cases were as follows: 1 SPS, 7 TBT; the rest were cases reported by exporters. This result also reflected the fact that 299 of the 303 companies considered themselves as exporters, even though they also imported goods themselves. Only a few reported cases that relate to their importing experience. Hence, in the subsequent analysis, unless otherwise explicitly stated as including the importers’ case, the discussion that follows will focus only on the cases affecting exporters.

Perhaps owing to the dominance of manufacturing firms in the sample, technical barriers to trade (TBT) constituted the highest number of reported cases – 393 export cases and seven import cases. Of the various TBT measures, certification requirements, both from the country of origin (i.e. the Philippines) and in the destination market, dominated the TBT cases. Other important issues in TBT were testing and inspection and clearance. There was also a significant presence of TBT cases related to environment specific requirement. Of these, Australia had the largest number of reported cases.

Despite the fact that agriculture and agro-food industries comprised only about 14 per cent of the sample, cases of sanitary and phytosanitary (SPS) measures represented the second highest number reported cases by exporters – 258 export cases and 1 import case. Most exporters had problems related to SPS certification requirements, both from the country of origin and in the destination market. Other major SPS issues were related to product characteristic standards, labelling and packaging, and quarantine and testing requirements. Many cases were only reported pertaining to traceability, particularly on the origin of raw materials and parts, and on tolerance limits on residues and restricted use of particular substances.

Export-related measures ranked as the third highest number of reported cases with 100 export cases. These were mostly related to product certification and export licensing requirements in the Philippines which were considered prerequisites to be able to export any product abroad. Curiously, though the author was not aware of any

export tax in the Philippines, except those on natural resources, several companies reported cases involving export taxes.

Twenty-six cases involving other technical measures mostly related to documentation and pre-shipment requirements. Some exporters said that the document requirements changed quite frequently, or are too strict, and therefore caused delays. Some procedures were also vague, while others were asked for informal payments.

The para-tariff measures referred to in 23 cases pertained to additional taxes and charges, such as charges for delays in deliveries, import taxes charged on return shipments, as well as additional cost for additional documentation requirements. Most of price control measures were related to reference prices and price control. The 12 cases indicated that the reference price used tended to be higher than the purchase price by exporters. Another price-related issue was that of variable rates of duty which, exporters say, not only take place abroad but also in the Philippines. There were also 11 cases involving intellectual property. The cases indicated very long duration for filing of patent (for example in China), and in some cases, copying of their designs during fairs/exhibits.

The five reported cases on finance measures were related to contract enforcement between exporters and importers in the destination market. A few exporters felt that the government could have played a role in easing any delay in due process and force the importer to pay up. Three quantity control measure referred to two temporary prohibitions from the Netherlands of leather products and one is related to licensing cost and procedures.

The sole case involving anti-competitive measure actually referred more to a possible MFN violation, rather than to a strictly anti-competitive measure. The banana exporter felt that the destination market discriminates against their export, yet the same product, once transhipped via a third country faces no problem. For importers, the SPS case referred to a product characteristic standard issue from Argentina, while six of the seven TBT cases referred to Philippine custom delays or certification requirement from the originating economy.

2.2 Incidence of cases by procedural obstacles

Among the number of cases classified according to procedural obstacles, a total of 383 cases were related to inefficiency or obstruction (category C), 226 cases to arbitrariness or inconsistency, 134 cases to unusually high fees or changes. The other procedural obstacles, such as non-transparency (category D), discriminatory behaviour (category B), and legal issues (category E) were relatively less important and less cited compared to the top three.

For procedural obstacle category A on the arbitrariness or inconsistency with respect to the application of NTM measures, 143 out of 226 cases (63 per cent) pertained to the application of procedure, regulation or requirement, while only 46 and 19 cases referred to product classification/valuation and the behaviour of public officials, respectively. Interestingly, while many cases referred to problems of application in the destination market, many more cited problems with domestic agencies in the Philippines, particularly the Bureau of Customs. Some of the detailed problems refer to the slow release of shipments from Customs; requests for informal payments; unannounced changes in fees; or even absences of persons who had to sign the relevant documents causing delays in exportation. Others cited many certification requirements, such as fumigation certificates; clearance for endangered species; and tight regulation to get export permits. They also mention the lack of testing facilities in the Philippines that

were acceptable to some destination market, notably the European Union; because of poor inspection locally, the product was returned to the Philippines in some instances.

For procedural obstacle category C, 58 per cent were reported under C2 or on the very strict/detailed/redundant testing, certification or labelling. Indeed, many exporters identified that certain countries require fumigation of products which was not required by other countries for the same product. Others pointed to very low (high standard) content requirement of certain chemicals, for example aflatoxin, histamine level in dried fish, or bacterial level in squid, low chlorophosphorus in certain fruits – requirements which were too hard to satisfy. Others prohibited the use of food colouring or the use of iodized salt as an ingredient.

Another 17 per cent of the procedural obstacles under category C were on excessive documentation requirement (C1). Exporters complained about the tediousness of getting certificates of origin. They also pointed out that there were too many agencies in the Philippines that importers and exporters had to obtain certifications from, as well as too many papers to submit before being able to export a product, at times requiring seven copies of each document. At times, documentation was requested to show that the company gives minimum wages to its workers, or that a particular lumber used had not been taken from protected rainforests.

Fifteen per cent of the cases in category C related to administrative delays. Companies reported that the long process to get Halal certification in the Philippines, or the long GSP evaluation in the United Kingdom. Companies again pointed to the CTPAT inspection in the United States which caused delays in bringing out products. As far as lack of resources (C7) were concerned, companies pointed to the lack of good testing laboratories in the Philippines, which made it difficult to comply with EU requirements. In addition, translation facilities, for example into Arabic, could be quite inefficient, particularly in the light of the detailed labelling requirements of some Arab countries.

The 134 cases referring to category F or to unusually high fees and charges actually referred to the accumulation of costs of certification, documents, testing, standards and labelling. For example, some companies pointed to the expense associated with obtaining HACCP certification. Others complained about the cost of fumigation of containers, or additional testing requirements, or to international accreditation or compliance to audit or buyer inspection. Some even required flying in representatives from foreign government agency to oversee particular processes and to certify that the products have conformed to the destination country's SPS requirements.

Considering that all the specific complaints of exporters were on documentation, certification, labelling, etc., it is no surprise that most of the procedural obstacles were also concentrated on SPS and TBT measures. For example, of 383 category C cases. Forty-six per cent also faced TBT measures, and 38 per cent faced SPS measures; of the 226 category A procedural obstacles identified, 54 per cent also have TBT measures. This is because, by the nature of the NTM measure, the certification, testing, labelling and other requirements were sine qua non for the appropriate implementation of the measure.

2.3 Incidence by economic sector

Broken down by economic sector, over one-fourth of the cases involved agriculture products from HS 02-HS 24, while close to 15 per cent are on unprocessed agriculture product (HS 01-HS 08). The rest, over 70 per cent, are on non-agriculture manufacturing goods. A similar breakdown was found for procedural obstacles. In terms of specific NTM measures, specifically SPS and TBT, while both manufacturing and agriculture

are subject to SPS measures, most cases fell within the category of agriculture and food products. Twenty-eight per cent of the 258 reported SPS cases were in the unprocessed agriculture products, specifically HS categories 03, 04, 07 and 08. Of these, cases of SPS measures on fish products (HS 03) were the highest, which also reflects the fact that this is a major Philippine export. Another major export of the Philippines are fruits and nuts, which perhaps also explains the relatively high incidence of SPS cases for HS 08. There were no reported cases for the other unprocessed HS categories, presumably because the Philippines is not a major exporter of those products. Philippines, for example, is not a meat exporter (HS 02).

2.4 Incidence by country

In terms of which countries had the largest number of reported cases, the United States tops the list with 242 NTM measures, or 29 per cent of total. Japan is a far second at 8 per cent and Australia, third, with 6 per cent of the cases. Even the combined share of the European Union member countries only add up to 18 per cent, still way below that of the United States. This result also reflects the fact that the United States remains the top trade partner of the Philippines and the fact that 210 companies or almost 70 per cent of the sample actually export to the United States. Exporters to Japan, in contrast, number only 95, or 31 per cent of the companies in the sample. By the law of large numbers, the likelihood that there would be many reported NTM cases in the United States is indeed going to be high. Altogether, the top ten countries' share in the total number of cases was close to 80 per cent.³

2.5 Incidence by specific products

Of the various Philippine exports, banana products received the largest number of NTM cases, followed by jewellery, various furniture and decorative articles. The 44 NTM cases involving banana was equivalent to more than 50 per cent of the total NTM cases involving unprocessed agriculture products, 38 of which were SPS-related and given by 15 different countries. Similarly, sardines faced almost all SPS measures. Imitation jewellery, in contrast, had 40 NTM cases, 29 of which were TBT-related, while the rest came from export measures and other technical measures, specifically documentation requirements. The same holds true for the furniture exports, of various materials, as well as garments exports, where TBT was practically the sole NTM measure imposed.

3. *Specific aspects related to sanitary and technical regulations*

Some 262 companies answered questions on the technical regulations they faced. Eighty-six per cent of these found that it was feasible to adapt their products to the technical regulations in the destination market, while 37 companies, or 14 per cent, found that it was neither technically nor financially feasible to adapt their products. Likewise, of the 262 companies, 47 companies, or 18 per cent, faced changes in technical regulations, whether exceptionally or frequently, while 82 per cent had not faced technical regulations "in recent years". Of the 47 companies that faced changes in technical regulations, only 11 actually replied financial or technical infeasibility, while 36 found them feasible. This means that out of the 37 that answered that faced technical problems or that it was financial unfeasible to proceed, 11 may be referring to the changes in technical regulations "in recent years", while the other 26 may be referring to the technical/financial problem of adapting to regulations in the destination market, in general. Be that as it may, of the 11 that faced changes in technical regulations and mentioned technical or financial infeasibility in adapting, seven companies stopped exporting to 12 different countries.

³ Including the Republic of Korea, Italy and the United Arab Emirates.

4. Summary of results

The findings of this section of the paper can be summarized as follows:

- Most exported products from the Philippines are subjected to technical barriers to trade (TBT), sanitary and phytosanitary measures (SPS), and export-related measures (ERM). Forty-seven per cent of 834 export cases reported TBT measures, while 31 per cent faced SPS measures. Another 12 per cent complained about export-related measures. For both TBT and SPS, the major issues are on certification and labelling requirements, product characteristic standards and inspection and clearance.
- By procedural obstacles, the major ones related to inefficiency or obstruction, as well as arbitrariness or inconsistency. These, in turn, were closely related to the top NTM measures on certification and labelling, i.e. exporters complained about the many documentation required, the detailed requirements in packaging and labelling, and procedures in inspection and testing. However, many procedural obstacles that were raised by exporter-respondents referred to those encountered domestically. These included delays caused by export-related agencies, such as the Bureau of Customs, in the exportation process. The procedural difficulties experienced by respondents in the country of exports were usually addressed or overcome in due course, especially as experience in exporting a particular product was gained through series of transactions.
- By economic sectors, about 75 per cent of the total cases reported concerned manufacturing companies, 25 per cent dealt with companies involved in agriculture, and 10 per cent exported unprocessed agriculture products. Almost all of the TBT cases related to manufacturing products, while 73 per cent of all SPS cases concerned agricultural products, with the balance taken up by manufacturing products.
- By destination markets, the United States and Japan had the largest number of reported cases, reflecting also the fact that these were the two major trading partners of the Philippines. Australia and the European Union, along with the individual countries of the European Union, were likewise among those that had many reported cases. The top ten destination markets with the most number of cases accounted for 67 per cent of all SPS cases and 78 per cent of all TBT cases. This implies that relatively more SPS cases were spread out across other destination markets, while TBT cases are more concentrated on the top ten countries.
- As far as technical regulations were concerned, while most of those that faced changes in technical regulations found them more complex, the increased complexity itself only lead to a few companies to stop exporting to these destination markets. In terms of regulations, about 85 per cent of exporters found adaptation to the foreign regulations feasible, while the other 15 per cent found them financially or technically unfeasible. Most of them were also aware of international norms concerning their products.
- The number of those that found positive effects from complying with foreign technical regulations exceeded those that did not, 61 versus 39 per cent. A major benefit cited was the decrease in reduced entry barriers, not only in one destination market but also in third markets. It also increased market penetration because compliance helped increase their reputation of dependability.

III. NTMs applied by the Philippines

A. National data sources

We compiled the Philippine NTM data by consulting the relevant administrative orders, circulars and memoranda on the websites of various government departments and agencies. The few others which we considered important, but which were not available online, were obtained from the records section of the concerned department.

We then made an assessment of the likely non-tariff measure that the regulations imply. For some, it was straightforward and specific, for example, certification procedures or export permits. For others, the wordings of the law/regulation might not be easy to interpret but the implication could be clearly identified as one of the NTMs on the list. Others were more difficult to associate with more specific NTMs, hence we placed it in a more general category, for example A100 or voluntary standards, instead of specifying if it was international or national, or on the production process, product characteristic, etc.

The more difficult task concerned product classification. Luckily, many regulations generally cover, say, all animal and animal products, which meant that we could choose larger HS headings, such as HS 01 to HS 05 and HS 15. Other regulations contained more specific products, some of which had no direct match with any product in the harmonized system. In these instances, we made an educated guess on the HS category based on the department and the context of the regulations. For example, some regulations from the Bureau of Food and Drugs contained some medical terms/items that did not appear in the same way as on the HS list. After checking with a medical doctor, we ended up choosing the closest HS classification, namely products used in surgical operations. For regulations where the product was not specified, say wood packaging regulation, we just assumed the most likely products that make use of wood packaging, for example fruit products or some dairy products, etc.

Most of the regulations did not apply to a specific country, with exception of a few countries with health advisories, for example when there is an outbreak of food and mouth disease in those particular countries. Thus, most of the NTMs in the Philippines were applicable to all countries, instead of only to some.

On starting and ending dates, when the date of implementation of the regulation is specified, we indicate them as such; otherwise, we assumed that the date of the regulation was likewise the starting date of its implementation.

B. NTMs applied by the Philippines

There were a total of 4,842 entries on the list. Each entry did not necessarily denote a product because some entries are up to 2-digit classification of the harmonized system. As explained above, many regulations from which we derived NTMs generally cover the whole spectrum of plant and plant products, or animal and animal products. Be that as it may, an analysis of the entries provides interesting results.

1. Types of NTMs

With regard to the prevalence of specific NTMs, we found that more than 50 per cent of the entries are affected by SPS measures. Quantity control measures and TBTs

follow with 19 and 12 per cent, respectively. Export-related measures, which had been identified by many Philippine exporters, as reported in Part II of this paper, also account for 8 per cent of the total number of entries.

Of the 2,483 SPS entries, about 25 per cent were accounted for by restrictions and prohibitions in case of outbreaks of infectious diseases and the corresponding quarantine requirement (A260-A262). Conformity assessments related to SPS, especially certification requirement in the destination market (A300-A312) take up 16 per cent, while inspection and clearance (A340) accounted for another 16 per cent. Standards, both international and national, also accounted for 11 per cent of the SPS-related measures. Other major measures that the list identified included: labelling, marking and packaging requirements (A210-A213), registration requirements (A350) and testing requirements (A330).

With regard to the 583 TBT entries, more than one-third of them were accounted for by certification requirements once again (B310-B312), while 28 per cent were on national standards (B120-B122). Registration requirement (B350) and inspection and clearance (B340) took up 16 and 13 per cent, respectively. For quantity control measures, more than three-fourths of the 911 entries were on prohibitions, majority of which were temporary. Another one-fifth are accounted for by licenses and import permit requirement (E100, especially E140).

Finally, for export-related measures, more than 60 per cent of the entries were due to licences and export permits. The result corroborates many of the NTMs reported by Philippine exporters. Many of them have said that most of the delays and problems they face were actually in satisfying all the certification, registration and testing requirements, as well as licensing and permits required by the government.

2. Affected products

Despite the fact that the entries did not correspond to specific product, it was still interesting to note that of the 4,842 product(s) entries, close to 70 per cent were in agriculture, while the rest were in manufacturing. This means that the Philippines, based on the list of NTMs we gathered in this exercise, applied most of its NTMs on agriculture products (HS 01-HS 24). Likewise, 46 per cent of the total were on unprocessed agriculture products (HS 01- HS 08), or the majority (67 per cent) of the agriculture products.

3. Recent trends

The Philippine government has made an effort to streamline many procedures to facilitate licensing, registration and certification. In the first place, many instructions and required forms to be submitted were now available on-line. There were also efforts to provide a 'one-stop-shop' in order to prevent importers and exporters going to different government agencies just to obtain a single signature.

The creation of national standards has also been ongoing. To date, 4,274, or 77 per cent, of total Philippine product standards have been harmonized with international standards. The Philippines in certain cases has adopted international standards, especially in agricultural products, because it lacks the capacity to make its own independent risk assessment. Some government officials argue that international standards need to be adjusted to local requirements, but as the government lacks the capacity to carry out risk assessments, many local standards have not yet been affected.

C. Preliminary assessment of applied NTMs

On face value, many of the laws/regulations that we examined did not contravene any international commitment, for example WTO commitments. For example, with regard to rice quotas, the Philippines asked the WTO for an extension for this exemption. Many of the prohibited or regulated importations are, likewise, defensible under exemption Articles of the GATT e.g. Article XX and XXI, or the Agreement on Agriculture and SPS.

The problem perhaps lies in the manner of its implementation. For example, some exporters bewail the lack of clarity in the rules, procedures and process flows for export clearance of plant and plant products which allow for a certain leeway in how they are interpreted by the agency. They are also concerned about the required treatment of wood packaging materials without the requisite capacity in the government to carry out the said treatment.

D. Summary of results

Most NTMs applied by the Philippines were related to SPS measures. Other major NTMs were related to TBT, quantity control, trade-related investment measures and export-related measures. The finding corroborates the analysis of the NTM cases reported by exporters and discussed in Part II, namely that domestic NTMs, particularly those related to certification, licensing, testing and inspection put a heavy burden on both importers and exporters.

The majority of NTMs were applied on agriculture products, particularly live animals and meat products, dairy products and fruits. The NTMs applied by the Philippines, particularly the prohibitions and regulations of imports of certain products were compliant with WTO rules. The country does not apply higher product standards than the international standard. The more problematic area of concern for traders was in the application of the NTMs, for example the long delays resulting from inspection and the multiple agencies needed to be approached for permits and licences, etc.

IV. Challenges

A. *Business survey: Challenges faced and lessons learned*

The challenges faced during the interview phase of the project included:

◇ *On sample selection, both products and exporter/importer.*

The ideal sample should have reflected the actual trade structure of the Philippines, for example semiconductors account for almost 70-80 per cent of exports. If this had been the case, very few cases of NTMs would have been identified because semiconductors were not affected by them. Thus, we decided to opt for industries or products where more non-tariff measures were typically going to be found. We therefore opted for various manufacturing products and agriculture industries.

We also chose on the basis of location. The first criterion was that they should be in Metro Manila; then later, after exhausting the firms interviewed in Manila, we interviewed firms in Cebu, Davao and General Santos. The sample choice also depended on the list of exporters which we obtained from the Board of Investments. The list allowed interviewers to obtain the names of contact persons immediately. More focus was placed on interviewing exporters than importers.

◇ *Complexity of NTM classification*

The surveyors spent a considerable amount of time probing the responses given by respondents on their NTM experiences. Familiarity with the NTM classification by the surveyors proved very helpful, as this was necessary to fully explore the exact and precise NTMs experienced by the exporter-respondent. In many cases, the actual NTM classification was decided after consultations with other colleagues in the team. During the interview, we focused on obtaining information on NTMs and experiences, rather than on specifically pigeonholing those in the different NTM categories.

◇ *Quality and length of business survey questionnaire.*

In terms of the quality of the business survey questionnaire, the major areas of difficulties in NTMs were due to the fact that some questions were straightforward and others less so. The more sensitive information, for example annual sales, did not always elicit responses from respondents. Depending on the number of NTM cases identified, the length of the questionnaire varied but, overall, it was fairly easy to administer after a number of interviews.

◇ *Usefulness of the Trade Barrier Reporter web portal*

The respondents were receptive to the idea of a web portal as a window for them to communicate any complaints they may have. This also provided a much-needed incentive for them to participate in the survey, and allayed their fears on the confidentiality of responses. However, the interview itself did not make use of the web portal facility as it was much faster to carry out the interview through face-to-face conversations.

◇ *Administrative problems implementing survey.*

Because the survey needed to be extended in three regions that are far from Metro Manila, the cost and expenses incurred in administering the survey increased two-fold. This was not readily realized at the start of the survey, so it became difficult for the survey team to manage their resources.

◇ *Technical problems in implementing the survey*

It was necessary for the survey team to spend a period of time familiarizing itself with the survey structure and the administration of the survey. Periodic meetings were very useful in order to address crucial issues in the classification, and the manner of communicating each of the questions. It has been very helpful to discuss the manner by which each question was introduced and communicated. The answers to the initial questions were very critical inputs to probe the NTM experiences of companies.

◇ *Degree of cooperation by companies*

The majority of the respondent-companies were owned by senior management. With the exception of large companies where a bureaucratic structure poses as a challenge, the level of cooperation was not as easy or quick to obtain.

◇ *Linkages with the United Nations, government and business chambers*

The survey team rehearsed the introduction as this was particularly important for the survey. In the Philippines, the amount of cooperation obtained largely depended on how convinced the respondent was on the utility of the survey on his or her business. Introducing the survey as a United Nations/ national government project definitely sustained interest among respondents, especially among SMEs, but this did not always hold true in the case of large companies.

Summary of lessons learnt

The administration of the survey is best carried out with careful planning, taking into consideration the targeted respondents, their scale of operations, the sensitivity of the sectors involved, and the issues at hand. The strategy and skills of the surveyor is essential in trying to sustain the interest of the respondent and in obtaining their full cooperation. The training of the surveyors before the survey launch proved to be very helpful in quickly addressing issues in the field. Likewise, it was very important to monitor the daily interviews, as this provided a useful exchange of information on a number of topics, such as unique sectoral NTM experiences, as well as some of the problems encountered in the course of the survey.

The regional survey was generally easier to conduct because firms in the provinces were more accommodating to someone who had to come all the way from Manila to carry out interviews in their region. However, it added considerably to the expense of the survey.

The survey strategy largely depended on a list of exporter-companies compiled from various sources. It is best to obtain a list that contains more specific classification, for example an exporter list vis-à-vis a more general registry of companies from a regulatory public agency. In the Philippines, many of these listings are not updated, and in some cases the same companies can be found in different listings. To obtain

better cooperation from firms, it is likewise important to help firms appreciate what can be done with the data that they would supply and how it can benefit them.

B. Inventory on NTMs applied by the Philippines: Challenges faced and lessons learned

The challenges faced in the compilation of NTMs applied by the Philippines included:

◇ Identification of sources of information

Since NTMs are scattered across various products, it follows that the agencies responsible for them were also diverse. A desk review of materials on NTMs, government pamphlets, or quick visits to specific government department websites eventually led to agencies that are responsible for policy and implementation of various NTMs. For example, the Bureau of Customs visitors' arrival form contained a list of prohibited and regulated products in the Philippines and the agencies where visitors can request clearance from. These helped us to identify some specific agencies. Besides identifying the agencies responsible, we had to also look for relevant administrative orders, memoranda and circulars from their respective websites. Some of these sources were not accessible because the government websites had not place all relevant regulations online. We tried to get older regulations and those that were only available in hard copies by going directly to the records division of the agencies concerned.

◇ Degree of cooperation received from the relevant agencies in gathering information

Websites of relevant ministries were major sources of information; however, a good proportion of the information that was found was incomplete. Going to the records section of relevant agencies helped to find the missing information. Despite this, some administrative orders and memoranda could still not be located.

◇ Cost of access to information

The information required for the project could be obtained from publicly available information. No purchase of specific materials was made. There is, however, a hard copy of standards for sale from the Department of Trade and Industry, but in the end, we opted not to buy this publication because the project did not strictly require it. This information would be useful for traders and manufacturers who would like to know the exact required standards in the Philippines for particular products, while for our purposes, the information that a standard exists for such products was sufficient.

◇ Difficulties in gathering or classifying the measures in the database.

As discussed above, the work entailed understanding the content of the regulation/legislation and making an educated guess of what the NTM(s) is/(are) in each particular case as well as of the product coverage in the regulation. There is, admittedly, a huge subjective component in the construction of the database.

V. Conclusions

This study has generated interesting information on the NTMs faced by Philippine exporters. Based on the sample interviews, TBT accounted for the greatest number of NTMs experienced by exporters, followed by SPS and export-related measures. Many of these NTMs were related to certification and labelling requirements, product characteristics standards, and inspection and clearance. Unsurprisingly, the dominant procedural obstacles identified by exporters were related to complaints on the need for excessive documentation, detailed labelling and packaging requirements, and tedious inspection.

The paper also found that the greatest incidence of NTMs fall on manufacturing products, largely reflecting the fact that manufacturing companies constitute the majority of the sample. About 75 per cent of total NTM cases concerned manufacturing companies, and the remaining 25 per cent are agriculture companies. The United States and Japan were the top two countries with reported number of cases, followed by Australia and Japan.

Interestingly, the companies that faced changes in technical regulations generally found them more complex, but this only stopped a few of them from exporting to those markets. Moreover, many companies reported positive benefits in adapting to the regulations, not the least of it is reduced entry barriers and ease in shipment in both the destination market and other third country markets.

The paper also found that, with regard to the NTMs applied by the Philippines, SPS and TBT also take the majority of the measures applied on imports. Quantity control measures, trade-related investment measures and export-related measures are, likewise, numerous. Most of the NTMs applied by the Philippines were on agriculture imports, particularly live animals and meat products.

Recommendations for moving forward

Since the major contribution of the project is the unique database of NTM cases from the private sector and the NTMs applied by the Philippines, most of the recommendations will focus on how to maintain, expand and improve these two databases. Additional funding will, however, be needed in order to do this.

For the NTMs applied by the Philippines, constant updates will be required as new regulations are issued and old ones replaced. Furthermore, some regulations that were not found as the time of the research may become available. These, too, should be added in the database.

As we get better knowledge of specific products referred to in the existing regulations, the existing HS classification we have put in the database can also be edited. That is, the information should be polished more and more as information become clearer.

It is important to build awareness of the NTMs web portal. This could be done by asking exporters organization, for example Philexport and government institutions, such as the Department of Trade and Industry and the Department of Agriculture, to put a link on their website of the NTM web portal so that traders who visit their websites could learn of the UNCTAD facility. However, for them to be encouraged to

report NTMs, the website should provide valuable information only to those exporters who contribute information, for example those companies that have already registered on the website. Examples of the sets of information that can be supplied are the various NTMs that companies face for their particular products around the world, or how many Philippine or developing country firms have reported to have faced the same complaint, etc.

A new set of private sector interviews will be needed to carry out an impact assessment of NTMs in order to determine the cost of compliance. Another interesting area of future work is to further explore the entry and exit of exporters in particular markets. As for capacity-building and technical assistance needs, this requires both a short and long-term view. In the short term, the bureaucratic logjam could be simplified by making information available and establishing “one-stop-shops” to facilitate approvals. More third-party providers should be accredited by the government to minimize testing delays. An advertising and awareness-raising campaign on Philippine ethnic food should be launched in other countries to familiarize foreign customs officers with food products from the Philippines. Custom processes also need to be computerized. There are already many efforts along this line, many of them foreign-funded.

A long-term and sustained investment in human development is required to build capacity in risk assessment. This may, perhaps, require a link-up with universities and science research institutes. Likewise, more modern testing laboratories that will be acceptable to destination markets need to be established in the country to avoid the rejection of products by foreign customs. These will require long-term foreign technical assistance, not short-term, quick result-oriented projects.

THAILAND¹

I. General Overview

A. Current economic structure and growth

Thailand experienced a significant jump in exports and imports in the years following the 1997 Asian financial crisis. Since this time, the country has relied on international trade to boost its economy, as reflected by the gradual rise of the trade-to-GDP ratio to about 120 per cent in 2007 and to an even higher level in 2008. This is part of the reason why the Thai economy, which has strong international reserves and a robust financial sector, was able to cope with the liquidity problems created by the global economic crisis in 2008-2009.

Exports have become the country's major source of economic growth. In 2009, Thailand's GDP growth is expected to be around -3.0 to -4.5 per cent, according to estimates from the Ministry of Finance, Bank of Thailand and the National Economic and Social Development Board of Thailand (NESDB). Trade is expected to drop by about 17-18 per cent if the economy recovers nicely in the last quarter of 2009.

The structure of the Thai economy has been almost evenly balanced since 2001, with the services sector accounting for about 48 per cent of GDP and the industrial sector accounting for about 44 per cent of total GDP, the remainder is accounted for by the agricultural sector. The agricultural sector plays an important role in releasing valuable surplus manpower resources to develop the industrial and services sector. During the period following the Asian financial crisis, the agricultural sector presented the economy with strong support for job opportunities and increased its role in the export sector, for example rubber exports are now part of the top ten exports of Thailand.

B. Trade structure

Thailand's trade structure has changed significantly over the past two decades, and it now has a more diversified economy which relies on a wider variety of exports. The country has also gradually transformed itself into an industrial economy and the volume of industrial exports is now larger than agricultural exports. Labour (particularly unskilled) migration from the agricultural to the industrial sector has occurred because of the wage differences between the two sectors during the period of rapid export

¹ This part of the report was prepared by Santi Chaisrisawatsuk of the National Institute of Development Administration (NIDA).

growth. Despite the increasing role of the industrial sector as a contributor to Thai exports, the agricultural sector remains an important sector of the economy.

Thailand's major export partners are in the ASEAN region, the European Union, the United States and Japan; China is now also moving to close the gap. Exports to ASEAN countries has increased significantly to over US\$40 billion in 2008 from US\$12.3 billion in 1995, partly as a result of the implementation of ASEAN FTA (AFTA) from 1993-2010. The United States, the European Union and Japan are now major markets for Thai exports, but the proportion of exports to these markets have been falling over the past decade. According to the country's Trade Policy Review (2007), the share of agriculture to total exports declined from about 20 per cent in 1999 to 18.5 per cent in 2001.

In terms of imports, Japan is the largest importer of Thai products, with a value over US\$33 billion in 2008. The value of Japanese imports from Thailand is consistent with Japanese direct investment flows into Thailand in recent years. This suggests a complementary relationship between trade and investment between the two countries. ASEAN countries are now well established as major import partners. Thailand imports over US\$30 billion from ASEAN countries, over US\$14 billion from the European Union, and over US\$11 billion from the United States in 2008. The share of agriculture in total imports has remained unchanged at about 7.9 per cent in recent years. This reflects the country's capacity to meet its own food needs. In addition, a number of technical and tariff barriers to agriculture imports are also presented.

The major importing countries in the Middle East include the United Arab Emirates, Saudi Arabia, Qatar and Oman. Most of the imports are petroleum and petroleum-related products. Thailand's top ten products accounted for 70 per cent of total exports in 2006. Thailand's major exports are comprised of industrial and agricultural products. Electronics and electrical appliances, such as computers and computer parts, vehicles and auto parts and plastic products, are among Thailand's top exports. Agricultural products, including rubber and processed foods, form part of its export basket. Interestingly, Thailand has in the past been the world's largest rice exporter, but rice exports have fallen from Thailand top ten export list in 2006. This again suggests how Thailand's export structure has changed and how the country has developed a more dynamic export-oriented economy. Thailand's competitiveness in world markets is in large part due to the diversification of its trade basket.

Thailand's main imports include fuels, capital goods, intermediate products and raw materials; the top ten imports include items, such as electrical, electronic equipment, machinery and auto parts. In addition, raw material and intermediate products, such as iron and steel, plastics and plastic articles, organic chemicals, and copper and copper articles were brought into the country to support the development of export-oriented industries in Thailand. Not surprisingly, Thailand recently extended anti-dumping (AD) measures on iron and steel against 17 countries.

C. Recent trade and tariff policies

Thailand has very actively engaged in bilateral trade negotiations with other countries, particularly as the international sector (exports and imports of goods and services) has been identified as the most significant contributor to recent economic growth. The tariff structure at the multilateral level has been gradually reduced in recent years, and the falls have been greatest within the framework of bilateral agreements. Thailand's average MFN applied tariff rate is 25.7 per cent on agriculture products (including processed food products) and the average applied tariff rate on non-agricultural import was 13 per cent in 2006.

During the Thaksin administration, trade liberalization through economic integration was seen as a major economic instrument to stimulate growth. Thailand has participated actively in trade agreement negotiations at the multilateral, regional and bilateral level. Like many other small open developing economies, bilateral free trade agreements have been at the centre of their trade diplomacy over the past decade. Thailand has engaged in both South-South bilateral trade agreements, but also North-South trade agreements. Thailand has successfully concluded and implemented a number of North-South agreements, including the Thailand-Australia FTA, the Thailand-New Zealand Closer Economic Partnership Agreement, and the Japan-Thailand Economic Partnership Agreement.

According to Thailand's Trade Policy Review (2007), a number of agricultural products are subjected to non-automatic import licensing, these products include fish-meal, jute and kenaf. In addition, 23 agricultural products are subject to tariff quotas and import licensing requirements, including potato and tea. Raw hides and skin and some forms of unprocessed wood are also subject to export taxes.

D. Recent and new commitments and regulations related to SPS and TBT

SPS and TBT provisions in Thailand have evolved gradually. SPS measures are mainly the responsibility of the National Bureau of Agricultural Commodity and Food Standards, together with the Food and Drug Administration. The Thai Industrial Standard Institute operates under the supervision of the Ministry of Industry, which establish regulations for TBT measures. The implementation of SPS and TBT measures are overseen by the Department of Foreign Trade. The numbers of SPS and TBT measures have increased over the years, with more focus placed on improving product standards and consumer food safety.

Since 1999, mandatory technical regulations are required for imports of six steel products. In addition, the Ministries of Transport and Industry has set technical regulations in the automobile industry, and some 217 companies in the sector have received ISO 9000 certificate. The Management System Certification Institute (Thailand) was also created in 1998 to handle the certification work in the context of ISO 9000, ISO 14001 and ISO 18001.

II. Business Survey

A. Survey methodology and implementation

Two hundred and thirty-five surveys were completed by the research team. A consulting company also facilitated the work being carried out by the research team who would subsequently carry out the interview (200 surveys completed). For the most part, the surveys were conducted with companies that were located in Bangkok and surrounding provinces, or among companies that had subsidiaries in Bangkok area. In addition, some of the surveys also included companies located in important industrial areas in eastern, north-eastern and northern parts of the country. A total of 435 surveys were completed over a period of 6 to 8 months.

Difficulties were experienced in the early stage of conducting the survey as the research teams had to explain and convince the targeted firms of the benefits of having an NTM database and making available this data. Some companies refused to make

appointments for the interview and were reluctant to provide key information. After a process of trial and error, it was found that a “walk-in” strategy consisting of a researcher stopping by a company and asking for an interview was a good approach, especially for SMEs. In most of the interviews that were conducted, researchers had to spend about 15 minutes giving information on the NTMs that appear in the questionnaire to help interviewees to better identify whether they had been affected by NTMs. In some cases, examples needed to be provided to ensure an appropriate understanding of a particular NTM. Moreover, companies were unable to identify the right person to attend the interview and thus, the information received might not fully reflect all the NTMs faced by companies.

B. Survey results

1. Profiles of interviewed companies

The companies that were interviewed were classified as belonging to the manufacturing, agricultural or agro-food sector and whether they were multinational or trading companies, etc. A total of 435 companies were interviewed and completed the surveys. More than half of these companies were involved in manufacturing and about 20.69 per cent, or 90 companies, were both manufacturing and trading company. Thirty-one companies, or 7.13 per cent, were classified as both multinational and trading companies.

Among interviewed companies, 45.75 per cent (199 companies) had no foreign ownership, 39.08 per cent (179 companies) had less than or equal to 50 per cent foreign ownership, and about 14.25 per cent (62 companies) had more than 50 per cent foreign ownership. Most of the companies with no foreign ownership were small and medium-sized enterprises (SMEs). In general, foreign ownership is limited to 49 per cent² under Thai law, except for companies that had been approved by BOI Thailand, in which case foreign ownership was not limited. Higher foreign equity limits in banking were introduced after the 1997 Asian financial crisis. However, majority Thai ownership is still required in many industries, for example domestic shipping and aviation requires at least 70 per cent Thai ownership.

The majority of companies had been operating for more than 5 years. Only 6.67 per cent of the companies interviewed had been operating for less than 5 years. Sustained exports and foreign direct investments after the 1997 crisis contributed to an increase in the numbers of companies participating in international trade.

Three hundred and fifty companies (80.46 per cent) employed more than 50 employees; 36 companies (8.28 per cent) employed 10-20 employees; 27 companies (6.21 per cent) employed 21-50 employees; and 20 companies (4.60 per cent) employed less than 10 employees. This is consistent with the companies participating in the international trade sector in Thailand where most of the companies employ more than 50 employees. Some small companies were also included in the sample to make sure that the sample covered the whole range of company.

2. Report on trade barriers

The 435 interviewed companies reported 1,835 cases of non-tariff trade measures, an average of 4.22 cases per company. About 93.79 per cent of interviewed companies

² Foreign ownership in some specific sectors is limited to less than 49 per cent and there are lists of reserved occupations which prohibit foreign participations.

reported 1-4 cases, 5.98 per cent reported 5-9 cases and one company reported 10 cases. In general, the companies that reported the largest number of cases were trading and multinational companies handling a wide variety of products with different trading partners in several countries.

The number of cases is more likely to be under-reported due to the methodology of the survey. In many cases, the interviewees were unable to recognize some of the NTMs imposed by an importing country, especially historical measures. Moreover, interviewees might not be aware of the type of NTMs their company had faced because they were not directly responsible for monitoring such developments and were therefore not qualified to be interviewed. For instance, a marketing manager in charge of exporting products to different destinations for the company often failed to recognize some of the NTMs that are imposed on imports of raw material and intermediate products.

Among the total of 1,835 NTM cases reported by interviewed companies, 92.64 per cent of these cases concerned SPS and TBT measures; 865 cases were TBT measures and 835 cases were SPS measures. The SPS measures that were reported concerned exports and imports of agricultural products, especially food processing products, rice, fish, seafood, fruit and vegetables. The majority of TBT cases reported were related to product standards, production process requirements and environmental protection clauses. These cases concerned industrial products exported to mostly developed countries. The TBT cases covered a wide range of products, for example auto parts manufacturers reported 31 cases in 11 countries. In addition, there are 53 reported cases on quantity control measures, which accounted for 2.89 per cent of the total cases reported.

A total of 13 agricultural exports are among the top 15 products that had been affected by NTMs. However, the top 15 products that were affected by NTMs accounted for only 26.05 per cent (478 cases) of the total number of cases reported. A total of 73.95 per cent of all reported cases were distributed among a number of products with less than 20 cases for each product. The number of countries involved in NTM cases also varied by product. For Thai rice exports, 71 NTM cases involved 19 countries, about 3.72 cases per country, while plastic articles reported 36 cases in seven countries, approximately 5 cases per country.

The European Union, United States and Japan accounted for more than half of the reported cases of NTMs. The European Union was involved in 403 cases, the United States in 337 cases, and 217 cases are related to exports or imports to Japan. This is consistent with the share of Thai exports to those markets. In 2008, about 14 per cent of total Thai exports were destined to European Union countries, 12 per cent to the United States, and 11 per cent to Japan.

China and Australia accounted for 154 and 130 cases, respectively. This is perhaps to be expected as the volume of trade between Thailand and these two trading partners had grown significantly after the implementation of FTAs, such as the Australia-Thailand FTA, the Thailand-China FTA under ASEAN-China FTA. Some of the NTM cases arising from trade with China are due to the “CCC mark” regulation³ imposed on a wide range of major Thai export products, especially electronics, electrical appliances, computers and computer parts. SPS measures had been imposed by China and Australia on Thai agricultural imports due to increasing health concerns.

Fewer NTM cases were reported in the ASEAN region, and only Malaysia and Viet Nam were cited as having implemented 49 and 23 cases of NTMs, respectively. It is important to note that the number of NTM cases reported may have included some conditions on the standard and quality of the products required by importers rather

³ Import products are required to be inspected by the authorities for proper standard and provided with the mark to apply on the product.

than the regulation imposed by the importing country. Some respondents confused private and government requirements.

3. Specific aspects related to sanitary and technical regulations

Generally, the numbers of NTM cases were tied to export volumes among trading partners. A larger export volume often implied a larger number of reported cases of NTMs. Furthermore, the number of NTMs that were applied depends on the category of products being traded and the trading partners. Usually, developed markets, where customers of the products paid more attention to the quality of the product and focused less on the slightly lower price products (price competition), have tended to impose new TBT and SPS measures. Food safety and environmental concerns seemed to be the two driving forces behind the majority of TBT and SPS measures. TBT and SPS measures might be seen to have negative impacts by some producers as they could lead to increased production costs and lower their competitiveness. However, meeting the TBT and SPS measures imposed, especially TBT and SPS imposed by developed countries, such as the European Union, United States and Japan, provided some producers in Thailand with a competitive advantage in third markets, and made it easier for them to gain access to trade opportunities in new markets. A number of companies in Thailand have become increasingly aware of these advantages. Besides, following some of the TBT and SPS regulations could have also lead to cost reductions.

III. NTMs applied by Thailand

The NTMs applied by Thailand are concentrated on SPS and TBT measures, which together account for about 80.86 per cent of the numbers of products subjected to NTMs. Other NTMs included import and export surcharges (or special duties), tariff quotas, import and export licensing (non-automatic and automatic) and trade-related investment measures that are applied on a different range of products.

Tariff quotas were applied to a number of agricultural products. The list of products subject to import licensing in Thailand included agricultural products, such as fish meal, gunny bag, jute and kenaf, and non-agricultural products, such as marble, building stone, six-wheeled buses seating over 30 people, silk yarn, used motor vehicles, used six-wheeled buses, used motorcycles, used diesel engines and electrical and mechanical-operated games. Thailand had also imposed anti-dumping measures on certain steel products imported from 17 countries. Export licensing was applied on several products for economic or environmental and other reasons. Products subject to export licensing included live bovine animals, can tuna, longans, durians, shrimps and other seafood, wood and article of wood, wood charcoal, coal, live black tiger shrimp, wild animals coffee and products, tapioca, sugar, fertilizers and gold. In addition, Thailand has a series of production subsidy and support programmes in place, including a pledging scheme, soft loans, and price interventions for some agricultural products, such as rice, tapioca and sugar. Support programmes for the purchase of seed, fertilizers and facilities are also available.

IV. Challenges

A. *Business survey: Challenges faced and lessons learned*

- Businesses were reluctant to provide significant information on NTMs because they considered such information to be confidential, and also because divulging such information would have crucial implications on their competitive position. Likewise, in some cases they were afraid that revealing such information would create a negative relationship with their trading partners.
- Only a small proportion of companies were aware of the significance of NTMs and had a limited understanding on NTMs and the impact of such measures on businesses. Generally, companies only became aware of NTMs when they were faced with the problems raised by such measures.
- Original Equipment Manufacturing (OEM) producers were less concerned about NTMs because most of the products they produce were purchased by parent companies or their subsidiaries which often imposed higher requirements than the NTMs imposed by the national authorities of the countries they are exporting to.
- Larger firms faced a wider variety of NTM because of their product range and customer base in destination countries.
- Some of the NTMs were due to the absence of trade facilitation, for example a shortage of inspection equipment used to handle an increasing volume of shipments, particularly for perishable products.
- More rigorous private product requirements than those covered by NTMs, particularly for SPS and TBT (most cases were discovered in agricultural products on food safety concerns), which lead to a degree of confusion in the private sector.
- Businesses were more concerned by interpreting the issues related to NTMs measurement.

B. *Inventory on NTMs applied by Thailand: Challenges faced and lessons learned*

- The numbers of reported SPS and TBT measures imposed had increased in line with rising volume of products traded.
- The data on NTMs applied by Thailand was collected separately by different government authorities depending on whether the product in question was an agricultural or an industrial product.
- The lack of understanding on NTMs and why they were applied meant that they were perceived as trade protection instruments, rather than tools to improve product standards and product quality.

- Some of the NTM applied in the past, such as local content requirement and export and import licensing, had been eliminated and the range of products subjected to NTMs had been gradually reduced. However, at the same time some new NTMs had been introduced.

V. Conclusions

Collecting data on NTMs was crucial and very useful in facilitating international trade for the private sector. Several government authorities were involved in gathering and disseminating information on NTMs in Thailand. However, the fact that the private sector did not participate in data collection efforts made it difficult for authorities to take stock of NTMs faced by private sector exporters and importers. The majority of NTMs applied by Thailand were SPS and TBT measures. Compared to developed countries, there was only limited public participation in the choice of applied SPS and TBT measures, particularly with regard to measures related to consumer safety and production standards. A proper NTM could be derived from domestic consumer consensus on the standard of the product imported, regardless of the country of origin or domestically produced products, and no distinction should be made between imported and domestic products. In addition, some quantitative control measures, such as tariff quotas were still being applied on some products by Thailand.

The survey information revealed that Thai exporters were confronted with several types of NTMs, the majority of which were SPS and TBT measures. Multiple cases were reported by all of the companies that were interviewed. The numbers of reported NTM cases by companies indicated that the European Union, the United States and Japan imposed the largest numbers of NTMs, and that the largest numbers of affected products were agricultural products, such as rice, processed food, fish, seafood, fruit and vegetables. Trade among ASEAN countries had not to the same extent been affected by NTMs. Only Malaysia and Viet Nam appeared in the top 15 countries of reported cases of NTMs.

An appropriate and fair NTM could lead to the faster development of product quality and standards which, in turn, could ensure welfare improvement by reducing price competition, and also create new opportunities for SMEs in the global supply value chain (GVC).

PART II

QUANTIFICATION AND RESEARCH AGENDA ON NON-TARIFF MEASURES

Quantitative Strategies

for Non-Tariff Measures:

Methodological Approaches and Ways Forward with the Pilot Project Data¹

It has been widely remarked that in a world where tariffs have been reduced by recent trade rounds and bilateral FTAs, pressures for protection against imports are more likely to take the form of non-tariff measures (NTMs). This has led to an intensified interest both in monitoring such measures and in quantification of their economic effects.

In the current global trade collapse, direct increases in tariffs, such as were observed in the 1930s, have been virtually non-existent, giving further salience to the potential role of non-tariff policies for restricting imports.

The purpose of this review is to survey available methodologies on the quantification of the effects of NTMs and provide evidence of empirical linkages between trade and non-tariff measures; examine the data obtained through the pilot project, both through survey and official sources; and propose alternative options for analysis and quantification using the data from the pilot project.

I. Quantitative methods for assessing the effects of NTMs

The present task affords a useful opportunity to review recent progress in the quantification of the economic effects of non-tariff measures, and to express some personal views as to the most important issues that have emerged in this endeavour. Some of these points have been raised elsewhere,² while others have been clarified as the result of recent studies conducted at the United States International Trade Commission (USITC). The main points are grouped under the following headings:

¹ This part of the report was prepared by Michael J. Ferrantino of the U.S. International Trade Commission. The material in this paper on quantitative methods was originally developed for a presentation to the UNESCAP/UNCTAD/WTO-OMC Research Workshop on Rising Non-Tariff Protectionism and Crisis Recovery, (14 December 2009, Macau). This paper represents solely the views of the author and does not represent the views of the U.S. International Trade Commission or any of its Commissioners.

² Many of the arguments set forth briefly here are elaborated further in Ferrantino (2006), which rests squarely on Deardorff and Stern (1997).

1. NTMs are closely related to trade facilitation, and the economic analysis of NTMs is similarly related to that of trade facilitation.

This point ought to be self-evident, but is not always seen as such. NTMs make trade harder, and removing them makes trade easier. Trade facilitation makes trade easier by removing problems that make trade harder. Thus, NTMs and trade facilitation are in fact mirror images of each other. It may well be convenient to categorize policies variously as NTMs or as trade facilitation for the purposes of constructing a list or database of policies. Nonetheless, in terms of their economic effects, removal of NTMs can often be considered “trade facilitation” by another name, and vice versa.

In the legal language of trade negotiations and FTAs, NTMs and trade facilitation are often dealt with as if they were unrelated subject matters. In particular, SPS and TBT measures are often dealt with under the rubric of NTMs (as, for example, in the non-agricultural market access (NAMA) negotiations in the Doha Round), while customs matters are often considered under the heading of trade facilitation.

Nonetheless, when quantifying the effects either of trade facilitation measures or of removing NTMs, similar issues arise. Are trade flows smaller than they might otherwise be? Are import prices higher than they might otherwise be? If the policy were changed, what would be the follow-on effects on trade, economic welfare, GDP, production or employment? These lines of enquiry require quantitative tools, such as price gaps, gravity modeling and other econometric tools and simulation methods (partial equilibrium or computable general equilibrium) to study both sets of problems, with the details of implementing the tools often being very similar in practice.

2. The economic effects of NTMs and trade facilitation are potentially very large.

For example, Andriamananjara et al. (2004) estimated that removal of certain categories of NTMs could yield global welfare gains of US\$ 90 billion in 2001. This estimate involved several steps, including identifying particular policies of interest, quantifying their effects on prices using econometric methods, and simulating the effects of the resultant price gaps in a CGE model. In another widely cited result, Wilson, Mann, and Otsuki (2005) estimated that trade facilitation in developing countries could raise global merchandise trade by US\$ 377 billion (9.7 per cent) in 2000-2001. A recent study of NTMs affecting EU-US trade and investment estimates that an ambitious scenario of NTM reduction and regulatory convergence would generate short-term real income gains of about US\$ 85 billion and longer-term gains of US\$ 210 billion (Berden et al, 2009).

There are relatively few quantitative analyses that compare the effects of NTMs and tariffs. Fugazza and Maur (2008) report that in 14 of 26 global regions, the ad valorem tariff equivalent of NTMs calculated using the results of Kee, Nicita and Olarreaga (2006) is higher than the average tariff. In studies focused on particular products and markets, the impact of NTMs is often found to be as high as, or higher, than that of tariffs. For example, the impact of SPS measures on U.S. beef exports from 2004-2007 (US\$ 11 billion) has been estimated to be almost twice the impact of tariffs and tariff rate quotas which are estimated to be US\$ 6.3 billion (USITC, 2008). In another study focusing on U.S. agricultural exports to India, the effects of removing India’s NTMs on U.S. exports were found to be about the same order of magnitude as those removing India’s tariffs (USITC, 2009), although the role of NTMs for a single product (wheat) accounted for most of the NTM effects.

3. The distortions from NTMs can be measured as price gaps or quantity gaps. In many applications, price gaps are preferable.

Restraints on imports, if they are effective in practice, are likely to reduce the quantity of imports, increase their price, or both. In some cases, the quantity or price effect of import restraints is of interest for its own sake. One may also wish to introduce measures of the distortion into a simulation model to estimate effects on welfare, GDP, or inter-industry effects.

For purposes of simulation modeling, it is often convenient to express these effects as “price gaps” or “tariff equivalents”. The difference between the high price of imports induced by the NTM and the lower or “world” price that would prevail in the absence of distortions can be treated as a tariff equivalent. Tariff equivalents have the advantage of providing easy comparisons between NTMs and tariffs. Also, the removal of NTMs can be simulated in a partial equilibrium or CGE framework using familiar methods for simulating the effects of tariff changes.

One can also measure the quantity or value effect³ of NTMs or other import restraints as the difference between the observed (lower) imports under the NTM and the higher level of imports that would have been observed without the NTM. This requires the analyst to come up with a level of “normal” imports in the absence of the NTM. One widespread technique for doing this is gravity modeling. It is well known that a high degree of the variation in the value or volume of trade between partners can be explained by the size of economies of the trading partners (more trade between partners with higher GDPs) and by the economic distance between partners (less trade between more distant partners, more trade between partners sharing a common border or a common language). Estimates of the gravity model can be used to generate out-of-sample estimates of what “normal trade” would be between country pairs for which the trade value is usually lower.

There are several reasons for preferring price gaps to quantity gaps in most cases. First, price gaps measure the difference between two observed values, a distorted (NTM-ridden) price and a non-distorted price. Quantity or value gaps measure the difference between an observed (distorted) value and an estimated “normal” value of trade, and are thus influenced by the quality of the estimated value, which is subject to the various uncertainties surrounding econometric specifications. Even when price gaps are “mass-produced” using an econometric framework, such as the one presented by Dean et al (2009), the econometric properties of these estimates are likely to be preferable to estimates of quantity gaps, since there is generally less cross-country variation in prices than in trade flows (Ferrantino, 2006: p. 20 and Annex 2).

Quantity gaps may be preferred in cases where the NTM is prohibitive and stops trade altogether. In such cases, there is no price of imports on which to base a price gap. They may also be used in cases where trade data are relatively abundant and prices are difficult to measure, for example for highly differentiated products of the same general type.

³ While ideally one would like to contrast “quantity gaps” with “price gaps,” in practice what are often estimated as quantity gaps are really “value gaps,” in which the analyst contrasts the dollar value of imports constrained by an NTM with a normal value. This is no doubt because data on trade values are more easily obtained than data on trade quantities (e.g. number of units, kilograms, etc.) Since value = quantity*price, analysis based on values may be influenced by variations in the level of prices, across trading partners or across time. Analysis based on values is often reported as if it were based on quantities, making the unstated assumption that prices are constant in the relative dimension.

4. Analysis should focus on cases where there is both a policy of concern and an observed economic effect.

Quantitative analysis of NTMs can be approached either from the policy side or from the data side. On the one hand, the analyst can begin with a list of one or more product that may be subject to policies that are of potential concern, and then attempt to find out if they have any economic effects, i.e. positive price gaps or quantity gaps. Alternately, one can begin with price and quantity data on a variety of products and go looking for evidence of distortions. Ideally, the reported results should focus on the intersection of the products of concern on policy grounds and the products which show empirical evidence of distortions.

If one begins with a list of products of policy concern, it will sometimes be the case that economic effects on imports are not observed. This may be the case, for example, with regulatory policies that impose relatively small costs. On the other hand, the literature contains examples of studies that focus entirely on anomalies in prices, quantities, or values without linking these to any particular policy. Such studies may produce impressively large estimates of the effects of NTMs, but are of relatively little practical use to policymakers.

5. Sources of information on NTM policies can either come from official sources, or be based on complaints and concerns of traders. The former tend to exclude less transparent measures, while the latter are often not specific about the measure involved.

Earlier analyses of NTMs relied heavily on the UNCTAD TRAINS database. One main advantage of TRAINS is that it provides data on policy measures on the basis of the Harmonized System of tariff and trade nomenclature. The line-by-line approach adopted in the TRAINS database often includes detail on products defined at the national level in categories that are finer than the internationally standardized HS6 subheading level. Providing line-level information enabled analysts to calculate coverage ratios, expressing either the percentage of lines, or the percentage of trade covered by notified NTMs. Frequent criticisms of the coverage-ratio approach include the fact that the economic effect of measures is likely to vary widely on a line-by-line basis, and the possibility that countries with more transparent reporting of measures appear to be more restrictive. Still, when a new line-by-line inventory of NTMs becomes available, coverage ratios can be a useful way of developing preliminary stylized facts about the pattern of NTM incidence, for example as can be seen in Ando (2009) for NTMs in the ASEAN region.

Other inventories of NTMs rely directly or indirectly on concerns or complaints registered by traders. These concerns may be determined by direct surveys of traders, such as in the Pilot Project surveys and Trade Barrier Reporter (<http://ntb.unctad.org>) or they may be collected by an intermediate party, such as a national government. The WTO Trade Policy Reviews (TPRs) combine official information, as collected by the Secretariat and provided by members under review, with concerns of traders expressed indirectly by means of other members' queries in the review process. The CoReNTM database of Martinez, Mora and Signoret (2009) provides a useful assembly of entries gathered from the EU's Market Access Database, the United States Trade Representative's National Trade Estimate, and the WTO TPRs.

One advantage of gathering data on NTMs based on concerns and complaints is that traders can identify not only policies of concern, but also any difficulty they may encounter in administering a policy. Policies that are arbitrary, inefficient, costly, time-consuming, non-transparent, or corrupt may have economic effects that are greater than those administered honestly and efficiently. The inclusion of “procedural obstacles” as a new category in the Pilot Project surveys and Trade Barrier Reporter is a significant step forward in gathering information of this type. Similar information is contained in many of the entries to be found in the CoReNTM database. Collecting information based on concerns and complaints can be problematic as traders are sometimes unable to identify the specific policies of concern, or misidentify them. For example, surveys often report concerns with “customs procedures”, which on further examination may refer to a variety of border and behind-the-border measures that are not administered by the customs authorities, but by other government agencies or private actors in ports of entry.

The global downturn in trade in 2008 gave rise to a new effort to collect information on State policies that potentially limit trade. The Global Trade Alert project (<http://www.globaltradealert.org/>), coordinates the resources of a variety of institutions under the direction of Simon Evenett at the Centre for Economic Policy Research (CEPR), and gathers real-time information both on proposed new trade policy measures and measures that are actually implemented. The data include both trade-restrictive and trade-liberalizing measures, and can be searched both by implementing country and by country affected.

6. There are a variety of data sources on import and export prices and quantities available to analyse NTMs.

In some cases, the analysis of NTMs focuses on very specific products and markets. Special-purpose data on these products and markets can sometimes be obtained from industry or official sources. In many cases, it will be more convenient to refer to a comprehensive source of trade data. The most widely used source is the COMTRADE data published by the United Nations Statistical Division. These can be accessed either by a direct subscription (<http://comtrade.un.org/>), or through the WITS system maintained by the World Bank in collaboration with UNCTAD (<http://wits.worldbank.org/witsweb/>)

Since large downloads can be made from COMTRADE, it is convenient for comparisons across time and across countries. Analysis can be made using either data reported by countries themselves or “mirror” data from partners; in other words, country Y’s reported exports to country X can be used as a proxy for country X’s imports from country Y, although there are often discrepancies between reporter data and partner data. Since units of measurement are available, it is possible to divide values by units of measurement and obtain unit values for price gap comparisons.

Unit values need to be used with caution. At the HS6 level, many products are still highly differentiated, and the average unit value may not be representative of any particular transaction. As a rule of thumb, unit values obtained from trade data are more likely to be reliable for agricultural goods than for manufactures, and for goods measured in kilograms than goods measured by number (count). A further difficulty is that some unit values in COMTRADE are imputed based on global averages, and cannot be used to represent import prices for a specific country. There is a data flag in COMTRADE to indicate which unit values are imputed; at present, this flag is not available in the WITS version of COMTRADE.

Alternately, global trade data can be obtained from the private firm Global Trade Information Services (<http://www.gtis.com/>). GTIS acquires trade data directly from approximately 70 countries, filling in the gaps with COMTRADE data, and sells it in a product called Global Trade Analyzer. Since the unit values have not been imputed or transformed, they are more reliable for the purpose of NTM analysis. Besides the additional costs associated with obtaining privately-sourced data, there is a limitation on the size of the feasible download. This is less of a problem for analyses with a narrow focus, but more problematic if the analysis is to cover many products and countries simultaneously.

Data on trade prices and quantities, along with data on the incidence of NTMs as policies, are the raw materials for constructing quantitative estimates of the economic effects of NTMs. The discussion now moves to the question of how best to conduct the analysis once the data have been collected.

7. The best estimates of NTM effects are crafted with detailed knowledge of products and markets – one product and country at a time. However, policymakers often want to know about many products and countries at once. This leads to a trade-off between “handicraft” and “mass-produced” estimates of NTM effects, with a corresponding trade-off between quality and quantity.

Ideally, an analysis of NTM effects is able to focus on a very small number of policies, products and markets. Careful analysis of a single NTM price gap should incorporate as much information as possible about the actual policies involved, the procedures by which they are implemented and whether they have changed over time, the exact products covered, and so on (Deardorff and Stern, 1997). Such information is important for making a correct assessment of the quantitative impacts of such policies.

However, policymakers often want to know about many products and countries at once. They may ask questions such as, “Which countries are imposing the biggest non-tariff barriers to my country’s exports? Which of my country’s export products are most impacted by NTMs? What are the top NTM issues out trade negotiators should be focusing on?” The answers to such questions imply that many countries and products are to be surveyed at the same time. There thus arises a contrast between “handicraft” estimates which are specialized for particular cases and “mass-produced” estimates (Ferrantino, 2006). Associated with this contrast is a trade-off between higher quality of handicraft estimates and broader coverage of mass-produced estimates.

Some attempts to generate NTM estimates for many countries and products have replaced the arithmetic calculation of individual price gaps with econometric methods. In such methods, the price gap is estimated as a residual or dummy-variable estimate, representing the difference between an actual price and the price one would expect in a given market, given systematic differences in such factors as non-traded goods prices (see, for example Dean et al., 2009). Econometric estimates of this type are subject to limitations similar to gravity model estimates of quantity gaps. The estimates of the gap are only as good as the econometric specification. While they may provide general estimates of the price anomalies associated with NTMs, readers familiar with specific cases and markets will often find individual product-by-country estimates to be unrealistic.

The attempt to combine the precision of handicraft estimates with the coverage of mass-produced estimates is an important area of research in NTM quantification at present. If price data are abundant and there are reasonable methods to impute such factors as transport costs, it is sometimes possible to produce something like handicraft estimates for dozens or even hundreds of products simultaneously (USITC, 2009). These can be aggregated by product categories for convenience in modeling.

8. Appropriate price comparisons for NTM analysis require the identification of a point in the supply chain where prices are to be compared. When there are multiple policies present, a single estimated price gap summarizes their effects but does not provide information on the effects of individual policies. Supply chain analysis is particularly useful for trade facilitation problems.

The movement of goods from the exporter to the ultimate consumer involves numerous transactions costs, which take the form of markups. Anderson and van Wincoop (2004) suggest that the “typical” cost increase for developed-country exports between the factory and the retailer is approximately 170 per cent, which may be decomposed as follows: 21 per cent transportation costs, 44 per cent border-related trade barriers and 55 per cent retail and wholesale margins ($2.7 = 1.21 \times 1.44 \times 1.55$). The 44 per cent may include tariffs, NTMs and “natural” barriers, such as different languages, information costs, and the cost of using different currencies. In many cases the mark-up from factory to consumer may be even higher. Feenstra (1998), citing Tempest (1996), reports data which imply that the mark-up on Barbie dolls produced in China and sold in the United States is approximately 900 per cent.

Thus, any comparison of distorted and non-distorted prices needs to specify at what point in the supply chain the price comparison is being made. If the non-distorted “world” price is measured at a different point in the supply chain than the distorted price affected by NTMs, corrections need to be made for those transport costs, tariffs and wholesale and retail markups which are added at each point of the movement of products. Products move from the farm or factory to the port of exportation, are loaded onto ships or planes, move internationally by ocean or air, are unloaded at the port of importation, pass through customs where tariffs may be charged, and move into the internal distribution system in the importing country where they are subject to wholesale and retail markups. Some formulae that can be used for breaking down the various markups in the supply chain can be found in Ferrantino (2006, Annex 1), which follows closely Deardorff and Stern (1998, Appendix 3).

A common basis for comparisons for NTM price gaps is the CIF (cost-insurance-freight) price, which is the price in the importing country inclusive of insurance and freight but not including tariffs. The unit values in most countries’ trade data are reported on a CIF basis. Retail price comparisons have also been used (e.g. Bradford, 2005). These are problematic, since the values of wholesale and retail margins are often imprecisely measured and apply to aggregate product categories. One can also use the farm gate or factory gate in the exporting country as a basis for comparison. The literature on measuring the effects of agricultural policy distortions takes this approach in the form of “import reference prices” and “export reference prices” (Anderson and Martin, 2009).

It is often the case that the difficulties faced by traders attempting to export or import goods consist of multiple policies applied to the same transaction, or to a mix of official and private practices (see Tilton (1998) for a case study of Asian cement trade).

Such situations may be particularly frustrating for traders; if one policy is negotiated away, another may pop up to have the same restrictive effect in the marketplace.⁴ The classic price gap or tariff-equivalent method is only able to express the summary effect of all policies in place, and is not able to apportion the effect among multiple policies. Indeed, it may not even be appropriate to think of several policies accounting for different percentages of a single price gap. They may all operate as constraints, and it may be necessary to remove all of them before any change in market outcomes is observed.

A supply chain perspective can help in the analysis of multiple NTMs. By isolating the individual locations in the supply chain where different policies can take place, it may be possible to obtain a better understanding of which policies act as absolute constraints and which are not constraining, but may increase costs. Breaking down the supply chain is especially useful for the analysis of trade facilitation as well. For example, the process of importation in a seaport can be broken down into a number of steps (Londoño-Kent and Kent, 2003). Survey instruments can also be designed from the perspective of the costs or time associated with different parts of the supply chain.⁵

9. The problems involved in making price comparisons for differentiated products remain a significant challenge for the analysis of NTMs.

Unless special-purpose data are available, price comparisons for traded goods are likely to be made using internationally comparable unit value data at the HS6 level. However, it is now well-established that products defined at the HS6 level are not homogeneous, particularly in the case of manufactures. Some products do not even have internationally standardized units of measure (for example, beverages may be measured in litres in one country, kilograms in another, and dozens of bottles in a third). Moreover, different countries exporting the same HS6 product tend to charge different unit values⁶, suggesting that there is product differentiation at a level finer than HS6, or even at the nation-specific statistical reporting categories (HS9 or 10).

Since it is always possible that the two prices compared in a price-gap calculation are for products that are not identical, some part of the price gap may represent quality differences rather than the effects of NTMs. How big a problem is this? Taken to the extreme, it could place all estimates of price gaps under a cloud of skepticism. The situation is not quite as bad as all this. In many cases, even when there are quality differences they are not likely to be very large or to fall within a reasonable range, so that large price gaps at HS6 may still reasonably be associated with policies. It is also possible to carry out price comparisons that take into account that different suppliers of imports are likely to be selling different quality products, so that the import price is averaged out among source countries, each of which has its own benchmark price calculated on the basis of that country's exports to the world as a whole (USITC, 2009).

⁴ In U.S. policy circles, this is often referred to as the “whack-a-mole” problem, after the child’s arcade game in which the player attempts to smash down mechanical rodents with a large mallet before they can pop up again.

⁵ Examples of this include the “Trading across Borders” component of the World Bank’s Doing Business surveys (<http://www.doingbusiness.org>), and the survey of logistics impediments in USITC (2005).

⁶ See, for example, Schott (2008) and Fontagné, Gaulier and Zignagno (2008).

10. Simulation models provide a tool to estimate the effects of NTMs on trade flows, production, employment, GDP and welfare. They range from simple methods which can be calculated on a spreadsheet to complex tools at the frontier of current research linking partial- and general-equilibrium models.

Simulation models have long been used to analyse the effects of tariff changes, for example in the context of global trade rounds or free trade agreements. Such models are useful tools as they embed tariffs (or tariff equivalent measures of NTMs) in a framework based on economic theory, which allows multiple variables to adjust when trade policies are changed. Thus, simulation models can be used to assess the effects of NTMs, or their removal, on trade flows, production, employment, GDP and welfare. Both price gaps and quantity gaps can be used as “policy shocks” in simulation models.

Simulation models come in various degrees of complexity. Partial-equilibrium (PE) models consider individual markets (for example, the market for a particular agricultural good or variety of steel), and assume that many other things, such as wage rates, are held constant since the trade policy only has a second-order effect on them. Partial-equilibrium models can thus be used to give trade and welfare effects for single products. They are good for analysing narrowly defined products, and can often be implemented with simple computational tools, such as spreadsheets. Computable general equilibrium (CGE) models take into account the linkages between different industries. In global CGE models, such as GTAP, all industries in all countries are interlinked by a combination of trade relationships and input-output relationships in production. Use of CGE models thus has the advantage that the effects of policies applied to one product or industry to the situation in other industries can be investigated, often yielding unexpected results that are grounded in economic reasoning. One trade-off involved in CGE modeling is that the definition of products tends to be more aggregated than in PE modeling. In addition, there is often significant investment both in training, software and databases involved in performing CGE modeling at a useful level of proficiency.

Some of the most advanced applications of simulation modeling to NTMs involve linkages between PE and CGE modeling. This approach enables one to capture both the ability of PE modeling to represent narrowly defined products, and the strength of CGE modeling in capturing inter-industry linkages. These sophisticated approaches operate by passing information back and forth between models operating at different levels of detail, and sometimes by iterating between models to converge on a solution. Examples of this include USITC (2008) for global beef trade and USITC (2009) for U.S. agricultural exports to India.

11. There are an increasing variety of resources for analysts doing quantitative work in NTMs, and a growing community of researchers pursuing such work. A significant and growing body of this work pertains to the analysis of regulatory policies, such as SPS and TBT policies.

One place to access current research on the quantification of NTMs is at NTM Network (<http://i4ide.org/NTMnetwork>) and NTM Wiki (<http://i4ide.org/NTMwiki>). These websites contain links to databases, methodology papers, research and analysis from many sources (academics, GTAP, OECD, USDA-ERS, USITC, World Bank, WTO, etc). The information is both qualitative and quantitative, and covers NTMs, trade

facilitation, and liberalization of services. The open-architecture nature of the Wiki format enables researchers to add resources on their own, as well as to provide comments and discussions related to currently existing resources.

An increasing share of the analytical effort on NTMs has focused on regulatory policies, such as sanitary and phytosanitary standards (SPS) and technical barriers to trade (TBT). NTM Wiki devotes a special section to SPS, TBT, standards. It appears that SPS and TBT policies account for an increasingly important share of the NTM scene, as discussed below.

II. Characteristics of the pilot project data

A. *The new categorization scheme for NTMs*

One of the great steps forward made by MAST is the new scheme for categorizing NTMs (Kuwahara, 2009). The new categories promise to improve our understanding of the complexities of NTMs. First, they provide a great deal of additional detail for SPS and TBT policies. SPS policies were not categorized separately in the old UNCTAD TRAINS categorization scheme. The new categories provide 56 new subcategories for SPS and 50 new subcategories for TBT. SPS and TBT are placed at the head of the list, as chapters A and B in the categorization scheme. This appropriately reflects the increasing use and importance of these policy measures. There is also a useful parallelism between the subcategories for SPS and TBT. Many of them overlap, for example “production process standards,” “product characteristics standards,” “labelling,” “traceability requirements,” “tolerance limits,” and “conformity assessment” apply both to SPS and TBT, while some are specific to agriculture, for example “restriction/prohibition in case of outbreak of infectious diseases,” “quarantine requirement,” “regulation on animal raising or catching processes.”

For the purpose of the surveys, a new dimension has been added to the categorization scheme. The concerns of traders often go beyond the fact that a policy is present, to the way in which the policy is administered. This is reflected in the new “Classification of Procedural Obstacles.” Traders responding to surveys can identify not only the formal type of policy, but whether the policy was arbitrary, inconsistent, discriminatory, inefficient, non-transparent, expensive, or involved outright obstruction or legal barriers. The classification of procedural obstacles provides 23 subcategories of such problems, including whether “an ‘informal’ payment was requested.” Such concerns, which have frequently surfaced in previous studies of NTMs, can now be investigated with the survey data.

B. *Characteristics of the survey data*

So far, survey data are available for Chile, India, the Philippines, Thailand, Tunisia and Uganda. About 200 to 450 firms were interviewed in each country, or about 2,000 in total, giving rise to about 6,200 observations on NTMs (see Basu, 2009).⁷ The raw data include information on both the origin and destination country of the goods, the type of trade flow (exports or imports), the country imposing the measures and the goods affected by the measure. So in each survey country there are in principle both exporters and importers, and they can register their concerns about measures imposed either by their own country or by their trading partner. There are also HS codes for affected goods (either HS2, HS4, or HS6 depending on the information available), codes for the

⁷ The figures above exclude data from Brazil, which was unable to complete the survey.

measures in question, codes for the procedural obstacles associated with the measure, and verbal descriptions of the measures.

Basu (2009) reports a number of interesting stylized facts from the survey data, which the researcher can use as a starting point. In aggregate, about 83 per cent of the firms surveyed are exporters, about 74 per cent of the complaints made are against partner countries, and about 73 per cent of the complaints pertain to measures against exporters imposed by the importer. The share of SPS and TBT measures in all reported measures ranges from about 65 per cent in the surveys for India, Tunisia and Uganda to about 93 per cent for Thailand. This finding validates the decision of the MAST to emphasize these measures in the classification system. About 57 per cent of the procedural barriers faced by exporters are classed as “inefficiency or obstruction,” as are about 61 per cent of the procedural barriers faced by importers, with “arbitrariness or inconsistency” running second, at 23 per cent of the complaints facing exports and 20 per cent of the complaints facing imports.

Users with access to the Excel version of the data will find it easy to do customized tabulations. For example, in the Thailand survey there are 444 instances of Thai exporters expressing concerns about SPS regulations (measure category A) involving a “too strict, too detailed, or redundant testing/certification or labelling requirement” (C2). Within the 444 complaints, 62 involve tolerance limits for residues, or contamination (A231). Within those 62, 11 pertain to fish (HS 03) and six to rice (HS 1006). Again within the same 62, there are six complaints concerning policies of Australia, five concerning China, 20 for the European Union (with another two specifying the United Kingdom), ten for Japan, and eight for the United States. This illustration demonstrates the potential use of the data for analysis in several dimensions.

C. Characteristics of the official data

Official data using the new classification scheme have been collected so far for Chile, the Philippines, Thailand and Japan. They can be accessed using the World Bank’s WITS server. Data using the new classification scheme can be identified by the fact that the classifications begin with alphabet letters (A, B, C), whereas the older TRAINS classifications began with numbers (1, 2, 3). The types of information in the records include HS numbers affected, legal origin of the measures (law or publication number), date of entry into force (and sometimes, of termination), countries affected (many measures are bilateral), whether the measure is permanent, temporary or seasonal, the practical purpose of the measure, and whether the measure is national, international, or private.

Some interesting characteristics of the data are given in Basu (2009). Of the measures collected for the four available countries, about 50 per cent are SPS measures, about 30 per cent are TBT measures, while the remaining measures account for about 20 per cent of the total. This is consistent with the survey findings regarding the importance of SPS and TBT. Multiple measures are often recorded as applying to the same HS line. There are also a large number of bilateral or regional measures, particularly for SPS. One limitation of the TRAINS data in general, which may well apply to the newer data as well, is that information on the termination of measures may not be reported on a regular basis by countries as information on the initiation of such measures, especially in the case of temporary bilateral or regional measures.⁸ Thus, it is prudent for the researcher interested in a particular case to confirm the status of such measures from independent sources.

⁸ I am indebted to Frank van Tongeren for pointing this out.

III. Opportunities for quantification using the pilot project

Interested researchers will no doubt find many uses for the new survey and official data already available, and even more so once more countries have been added. The following suggestions are meant to illustrate potential areas of research.

A. *An underlying issue – counting vs. economic effects*

One of the easiest things to do with the pilot project data is to count the various types of measures by classification, by partner country, by procedural obstacle, etc. When HS numbers are available, these counts can be expressed as a percentage of the universe of HS numbers, giving rise to the coverage ratio approach discussed in section I.5 above. An alternative version of the coverage ratio is the percentage of trade covered by different kinds of measures. Coverage ratios are easier to implement on the official data than on the survey data, because the HS numbers in the survey data vary in their degree of detail (HS2, HS4, HS6) and also because the survey methods used meant that only a subset of HS numbers were gathered.

Besides the criticisms of counts and coverage measures raised earlier, there is the further point that not all measures have the same economic effect. Some may be administrative measures with relatively little impact on trade; others may be associated with a large price gap/tariff equivalent, or even be prohibitive. Thus, it can easily be the case that rankings of countries or types of measures by coverage ratios do not reflect the relative trade restrictiveness of such measures.

Provided that the difference between coverage and economic effect is noted, and that coverage measures are not presented as measures of economic effects, it is not necessary to avoid using counts or coverage ratios of measures altogether. Counts and coverage ratios can provide useful stylized facts about what is frequently observed, what is likely to be important, and what may warrant deeper research.

B. *Uses of the survey data*

One straightforward application of the survey data would be to bring it in contact with data on trade flows. On a country-by-product basis, we have data on what the relevant trade flows are. The procedures used to collect the data may in some cases have been stratified by product (it would be useful to have some clarity on this point), but are unlikely to be stratified either by the country being complained about, the category of the measure, or the category of the procedural complaint, since these would not have been known before the interviews. Thus, the data can be counted along these measures, and data on matching trade flows can be used to refine our understanding of the incidence of such measures. In merging the policy and trade data, the sectors may need to be aligned by a combination of the use of concordances and the analyst's judgment.

As an illustration, let X designate one of the countries participating in the survey, and let Y1, Y2, Y3, etc. denote countries that X exports to. It is possible to observe both country X's exports to its trading partners (E1, E2, E3...) and the number of complaints against each trading partner (N1, N2, N3...). The variation in the ratio N/E is interesting because it suggests that some importers receive more complaints relative to the size of their trade. This approach could be refined for sectors, or for the possibility that some trade is prohibitive, and be the foundation of a full-blown economic exercise.

Now, consider the survey data along the dimension of subcategories of complaints. The data allow for both counting of the categories of measures and the categories of procedural obstacles. There is likely to be substantial sectoral variation both in the type of measures employed and in the type of procedural obstacles observed. It is obvious that measures in category A (SPS) are more likely to be associated with agricultural goods (HS 1-24), while measures in category B (TBT) are more likely to be associated with manufactured goods (HS 29-97). But the data allow for a good deal of disaggregation, which would be useful in generating stylized facts.

Another interesting question is whether the policies the traders have complained about correspond to facts on the ground, or whether some of them represent misidentifications or misperceptions. This concern motivated the Group of Eminent Persons to recommend that resources in the immediate future be devoted to expanding the official data in preference to the surveys (Kuwahara, 2009). One way to address this question is to “ground-check” entries in the survey database to see if it is possible to identify official information on the policies targeted in the complaints.

To a limited extent, such an exercise could be performed with the available survey data. A subset of complaints in the survey data apply to the particular importers for which official data have already been collected. It would be useful to engage in a mapping exercise to see how often one can match a complaint to an officially recorded measure in available cases. The results of such an exercise may cast additional light on the relative priorities to be placed on the collection of official data rather than on survey data in subsequent rounds of the project. Difficulties encountered in matching the two sources of data do not necessarily indicate that the survey approach should be de-emphasized. Rather, it may be the case that complaints match official data better in some circumstances than in others, and such information would be useful both in improving the design of the surveys and in assessing the completeness and transparency of the official information.

C. Uses of the official data

One straightforward use of the official data parallels the use of the survey data. This is to generate stylized facts about what kind of measures are more likely to be used for different products. Again, we expect SPS measures to apply to agricultural products, and TBT measures to apply more frequently to manufactured products, although some agricultural products may be subjected to TBT. But it would be straightforward to generate some stylized facts about the measures which are more likely to apply to grains as opposed to fruit or processed foods, or to electronics as opposed to chemicals or basic metals. It would similarly be useful to compare these stylized facts with comparable ones generated by the survey data. Are the most frequently observed measures the same one that are most frequently complained about? There is a challenge in that the country coverage of the survey data and of the official data is both limited and different. One can conceive of various ways of addressing this issue statistically.

A simple task is to identify the stylized facts about multiple policies applying to a particular HS line. Are some products more likely to be subject to multiple policies than others? Are certain policies more likely to be observed as a “package,” that is, are particular multiple categories of policies more likely to be grouped together? Such information would be of particular use in understanding the “whack-a-mole” problem referred to in section I.8 above.

Another useful exercise would be to estimate a large number of trade restrictiveness measures (price gaps/tariff equivalents or quantity gaps) for one or more of the countries reporting official data, for example agricultural price gaps along the lines of USITC (2009). Since there are upwards of 700 HS6 lines in agriculture, there

will be substantial variation across the price gaps. It would then be possible to ask whether there is any systematic relationship between the types of policies imposed and their degree of trade restrictiveness. Are tolerance limits likely to be more or less trade-restrictive than labeling requirements? How do certification requirements compare to disease prevention measures? Alternately, does the variation in the trade restrictiveness of measures have more to do with the type of product being protected than with the type of measure? Is there any evidence that products covered by multiple NTMs are more trade-distorted? This is a more ambitious research agenda, but a promising one.

D. Cost-benefit analysis

It is widely recognized that regulatory policies applied to trade are often intended to provide benefits to consumers and producers, and not simply to be trade-restrictive. In many cases, they provide benefits such as protecting food from contamination, crops from disease, or electronic devices from electromagnetic interference, etc.. The design of regulatory policies to achieve a set of stated objectives, while at the same time minimizing distortion of trade patterns is a matter of ongoing interest for both policymakers and researchers.⁹

Analysts examining such policies from both the regulatory and the trade perspective may wish to explore cost-benefit analyses which weigh the potential regulatory benefits to producers and consumers against any trade-distorting effects. Recent progress has been made in identifying appropriate theoretical frameworks for different special cases for agro-food trade (van Tongeren, Beghin and Marrette, 2009). Gathering appropriate data is especially challenging in this area. The required information on the policies themselves may often go beyond what is currently provided in TRAINS official data. Also, the measurement of benefits is particularly challenging, though recent advances in experimental economics with respect to the willingness-to-pay approach appear to offer promise in some cases.

⁹ This point is a recurring theme of an analysis of NTMs affecting EU-US trade recently commissioned by the European Union (Berden et al,2009).

References

- Anderson, J. and E. van Wincoop (2004). "Trade Costs", *Journal of Economic Literature*, Vol. 42, pp. 691-751.
- Anderson, K. and W. Martin (2009). *Distortions to Agricultural Incentives in Asia*, Washington, DC: World Bank Publications.
- Ando, M. and A. Obashi (2009). "The Pervasiveness of Non-Tariff Measures in ASEAN: Evidences From The Inventory Approach," presented at the UNESCAP/UNCTAD/WTO-OMC Research Workshop on Rising Non-Tariff Protectionism and Crisis Recovery, December 14-15, 2009, Macau, China. Downloadable at http://www.unescap.org/tid/projects/ntp_s5_ando.pdf.
- Andriamananjara, S., J.M. Dean, R. Feinberg, R. Ludema, M.J. Ferrantino and M. Tsigas (2004). "The Effects of Non-Tariff Measures on Prices, Trade, and Welfare: CGE Implementation of Policy-Based Price Comparisons," U.S. International Trade Commission Office of Economics Working Paper EC2004-04-A, Washington, DC: USITC.
- Basu, S. R. (2009). "Non-Tariff Measures: Results from Firm Surveys and Official Sources," presentation to the UNESCAP/UNCTAD/WTO-OMC Research Workshop on Rising Non-Tariff Protectionism and Crisis Recovery, Macau, 14 December 2009. Available at http://www.unescap.org/tid/projects/ntp_s3_sudip.pdf.
- Berden, K.G., J. Francois, S. Tamminen, M. Thella, and P. Wymenga. 2009. *Non-Tariff Measures in EU-US Trade and Investment: An Economic Analysis*. Rotterdam: ECORYS Nederland BC for the European Commission, Directorate-General for Trade. Available at <http://trade.ec.europa.eu/doclib/press/index.cfm?id=501>.
- Bradford, S. (2005). "The Extent and Impact of Final Goods Non-Tariff Barriers in Rich Countries," in P. Dee and M. Ferrantino (eds.), *Quantitative Measures for Assessing the Effect of Non-Tariff Measures and Trade Facilitation*, Singapore: World Scientific Ltd. for APEC, pp. 435-481.
- Dean, J.M., J.E. Signoret, R.M. Feinberg, R.D. Ludema and M.J. Ferrantino (2009). "Estimating the Price Effects of Non-Tariff Barriers", *The B.E. Journal of Economic Analysis and Policy: Contributions*, Vol. 9, No. 1, Article 12.
- Deardorff, A.V. and R. M. Stern (1998). *Measurement of Non-tariff Barriers (Studies in International Economics)*. Ann Arbor: University of Michigan Press.
- Feenstra, R. (1998). "Integration of Trade and Disintegration of Global Production in the Global Economy", *Journal of Economic Perspectives*, Vol. 12, No. 4, pp. 31-50.
- Ferrantino, M. (2006). "Quantifying the Trade and Economic Effects of Non-Tariff Measures", OECD Trade Policy Working Papers No. 28, OECD Publishing: Paris.
- Fontagné, L., G. Gaulier and S. Zignagno (2008). "Specialization Across Varieties and North-South Competition", *Economic Policy* 23 (January), 51-91
- Fugazza, M. and J.C. Maur (2008). "Non-Tariff Barriers in CGE Models: How Useful For Policy?" *Journal of Policy Modeling* Vol. 3 No. 3 (May/June), 475-490.
- Kee, H. L., A. Nicita and M. Olarreaga (2005b). *Ad Valorem Equivalents of Non-Tariff Barriers*, Washington, D.C.: World Bank.

-
- Kuwahara, H. (2009). "Multi-Agency effort to define and classify NTMs - Definition, Classification (and Collection) of NTMs," presentation to the UNESCAP/UNCTAD/WTO-OMC Research Workshop on Rising Non-Tariff Protectionism and Crisis Recovery, Macau, December 14. Available at: http://www.unescap.org/tid/projects/ntp_s2_horoaki.pdf.
- Londoño-Kent, M. de P. and Kent (2003). "A Tale of Two Ports: The Cost of Inefficiency", Research Report (December) submitted to World Bank: Office of the Chief Economist for Latin America and the Caribbean.
- Martinez, A., J. Mora and J. Signoret (2009). "The CoRe NTMs Database: A Compilation of Reported Non-Tariff Measures," USITC Office of Economics Working Paper No. 2009-12-A (December), Washington, DC: USITC.
- Schott, Peter K. (2008). "The Relative Sophistication of Chinese Exports," *Economic Policy* 23 (January), 5-49.
- Tempest, R. (1996). "Barbie and the World Economy", *Los Angeles Times*, September 22, A1 and A12.
- Tilton, M. 1998. "Japanese Group Boycotts and Closed Government Procurement Procedures as Barriers to Trade", in U.S. International Trade Commission, *The Economic Implications of Liberalizing APEC Tariff and Non-tariff Barriers to Trade*, Publication 3101 (April), Washington, DC: U.S. International Trade Commission.
- USITC (United States International Trade Commission) (2005). *Logistic Services: An Overview of the Global Market and Potential Effects of Removing Trade Impediments*, Publication 3770, May, Washington, DC: USITC.
- USITC (2008). *Global Beef Trade: Effects of Animal Health, Sanitary, Food Safety, and Other Measures on U.S. Beef Exports*, Publication 4033, September, Washington, DC: USITC.
- USITC (2009). *India: Effects of Tariffs and Nontariff Measures on U.S. Agricultural Exports*, Publication 4107, November, Washington, DC: USITC.
- van Tongeren, F., J. Beghin and S. Marrette (2009). "A Cost-Benefit Framework for the Assessment of Non-Tariff Measures in Agro-Food Trade", OECD Food, Agriculture and Fisheries Working Papers No. 21, Paris: OECD.
- Wilson, J., C. Mann, and T. Otsuki (2005). "Assessing the Potential Benefit of Trade Facilitation: A Global Perspective", in P. Dee and M. Ferrantino (eds.), *Quantitative Measures for Assessing the Effect of Non-Tariff Measures and Trade Facilitation*, Singapore: World Scientific Ltd. for APEC, pp. 121-160.

PART III

REPORT OF THE GROUP OF EMINENT PERSONS ON NON-TARIFF BARRIERS

REPORT OF

THE GROUP OF EMINENT PERSONS ON NON-TARIFF BARRIERS (GNTB)

Introduction

In line with our goals set out at our first meeting on 12 July 2006, we had a second meeting on 5 November 2009 at UNCTAD headquarters in Geneva. We had very useful discussions on the basis of the report prepared by the Multi-Agency Support Team (MAST). The report is attached in *Annex 1*.

We would like to express our appreciation to the MAST, its members and other participants, who contributed over the last three years to the work over definition, classification and data collection of non-tariff measures (NTMs)/non-tariff barriers (NTBs). We also would like to thank UNCTAD and International Trade Centre UNCTAD/WTO for conducting the pilot project in seven developing countries. Our appreciation also extends to UNCTAD's Trade Analysis Branch, Division on International Trade in Goods and Services, and Commodities for their substantive backstopping and administrative support.

We would like to report the following:

1. Definition, classification, data collection and quantification of NTMs

UNCTAD-ITC pilot project

We have heard comprehensive presentations on issues relating to definition, classification and data collection of NTMs as well as on the results from the pilot project on NTM data collection in seven developing countries (Brazil, Chile, India, Philippines, Thailand, Tunisia and Uganda).

Discussion

Professor A. Deardorff noted that he had learnt a great deal from the presentations and was glad that a lot of progress had been made. However, he still needed to know whether certain non-tariff barriers existed in practice, and therefore it was still not clear whether a particular measure would promote or constrict trade. A database should be prepared that makes it possible to distinguish between discriminatory types of

measure against non-discriminatory measures. For example, one should be able to distinguish between those measures which discriminate against the rest of the world and those that impose the same standards on the rest of the world as on producers in the domestic market. Professor Deardorff emphasized the difficulties in quantifying non-tariff measures and stressed that counting barriers or measures would not help as the numbers do not always add up. The data should not yet be disseminated but if it is, it should carry caveats and warnings.

Professor Abreu considered that official data should feed into the survey effort, and this was particularly relevant in the case of the bigger economies. Very few sectors are of strategic importance. An initial drive should be undertaken to determine the taxonomy of countries in order to minimize costs and obtain better quality information. He would like to see what needed to be done with regard to future quantification efforts and what should be done by which organization or institution.

Professor L. A. Winters considered that even if we cannot single out barriers to trade from other measures, a neutral collection of data was a very sensible first step. Regardless of whether barriers are discriminatory or non-discriminatory, collected data would make it possible for researchers to reach their own conclusions. He noted that we should focus on the issues, but not appear to be premature, and also should draw boundaries on what type of data to collect, if we include everything, e.g. excise taxes, or pre-shipment inspections as opposed to post-shipment inspections, things will go awry. He raised question as to how to interpret information with regard to private firms' survey. Until the sampling frame is properly done and known, it would not add almost any extra information. A lot of what had been reported had to do with perceptions of the problem. If some firms did not report the same barriers, it may be that they knew how to get around it, and not that these barriers did not exist or that it was not costly to overcome them. He suggested that the survey could be linked to the World Bank's "Investment Climate" and "Doing Business" surveys.

Mr. R. Yerxa said that the WTO had 300 plus notification requirements covering a large number of agreements, e.g. on subsidies, safeguards, customs valuation, rules of origin, TRIMS, etc. The scope and quality of some of these notifications were variable, and there was a need to examine the comprehensiveness and utility of some of these WTO notifications. Significant gaps existed with regard to information on SPS and TBT. He also noted that the WTO collected official and unofficial data, a similar process could be adopted for the survey. The data could then be sent back to governments for verification in the same way as the WTO did in Trade Policy Review process. He underscored that one of the challenging tasks facing us is to enter consistent data in to the database.

Mr. B. Hoekman felt that it was important to check existing data in official sources and determine whether some of the results in the survey are not included in these sources. It may still be possible to collect information from unofficial sources and then send to government authorities for validation. He also pointed out that a simple listing of affected products by any measure will be of little help for policy analysis, because almost all products will probably be affected. The information should show at least some detail on the type of measure and restrictiveness of measure, as well as the number of measures affecting that product. That, for instance, could help identify outliers. For example, if a country applied 10 per cent stricter NTMs on the same product than other countries.

Recommendation

We took note of MAST proposals and endorsed MAST work on:

- **the definition of NTMs, namely:**

Non-tariff measures (NTMs) are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both;

and

- the new NTM classification, which included new entries, such as SPS, TBT, government procurement, export measures, intellectual property rights and subsidies, as well as on the new concept of procedural obstacles in trade.

With regard to quantification of NTMs, we agreed that that any meaningful work on quantification of NTMs can be done after the comprehensive database on such measures is created. This, of course, should not preclude ongoing and future research of various methods for quantification of NTMs. Nevertheless, the data collected should include sufficient information for the user to make its own judgement on the quantification of effects.

2. Multi-year programme on NTMs

Discussion

Mr. B. Hoekman presented the draft of a multi-year programme on NTMs which was a joint proposal by UNCTAD, World Bank, ITC and the WTO. The programme revolved around two axes: Collection of official measures, led by UNCTAD (and complemented by WTO notifications) and surveys, led by ITC. He also underscored the need to mobilize resources to fill the gap, and a funding request could be formulated in the context of the Aid for Trade initiative. He also suggested that it would be worthwhile to go beyond the collection of NTMs and make these data available through the World Integrated Trade Solution (WITS) software to researchers. The existing database on tariffs was sound but there was little coverage of NTMs.

Professor L. A. Winters said that the multi-year programme was an extremely promising proposal. However, the analytical and practical details needed to be worked out further. He added that transaction costs should be considered and that data should be made available to whoever needed it for free.

Mr. R. Yerxa said that the specific contribution of WTO could be that of providing access to all of its databases free of charge. Comparative advantage of each agency should be exploited, and the transaction costs, governance structure and funding modalities should be fully taken into consideration. He also pointed out that WTO was currently consolidating its databases of notifications and making them more coherent.

Professor A. Krueger sent a written message to suggest that the multi-year programme was a feasible project and that she would make contacts at the World Bank and UNCTAD about future activities.

Recommendation

We agreed that a multi-year programme was an extremely useful proposal and noted that it was important to exploit the comparative advantage of each agency involved, but also take into consideration the transaction costs, governance structure and funding modalities.

3. Future activities of GNTB and MAST

Recommendation

We agreed to a proposal put forward by UNCTAD, as follows:

GNTB and MAST should continue to provide policy and technical advisory guidance in the implementation of a possible multi-year programme. Depending on the timing of the programme, meetings of GNTB could be convened whenever necessary, while MAST could continue its current practice of annual meetings.

ANNEX 1

Summary of meetings on Non-Tariff Measures

(Geneva, 4-6 November 2009)

SUMMARY BY THE UNCTAD SECRETARIAT¹

I. Meeting of the GNTB

The meeting was opened and chaired by Mr. Petko Draganov, Deputy Secretary-General of UNCTAD, who made welcoming remarks on behalf of the Secretary-General of UNCTAD. He indicated that the purpose of the meeting was to discuss the findings of the MAST and to examine the newly reworked classification on NTMS and to exchange information on the future NTMs data collection programme.

He noted that NTMs were now a source of concern for all countries, particularly in developing countries, and that too little was known on the exact implication of NTMs on trade flows and economic development. The increased use of such measures, both as protection and regulatory trade instruments, underpinned the importance of bringing greater clarity on NTMS, particularly as there was a risk that NTMs could be used as hidden protectionist instruments and from a trade facilitation perspective. Greater and more sustained efforts were needed to collect and classify NTMs, particularly as the information we now have is outdated and fragmentary. Mr. Draganov called on participating international organizations to continue the work that has been undertaken on the collection and classification of NTMs, and counted on the continued support of GNTB, MAST and eventually the donor community to develop this urgently needed public good. In closing, Mr. Draganov informed the GNTB panel and MAST that Professor Krueger had been unable to attend the meeting.

The GNTB meeting held very useful discussions on the latest definitions and classification of NTMs; the pilot project; and the future plan for a multi-year global initiative programme on NTMs by ITC, UNCTAD, World Bank and WTO, as well as the fundraising strategy.

¹ This part of the report was prepared by Sudip Ranjan Basu, Hiroaki Kuwahara and Victor Ognivtsev, with assistance from Mark Bloch, Denise Penello Rial and Samuel Munyaneza.

On substantive matters, the following issues were highlighted:

(i) Definition, classification and data collection

The first meeting of the MAST in 2005 agreed that the **definition of NTMS** should be as broad as possible. At that time, it was deemed important to collect data from official sources as well as traders. After three years of technical meetings, the MAST concluded that NTBs were a sub-set of NTMs and that an a priori distinction of NTMs should be avoided. A set of definitions was agreed and submitted to the GNTB; however it was still felt that further clarifications were needed on the definitions.

The new **NTM classification** included new entries, such as SPS, TBT, government procurement, export measures, intellectual property rights and subsidies, as well as on the new concept of procedural obstacles in trade. This new classification made it possible to better reflect the changing trade relationships, as compared to the previous UNCTAD Coding System of Trade Control Measures (TCMCS). A new concept of procedural obstacles has also been introduced to facilitate the collection of data from importers. The structure of the new classification is now in two parts: technical and non-technical measures. The most prominent technical measures, for example SPS and TBT, are followed by non-technical measures. A new set of categories was introduced to respond to the needs of traders to submit complaints.

It was clearly noted that NTMs were now a source of concern for all countries, particularly in developing countries, and that too little was known on the exact implication of NTMs on trade flows and economic development. The increased use of such measures, both as protection and regulatory trade instruments, underpinned the importance of bringing greater clarity on NTMS, particularly as there was a risk that NTMs could be used as hidden protectionist instruments and from a trade facilitation perspective. Greater and more sustained efforts were needed to collect and classify NTMs, particularly as the information we now have is outdated and fragmentary.

GNTB members took note of MAST proposals and endorsed work of MAST on:

- the new definition of NTMs as: “policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both”.
- the new NTM classification, which included new entries, such as SPS, TBT, government procurement, export measures, intellectual property rights and subsidies, as well as on the new concept of procedural obstacles in trade.

(ii) Presentations on the pilot project

The **joint UNCTAD-ITC pilot project** aimed to test and validate new NTM classification (including procedural obstacles); develop, test and validate a new uniform methodology for capturing and classifying company level data on non-tariff obstacles to trade in different countries; test the feasibility of surveys (implementation, time, costs, local partnerships, companies’ willingness to participate); and assess whether survey data is suitable for analytical purposes and helps to identify country-specific challenges related to NTMs.

A modest amount of financial resources, about US\$500,000 over the period of two years in seven countries, was allocated to the project to hire local partners, training and

national workshops. Different local partners were identified in each country, including local focal points and survey specialists. The local survey specialists were responsible for selecting the sample, contacting companies, face-to-face interviews and data capturing. The country reports were prepared by Country Reporting Officers (CROs). A one-day instructor-led training was provided by UNCTAD or ITC to local partners.

On the scope of pilot surveys, the number of firms surveyed in these pilot countries varied depending on their size of market and response rates. In India, some 500 companies were surveyed, in other countries such as Thailand and the Philippines, the sample was smaller (435 and 303, respectively). In a majority of cases, firms reported NTMs concerned to SPS, TBT and other technical measures. Among the most frequently cited procedural obstacles were overly strict demands for testing/certification, documentation requirements and how regulations are applied.

The pilot project produced some valuable insights for future activities to collect NTMs information. One of the **lessons learnt** from the exercise was that some measures from the NTM classification were not selected, for example 72 out of the 257 measures in the NTM classification were not selected. In addition, some of measures representing large concerns for the companies were not included in the classification, for example in the Philippines many companies reported non-tariff measures related to anti-terrorism. Lastly, most measures reported refer to TBT and SPS measures but companies tend to confuse them.

Some MAST members felt that the survey methodology needed to be revised, for example the sample selection should allow for sector representativeness and that procedural obstacles need to be revised to include the location of the problem and agencies involved, the problems related to the business environment and infrastructure; and additional optional comments should be integrated into mandatory questions related to the problem. The surveys also revealed that information on NTMs and procedural obstacles should be captured at the most disaggregated level: by product (HS6 or detailed description) and partner-country. The survey implementation could also be improved by longer, more in-depth training because of the complex nature of NTMs, and to ensure that only companies that have experienced impediments to trade should be interviewed face-to-face, and lastly that implementation should be sensitive to the context and culture of the country where the surveys are being conducted.

One of the challenges faced by surveyors was that it was difficult to determine whether the responses on NTMs concerned historical or current cases. A historical record is useful and the surveys provide a crucial link between instantaneous information and historical records. More money will need to be spent to get better results. On the other hand, the questionnaire should be simplified to ask issues of NTMs relate to policy measures and should not try to capture information that extends beyond NTMs and policy measures. Further classifications of procedural obstacles could include on the business environment and infrastructure.

(iii) Presentation of the new NTM classification

The new NTM classification was prepared to collect information on national NTMs. One of the first filters that was established aimed at determining whether the import of a particular product into a particular country was subject to national regulations, and if so what kind. Two sources were then searched for relevant information: primary sources in ministries, national standard bodies, and other governmental agencies that issue regulations; and secondary sources, such as country specific databases, WTO notifications, and other existing NTM databases.

It was agreed that the NTM data was needed for descriptive and monitoring purposes as we have limited knowledge on the pervasiveness of NTMs. Such data will also make it possible to look for more detailed information (sources, regulations number, links, references, etc.) and will assist in research and policy-making through cross-country comparisons; assessing the impact of NTMs on some countries (for example, in least-developed countries), and the creation of time-series data.

The official data collection process comprises four steps: The sources were identified; the data was collected; the data was standardized using the same classification and product level; and it was verified and cross checked across various sources. The time required to collect the data and its quality and comprehensiveness are largely depended on: Number of national agencies issuing regulations; the availability of existing databases; format in which data is stored (paper/electronic); and the original classification that was used. National agencies and local consultants were used in developing countries, and in UNCTAD/ITC covered developed countries.

(iv) Discussion among GNTB members

Professor A. Deardorff noted that he had learnt a great deal from the presentations and was glad that a lot of progress had been made. However, he would still like to know whether certain barriers still existed, and it was still not clear whether a particular measure will promote or constrict trade. A database should be prepared that makes it possible to distinguish between discriminatory types of measure against non-discriminatory measures. For example, one should be able to distinguish between those measures which discriminate against the rest of the world and those that impose the same standards on the rest of the world as on producers in the domestic market. We are still unsure how quantitatively restrictive these barriers are, and counting barriers or measures will not help as the numbers do not always add up. The data should not yet be disseminated but if it is, it should carry caveats and warnings.

Professor A. Krueger sent a written message to suggest that the multi-year programme was a feasible project and that she will make contacts at the World Bank and UNCTAD about future activities.

Professor Abreu considered that official data should feed into the survey effort, and this was particularly relevant in the case of the bigger economies. Very few sectors are of strategic importance. An initial drive should be undertaken to determine the taxonomy of countries in order to minimize costs and obtain better quality information. He would like to see what needs to be done with regard to future quantification efforts and what should be done by which institution.

Professor L. A. Winters considered that even if we cannot single out barriers to trade from other measures, a neutral collection of data was a very sensible first step. Regardless of whether barriers are discriminatory or non-discriminatory, collected data will make it possible for researchers to reach their own conclusions. He noted that we should focus on the issues, but not appear to be premature, and also should draw boundaries on what type of data to collect, if we include everything, for example excise taxes, or pre-shipment inspections as opposed post-shipment inspections, things will go awry. He raised question as to how to interpret information with regard to private firms? Until the sampling frame is properly done and known, it would not bring very much additional information. A lot has to do with how the problem is perceived: If some firms don't report the same barriers, it may be that they know how to get around it. He suggested that the survey could be linked to the World Bank's "Investment Climate" and "Doing Business" surveys.

Mr. R. Yerxa said that WTO currently has 300-plus notification requirements covering a large number of agreements on subsidies, safeguards, customs origins, TRIMS, etc. The scope and quality of some of these WTO databases is variable, and the comprehensiveness and utility of some of these databases perhaps needed to be reviewed. Significant gaps exist with regard to SPS and TBT, and the extent of coverage. Lots of data is available from supplementary sources. He noted that the WTO collects official and unofficial data, a similar process could be adopted for the survey. The data could then be sent back to governments in the same way as the WTO does in Trade Review Policies. He underscored that one of the challenging tasks facing us is to enter consistent data in to the database.

Mr. B. Hoekman felt that it was important to check existing data in official sources and determine whether some of the results in the survey are not included in these sources. It may still be possible to collect information from unofficial sources and then send to government authorities for validation. If a particular product is affected by an NTM, it is likely that almost all similar products will be affected. In principle, you should know a little bit what's going on, and so information about the type of measure and how many measures affecting that product is necessary. Outliers could also be identified, for example if the NTMs applied by a particular country are 10 per cent stricter than other countries. Maximizing and leveraging the use of surveys to achieve this is the condition to have then in the first place.

The UNCTAD secretariat had considered defining which measures were discriminatory and which were not, as well establishing a distinction between NTBs and NTMs. The survey made it possible to see where the majority of complaints were concentrated. Notification is only required when it diverts from an international standard. Barriers need to be identified and researchers left to decide. A desktop survey could identify measures which could affect a company before fielding the survey.

Decision

GNTB members, based on the recommendation of MAST, suggested that any meaningful work on quantification of NTMs can be done after the comprehensive database on such measures is created.

(v) Presentation of the multi-year initiative programme on NTMs

Mr. B. Hoekman suggested that it would be worthwhile to go beyond the collection of NTMs and give access to the world integrated trade software (WITS) to researchers. The existing database on tariffs is sound but there is little coverage of NTMs. He underscored the need to mobilize resources to fill this gap, and a funding request could be formulated in the context of the "Aid for Trade" initiative. It was stressed that future work on NTMs would revolve around three axes: collection of official measures, led by UNCTAD; surveys, led by ITC; and notifications, led by WTO. The latter is intended to avoid duplication. If there is data already collected, it should be used. This proposal would also include regional United Nations commissions or other regional economic bodies to work extensively on this global initiative.

During the discussion, Professor L.A Winters said that the multi-year programme was an extremely promising proposal. However, the analytical and practical details still needed to be worked out. He added that any transaction costs needed to be taken into consideration and that data should be made available at no cost to whoever needed it.

Mr. R. Yerxa said that he would need to engage in consultations within WTO before saying if it would be prepared to launch an analysis on NTMs in international trade. The specific contribution of WTO could be that access to all databases will be free of charge. He noted that WTO should be involved in any future activity as it has already done a lot of work, and now needed to determine where to go from here. We should exploit the comparative advantage of each agency, but also take into consideration the transaction costs, governance structure and funding modalities.

Decision

GNTB members agreed that a multi-year programme was an extremely useful proposal. They noted that it was important to exploit the comparative advantage of each agency involved, but also take in consideration the transaction costs, governance structure and funding modalities.

(vi) Future activities on GNTB and MAST

On MAST and GNTB, it was agreed that the GNTB and MAST should be continued: The GNTB could be convoked whenever it was needed and the MAST could meet on a yearly basis. Future activities should not only consist of data collection on NTMs, it should also develop a screening tool to parse the data that has been collected and study problem areas, as well as conduct more analytical activities. The first thing to develop is methodologies, and then move on to quantifying current NTMs. When it is not possible to provide a quantitative figure, a description should be provided, if possible giving a tariff equivalent, or outlining how many days and how much it cost to resolve the problem, researchers could make use of that.

In view of the multi-year initiative of four organizations (UNCTAD, World Bank, WTO and ITC), GNTB members agreed to a proposal put forward by UNCTAD:

Decision

GNTB and MAST should continue to provide policy and technical advisory guidance in the implementation of such possible programme. Depending on the timing of the programme, meetings of GNTB could be convened whenever necessary, while MAST could continue its current practice of annual meetings.

II. Meeting with Country Reporting Officers

The following text summarizes the comments and suggestions made at the meeting on 4 November 2009.

(i) Sample Selection Methodology

The business survey carried out in Brazil found that export firms had more complaints about domestic administrative measures than foreign measures. Brazil's survey was launched during the economic crisis, at a time when Brazilian firms were more concerned about domestic issues than dealings with foreign markets. This led to a certain amount of resistance on the part of surveyed companies and response rates were low. Efforts were made to improve the response but the results were unsatisfactory.

Brazil used a database of NTMs created and maintained by the Latin American Integration Association (LAIA) to gather data on more than 75,000 registers of NTMs which were applied to 9,765 lines at eight-digit level. The LAIA considers as a new measure over a product, the same kind of intervention, which is established to deal with an alternative use of the product.

Chile commissioned a professional survey company, MORI, to sample 300 firms, including 50 importers, active in all sectors, except services, mining and chemicals. Small firms (Exports < US\$ 200K) were excluded from the survey. The response rate was 0.33 per cent out of 1,139 that satisfied requirements. Most of the firms selected were export-oriented firms, and accounted for 60 per cent of Chile's exports. The surveys were carried out by experienced personnel with university backgrounds. Training sessions were held on the application of questionnaire and on the interpretation of NTMs.

The Indian survey focused on relevant export and import sectors and on obtaining information on NTMs directly from respondents and from official sources. It sampled the top 400 products in terms of export value, which represented 83.6 per cent (at HS 6 digit level) from 68 different HS chapters. The focus was also on products with a reported history or sensitivity to NTMs, and companies were chosen from three separate sectors: manufacturing, agricultural and primary goods. In terms of importers, the survey sampled the top 100 products in terms of import value, representing 72.2 per cent of imports.

Respondents were selected according to geographical location of export clusters; size; type of firm, for example whether they were manufacturers or traders; and their willingness to participate in the survey. The choice of possible respondents was determined through a desktop study. This was a herculean task as there was no ready-made list of companies. Numerous companies were contacted to determine whether they were exporters. The company charged with this task ELP Advocates and Solicitors, supported by UNCTAD's India office, commissioned a market research company (Nielsen) to carry out the survey.

A desktop study was first carried out to identify reported NTMs on inbound and outbound trade. This consisted of an examination of databases and ad-hoc reportage. A database was created to record the NTMs faced by exports and importers, as identified in the survey; a further set of NTMs resulting from laws, regulations and procedural requirements were entered into the database. This data made it possible to better identify NTM policy and the corresponding procedural obstacles. Findings were correlated to feed into the field survey with relevant inputs for specific product-country mix. The

field survey targeted 400 exporters and 100 importers. The survey team used flash cards to give examples to barriers.

In the Philippines, 303 firms were interviewed in the course of the survey, and asked about the products they exported, the destination market, and the specific NTM and procedural obstacles encountered. Two hundred and thirty five firms were involved in manufacturing, 37 in agriculture and 16 in trading activities. It was found that the key to a good response was an understanding of NTM typology.

The companies chosen for the survey were registered exporters in target export sectors with likely large NTM experiences. These companies did not necessarily reflect the country's export structure which is dominated by electronic exports (60 per cent). The survey was conducted in Metro Manila and in three other regions of the Philippines: General Santos, Cebu and Davao. Most of the firms were domestically-owned SMEs and had been in business for more than five years.

A total of 1,200 companies (mostly in the manufacturing sector and trading companies) were contacted in Thailand. Four hundred and thirty-five companies completed the questionnaires and the majority of companies reported at least one NTB case. The response rate was 36.25 per cent.

In Tunisia, a total of 1,700 firms were contacted. The companies selected were mostly SMEs involved in both exports and imports and were active in food, chemicals, building materials textiles and clothing, and leather goods. The response rate was 23 per cent (404 out of 1700).

The Uganda Export Promotion Board was contracted as a consultant on the pilot project because of its role as a trade facilitating agency, as well as a public institution with a high reputation among the private sector. The survey was conducted between 27 June and 30 September 2009. Three hundred companies, comprising of 250 exporters and 50 importers in and around Kampala, were selected to participate in the NTB survey. The companies that were selected had been in international business for at least two years. The ITC questionnaire was used to conduct an average of four interviews per day, the relatively modest number of interviews was due to the complexity of the questionnaire and the geographic dispersion of the companies. A total of 292 useable responses were obtained from 208 export companies and 84 importing companies.

The criteria for selection – priority sectors drawn from the National Export Strategy (NES) – medium-term planning framework launched in October 2007, to give direction to the export drive; namely: coffee, tea, cocoa beans, cotton and textiles, fish, fruits and vegetables, natural ingredients, dairy products, hides and skins, handicrafts, cereals and manufacturing. The selection of importers was based on goods of economic importance to Uganda, such as petroleum products, agricultural inputs, medicaments, automobiles were given priority.

(ii) Firm-level survey results

The Brazilian study of the LAIA database found that 38 per cent of measures concerned SPS, 33 per cent involved TBT and other measures accounted for 27 per cent. However, some products that were imported for different uses had different licences, one for each use. The highest proportion (64.5 per cent) of Brazilian NTMs concerned three product lines: inorganic chemicals; organic chemicals; and pharmaceutical products. SPS and TBTs accounted for the majority of identified NTMs. Seven 4-digit products of 29 and 30 with 26 per cent of the total measures. Imports of 29 and 30 have grown less

than the rest of imports between 2000 and 2008. The survey found that contingency measures were not a problem.

Chilean companies reported a total of 807 NTMs, only 18 related to imports. The average number of NTMs per company was 2.67. Twenty-seven per cent of companies experienced no NTMs, and 40.7 per cent were affected by 2–5 cases of NTMs. Six companies (2 per cent) had more than 10 cases, five were food exporters, one was a construction company (all large companies) and one went out of business. Of total NTMs, 93 (12 per cent) are current. 43 per cent of NTM's are SPS, 29 per cent are TBTs, and 13 per cent are inspections before loading. The remaining 17 per cent include quotas, export measures, and others. Most (43 per cent) NTMs are in food related exports (including wine), followed by forestry products.

A total of 835 cases of procedural obstacles were reported. The bulk of them (42 per cent) were related to certification, analysis or labeling requirement; the second most important category (14 per cent) had to do with the application of procedures, followed by demands for too many required documents and forms (11 per cent) and delays in obtaining authorizations and approvals.

In 30.3 per cent of 327 cases, adaptation is difficult or very difficult. In 5 per cent of the cases, adaptation was impossible. Adaptation costs are high in 37 per cent of the 327 cases. In 23.5 per cent of 327 cases an international standard was invoked. Standards change frequently in 15 per cent of 298 cases, and they have become more complex over time (56 per cent of 142 cases). In 12 per cent of 139 cases, exports ceased after a change in standards.

The Indian survey found that there were a large number of NTMs in India and that there was a large volume of historical and anecdotal evidence of NTMs. Several important exporters or importers were reluctant to share information on the costs arising from compliance, partly because they had an incentive to respond. However, when the government asked similar questions, it was felt to be important. One of the difficulties from the outset was the distinction between an NTB and an NTM. Respondents had difficulties identifying the barrier they were facing, and found it easier to identify specific measures, although few of them were able to say how they set about overcoming the measures. Respondents were able to give more information on procedural obstacles, and most customs clearance agents could tell you the obstacles that they faced. They were well versed with them rather than on the measures.

Of the 787 reported cases of NTMs reported by exporters, the large majority were related to SPS and TBT. These measures were largely imposed by the United States, the United Arab Emirates, United Kingdom and Germany. The top four sectors facing the largest numbers of NTMs were the textile/leather, electrical and electronic goods and food industries. The most important procedural obstacles faced by exporters consisted of arbitrary and inconsistent behaviour and inefficiency or cases of outright obstruction.

Of the 236 reported cases of NTMs reported by importers, the large majority were also related to SPS and TBT. These measures were largely imposed by the United States and China on food products, followed by medical equipment, metals, textiles, gems and jewelry. Importers faced the same procedural obstacles as exporters, namely arbitrary and inconsistent behaviour and inefficiency or cases of outright obstruction.

In the Philippines, 90 per cent of the firms reported 1–5 NTMs, and 9 per cent reported between 6–10 cases of NTMs. The majority of cases were export-related measures, such as SPS and TBT; Arbitrary or inconsistent measures were among the most represented procedural obstacles. 45 per cent of reported NTMs concerned TBTs, and 31 per cent were related to SPS measures. The third highest category (12 per cent

of cases) fell within the category of 'export-related' measures. A detailed breakdown of NTMs showed that the largest number of TBT cases (215) concerned conformity assessment, and that voluntary standards and technical regulations accounted for 8.4 and 11 per cent, respectively, of NTMs. The largest number of procedural obstacles were related to inefficiency or cases of outright obstruction (383), followed by 226 cases of arbitrary or inconsistent behaviour. The largest reported number of NTMs concerned exports to the United States (28 per cent, 217 cases), followed by Japan (9.2 per cent, or 63 cases). Reported SPS cases were highest for agricultural products and TBT cases for manufacturing cases.

Eighty-six per cent of the firms surveyed considered that the sanitary and technical regulations they were subjected to were feasible, and only 7 per cent of them thought that they were not technically feasible. The majority of firms (61 per cent) found the new regulations to be more complex, while 35 per cent found that they were no less complex than before. Eighty-three per cent of the companies stated that would continue exporting their products despite the existence of NTMs.

Of the 4,842 NTMs imposed by the Philippines, 51.3 per cent concerned SPS and 18.8 per cent covered quality control measures, the third highest category (12 per cent) were TBTs. The most frequently affected products were agricultural products (68.6 per cent). Most of these products are related to agriculture (68.6 per cent).

As a major exporter of agricultural products, Thailand has experienced an increasing number of NTMs applied on its exports, notably SPS. Exporters have lodged a number of complaints with the Ministry of Commerce accusing some importing countries of violating SPS measures. An increasing number of cases of TBT have also been imposed on industrial products imported into Thailand and a rising number of complaints about TBT, particularly in relation to trade with China.

In Thailand, 47 per cent of reported NTMs concerned TBTs and 46 per cent were related to SPS. The largest number of cases involved rice, followed by crustaceans and fruits. The European Union, the United States and Japan account for half of the countries for which cases have been reported. The majority of cases of NTMs applied by Thailand are SPS and TBT measures. Only a small proportion of companies are aware of the significance of NTMs. Original equipment manufacturing (OEM) producers are less concerned about NTMs. Larger firms face more varieties of NTM due to products and customers (destination countries). Some of the NTBs can be explained by the absence of trade facilitation, i.e. insufficient inspection equipment available to handle increasing numbers of shipments, particularly for perishable products, inadequate certified laboratory, etc. More rigorous private product requirements than NTM related to products, particularly for SPS and TBT (most cases are found in agricultural products on food safety concerns), which lead to confusion in the private sector. Some of the NTMs applied in the past, such as local-content requirement, export and import licensing were eliminated, and the range of products subjected to NTMs have gradually reduced. However, some other NTMs have also been introduced, for example tariff quotas, and anti-dumping measures.

In Tunisia, each firm declared that, on average, they faced five NTMs. The majority of these (56.5 per cent) concerned importing companies. The largest number of NTMs (85.5 per cent) facing exporters concerned TBTs (50.6 per cent), technical measures (22.8 per cent) and SPS (12 per cent). Over 75 per cent of cases of NTMs on exports reported by firms arose from their trading activity with five partners (France, Libyan Arab Jamahiriya, Italy, Algeria and Germany); the largest category of products affected by NTMs were textiles, followed by clothing and clothing accessories.

The largest number of NTMs (90 per cent) facing Tunisian importers concerned TBTs (77.6 per cent) and para-tariff measures (11.7 per cent). Among the most important

procedural obstacles were problems of inefficiency, arbitrary conduct and taxes and charges that were considered abnormally high. Over 75 per cent of cases of NTMs on imports reported by firms arose from their trading activity with five partners (France, Italy, Germany, Spain and China); the largest category of products affected by NTMs (24 per cent) were capital goods and electrical machinery, plastics and paint products.

NTMs applied by Tunisia are essentially consumer protection measures (product safety) and are not really TBTs. The standards are the major NTMs applied by Tunisia and are generally the same or equivalent to international standards. The problem lies not in the NTMs but in their application. Tunisia does not apply any discrimination between partner countries, and implements effective price controls (anti-dumping, countervailing and safeguard measures). In line with its WTO commitments Tunisia does not apply variable charges.

In Uganda, nearly all companies reported having experienced obstacles related to administrative procedures. These problems included the inability to share customs information online due to the incompatibility of systems used to clear exports/ imports; limited customs hours; cumbersome and expensive customs procedures regarding exports, especially in regional markets. Lack of mutual recognition of inspections and the inconsistent recognition of standards marks continue to affect the competitiveness of Ugandan manufacturers/exporters as it creates an additional burden in compliance costs. The SPS measures set by the importing countries, especially the EU are too strict; the requirements to attain these standards cannot be met by Ugandan farmers; the most affected sectors include fresh fruits and vegetables, natural ingredients (honey) and fish.

At a regional level, the compulsory customs bonds required of traders expire at national borders within the East African Community. Hence, the number of border crossings impact on the cost of doing business. As a landlocked country, Uganda critically depends on its neighbours, Kenya and the United Republic of Tanzania, to provide it access to the sea and trade facilitation services, which include rail, road, sea freight, port, clearing and forwarding services.

Respondents stated that there were too many roadblocks along the major road transport routes, which greatly disrupts efficient movement of goods to the markets as well as increases the incidences of corruption. There were also a number of cumbersome business registration and licensing procedures: for example, Kenya insists that if Uganda is to sell poultry products companies must do through their registered outlets.

(iii) Problems and challenges

In Chile, problems were reported on the complexity of classification, for example the definition of Europe: by country or as a group. The problems faced were mostly related with the universe of firms (Prochile) and defining and standardizing the qualifications of firms. Difficulties when the interviewee was new in the position, because most cases were historical cases. Interviewees were uncertain whether NTMs were part of rules of the game or real NTMs. The original questionnaire was not well developed and had to be redesigned. The questionnaire was difficult to apply when a good is exported to many countries due to repetition. Consequently, the answers did not reflect the realities.

In the case of the Philippines it was difficult to distinguish between NTM and NTBs, but regardless of whether it was an NTM or NTB, identified measures increased trade costs and had a similar effect on trade as tariffs – higher price, lower trade volume. The most frequently encountered problems during data collection concerned

the sample selection and particularly trade structure; a preponderance of SMEs over larger companies; and there were few incentives for companies to respond. National regulations were scattered over several sources and not always available online, and there was a certain subjective component in classification issues.

In Thailand, NTMs are not considered to be a serious obstacle to business, especially by SMEs. Some respondents thought that the questionnaire was too long and required the interviewee to have specific knowledge about the products and was therefore very time consuming. Also, most SMEs in Thailand rely on the services of trading companies to deal with NTM issues, and were therefore unable to answer some questions. The survey staff found that it was difficult to locate the right person to interview.

Several government agencies are responsible for different NTM-related issues and are not working in a harmonized manner. It was important to keep updating data to ensure that the database is accurate and useful. There is a continuing lack of understanding about NTMs and why they are applied. It was important that NTMs should not be seen as trade protection instruments but rather as tools to improve product standard and product quality.

In Tunisia, the choice of the survey period (July-September 2008) was not convenient, and the appointments were not respected by the interviewed persons and government officials. Firms that were interviewed were unaware or unsure about NTMs, and most of the agencies that were contacted have no records or lists of the regulations related to NTMs; the classification of NTMs using the model proposed by ITC was a very difficult task and very costly in terms of time and personnel; the identification of HS codes accurate product also represents a difficult task, especially as government agencies do not use the same distribution measures; the level of detail provided by respondents is insufficient to codify at the HS6 level.

The perception of NTMs varies between companies and government agencies. The State considers NTMs as tools for consumer protection and regulation of domestic markets, while companies see them as obstacles to trade. The NTMs applied by Tunisia does not seem to be excessive or more stringent than international standards as the main NTM identified, namely standards and technical regulations, are notified to the WTO and have never been questioned. The problem lies in implementing these measures by various administration officials.

Some parts of the questionnaire needed to be improved. Questions on sales, capital, number of employees are considered as intrusive by some respondents. Every effort needs to be made to ensure that the respondent is given a chance to identify NTMs rather than being prompted.

In Uganda, there was limited awareness among the business community on issues relating to SPS and TBT due to the absence of mechanisms to disseminate customized information to stakeholders. The cost of compliance was high, particularly in terms of additional costs (for example, sampling, testing and analysis), and there was inadequate capacities (i.e. institutional capacity, infrastructure, legislation and resources) among both the public and private sector.

(iv) Conclusions

Chile faces few barriers, this was perhaps because many of the firms that were interviewed had a long experience in dealing with them, 60 per cent of the firms were export-oriented, and had learnt to cope with obstacles. There are more NTMs in Latin

American countries, perhaps because of the type of goods that were exported or imported. There is no doubt that the existence of FTAs helps in reducing obstacles to trade. Only a few companies found it too expensive to comply.

In India, the project succeeded in identifying NTMs and the procedural obstacles which may affect the ability to trade. It was able to test the classification of NTM policies and procedural obstacles developed by UNCTAD, and recorded and presented the identified NTMs in an accessible and comprehensible manner. However, it would have been advisable to expand the respondent base, include more products and cover a larger geographical area and create a national NTM database. There was also a need to correlate NTMs with existing laws or “measures”. The project identified the need for a web portal to be created to gather and disseminate information.

There was an ongoing need for technical assistance in order to inform exporters and importers about NTMs, which would facilitate the task of identifying and reporting them. Traders must be made aware of the overall impact/financial value of NTMs, as well as available methods to address the problem. Confidentiality was a problem as respondents did not want it to be known that there were facing NTMs.

In the Philippines, the companies that were contacted were SMEs rather than large companies. There was a lack of incentive for companies to respond to the questionnaire. Companies were more motivated to respond when they are told the results of the interview will result in legislative changes. Sources of official data were scattered in different places and not all the information was available on the web. There was a certain subjective component in the classification. It would be better to have a questionnaire in which the respondent could reply with either a “yes” or “no”.

The Tunisia survey showed that more regional workshops need to be organized between traders and government officials in order to bring greater clarity to the question of NTMs. Surveys should not be carried out during summer period and the month of Ramadan. Meetings are needed with government officials to explain and ensure the widest possible interest and purpose of the study. Prior to the classification of NTMs, the complete collection of information and ensure data validity (to ensure in advance that the texts have not been repealed or replaced).

In Uganda, The task of identifying and listing NTMs was highly appreciated and respondents felt that it was important to provide solutions to the obstacles posed by NTMs. Such efforts, among others, would include the establishment of a mechanism to continuously monitor and report to the institutions responsible for these NTMs and seek redress, possibly to an organization such as the East African Community.

(v) Discussion on the pilot project and future work

- Survey questionnaire

MAST participants felt that the questionnaire was too complex and needed to be kept as simple as possible. Some suggested that there shouldn't be open-ended questions and that questions could be answered by a simple “yes” or “no”. Some participants felt that the structure and classification of the questionnaire needed to be reviewed and a detailed guide needed to be developed to assist interviewers and the companies concerned to fill out the sections and understand the classification.

Some participants felt that Section 3 was overly complicated and should be left out. Listing international standards only added more layers, and confused most respondents

as they were unaware of the standards, but they knew there were problems. However, others felt that Section 3 is interesting as it helps to deal with bias and selection, and asks questions that can be answered by a simple “yes” or “no”. Others considered that the survey questionnaire was suitable for the task it was conceived for, but that the quality of the interviewer was key to the effectiveness of the questionnaire. Many interviewers had unfortunately not been sufficiently well trained for the task.

Face-to-face interviews were a good way to better understand the complexity of the issues; the use of flash cards in the Indian survey was an interesting way of simplifying the task of respondents. Professor Abreu pointed out that face-to-face interviews were costly and difficult to manage when several hundred companies had to be contacted. Likewise, sending out questionnaires was counter-productive. Mr. Jose Signoret of the United States International Trade Commission proposed that an interesting approach could consist of preparing a few emblematic case studies and ask firms which barriers they face and determine what their costs are.

The UNCTAD secretariat informed participants that a questionnaire had been prepared to help interviewers conduct interviews. Some questionnaires were changed to match national circumstances. Prior desktop research would be useful because if the measures affecting a company are known before hand, the response would be much better. This would perhaps make it possible to measure the cost of production at the firm and macro level, and then do some econometric analysis on the data.

- Data collection

The data collection in the seven pilot countries has thrown up some useful information and experiences. The revised NTM classification made it possible to streamline some issues, and helped to capture a measure if the interviewer could not distinguish between a TBT and an SPS.

Some countries directly asked the companies they interviewed whether they faced NTMs rather than list all the possible measures in order to speed up the process. Some of the larger firms had an export department to ask such questions and were aware of the rules of the game.

The current version of the questionnaire does not help to identify the source of a problem, i.e. whether it is in the importing or exporting country. There are problems with classification and to interpret the data that has been collected. It may be worthwhile to develop a shorter version as some measures were not identified as problems. ITC's new list of procedural obstacles has many overlaps and could be simplified, for example exporters could be asked if they have many documents to complete and if so, how many.

III. Meeting with Regional Groupings

Mr. H. Kuwahara of the UNCTAD secretariat informed the meeting that the NTM project could doubtless progress faster if more focus is given on collecting official data and using local expertise whenever possible. Three regional bodies that have long been involved in collecting data on NTMs, namely ALADI in Latin America, ASEAN in South-East Asia and SAARC in South Asia.

The UNCTAD secretariat hoped that it will be possible for regional bodies to go back to their respective secretariats and ask them to adopt the new NTM classification. UNCTAD wishes to cooperate with regional bodies on the multi-year programme and is prepared to provide practical assistance and build capacity. The amount of resources being asked for the first three years of the multi-year programme will be significant but once the bulk of the work is done, the work will consist of monitoring.

(i) ALADI

Ms. B. Brisci-Brause of ALADI gave a presentation of an NTM database established in 1997. The database contains data on NTMs obtained from official documents of the 12 ALADI countries and government websites. In the database products are identified and then encoded (8 lines). Product classification is sensitive as countries do not wish to share such information. The database contains the various measures that can be applied to a single product, some ALADI countries want to simplify these measures to boost trade as exporters may be discouraged when faced by NTMs and procedural obstacles.

The website (www.aladi.org) has different sections containing information on the business environment, investments, tariffs and the classification of NTMs. Other sections are more oriented towards governments and give information on trade agreements and the norms regulating trade (NTMs), rules of origin and trade statistics. It is possible to use the database to search either by product, country or measure, and provides all the legal sources and norms and the full text of the law affecting specific products in a particular country.

An agreement between ALADI and UNCTAD was signed in 1997; ALADI sends some data is used in the TRAINS database. However, the documents are all in Spanish. UNCTAD visited Montevideo and suggested that ALADI accepts the new classification system, ALADI agreed as long as training was provided. ALADI Member States accepted that UNCTAD could publish data from their database. ALADI have provided useful suggestions to improve the classifications.

(ii) East African Community

The Uganda Promotion Board participates in a national committee to monitor NTMs. The East African Community (EAC) whose membership comprises Burundi, Uganda, Kenya, the United Republic of Tanzania and Rwanda, does not currently carry out any NTM monitoring activity and does not have an official NTM regional database at the regional levels. UNCTAD could approach the EAC propose establishing a regional database on NTMs, particularly as it was a relatively small regional grouping when compared to the COMESA secretary which regroups 17 countries.

(iii) ASEAN

Ms. S. Manurung described that ASEAN has not signed an MoU with UNCTAD on NTMs, but has formally adopted the revised classification system. NTMs are a problem in the ASEAN region. Several approaches have been tried to monitor them, however these efforts have not met with success. ASEAN has a notification procedure that requires all member countries to notify measures that affect trade, but this procedure has not been operating optimally. The Secretariat has tried to monitor NTMs and develop a database along the lines of the TRAINS database and classify NTMs from different sources. The data that ASEAN currently receives is not very detailed. The initial database specifications have been circulated to ASEAN member states, and the verification process is now under way. ASEAN wishes to establish an ASEAN trade repository database and put in place a harmonized tariff system by 2015, and would welcome collaborating with UNCTAD in projects aimed at collecting NTM data.

ASEAN has attempted to gather information by consulting national websites, but the legislation is in national languages, and requests for the information in English have not been met. In Uganda, there is no single database where all relevant information on NTMs can be found. NTMs received by SAARC are not in the public domain. In Latin America, ALADI has found that individual countries are having difficulties providing a consolidated response as the information is usually sourced from different ministries.

(iv) SAARC

Mr. S. Sharma described that under the SAFTA South Asian Free Trade Agreement, SAAFTA member countries are obliged to report the NTMs their exports are facing. A subgroup has been created to identify NTMs and seek to harmonize standards between the eight member countries of SAARC. The SAARC secretariat does not currently compile data on notifications but does track serial numbers and HS numbers, description of barriers, and some of the problems facing exporters and importers. SAARC countries are currently cooperating in harmonizing customs documentation and procedures, and it is hoped that a services agreement will be integrated into SAFTA at the next meeting of the Committee of Experts.

(v) EU Helpdesk

Ms. M. Coutsouradis explained that the EU database Export Help (<https://exporthelp.europe.eu>) was created in 2004 to meet the market information needs of economic operators in both developing and developed countries. The website provided comprehensive information on import tariffs, trade statistics and NTMs. The website makes it possible to obtain detailed information on the requirements that need to be met to export a particular product to a EU market, for example the general regime on taxes, customs declaration requirements, etc. The website data is compiled by an external contractor which obtains the information from official journals in the EU.

(vi) Discussions

Some participants felt that surveys should try to find out the costs associated with NTMs. Information is needed on the domestic price of that product or good and detailed catalogue product information. Ideally, it would also be useful to obtain the tariff equivalent of non-tariff measures. The questionnaire could contain questions on prices and more efforts should be made to gather published data on CPI and use resources

such as the ICP (international price comparison project) which collects detailed info on prices.

Mr. H. Kuwahara enquired whether ASEAN was collecting specific information on SPS and TBT and whether member countries were obliged to notify. The absence of notifications was indicative of the restrictiveness of trade regimes, but there is little doubt that these measures are creating problems. Complaints about the use of NTMs have been received by UNCTAD but the levels are not that high; cross-notification from countries could be expected but it has not taken place. With regard to the lack of details of ASEAN NTMs, the TAB secretariat said that it has been changing some of the data it has been receiving from official sources into 6-digit levels.

Mr. J. Waino said that the pilot project represented a unique opportunity to highlight how NTMs were affecting businesses. Further work was needed to ensure greater coherence between existing databases and WITS and to gain access to official databases. Presenting traders with a list of 200 measures which they may be affected by was not useful, they should instead be provided by a list of measures they face. The surveys can highlight gaps in the database and could be used by companies to help them determine which markets they should be active in. One way to determine if there are barriers is to include a question in the survey on whether the trade was incurring any extra costs.

Some of the CRO presentations were clearly procedural obstacles and not measures. Some of it appears to be anecdotal evidence and needs to be double checked. An inability of a particular firm to handle a measure is a reflection on the firm in question. Information in the United States on NTMs is quite transparent but is located in various sources. There will be an additional 10,000 lines to be added to the USITC database.

Mr. J. Signoret said that measuring internal prices required a sophisticated model. The effort is to look at the difference in prices and tariffs and the costs that you have (CIF) and the difference is lumped together as NTMs. It is important to remember what you are comparing with what. SPS and TBT will define a product for a particular market. Since there is a multiplicity of products, we should try to take a homogeneous approach. One idea could be to look at a manufacturer, for example an auto producer like Toyota and see what it costs them to adjust to United States or European Union specifications. You will only get an accurate picture by looking at actual cases. SPS and TBT also breaks down the perfect information assumption of the market, and it would be very interesting to determine how they distort international trade.

(vii) Conclusions

The three-day meeting was closed by thanking members of the pilot countries representatives, members of MAST and the GNTB and regional representatives. UNCTAD secretariat has achieved a good amount of during the course of this activity in close collaboration with MAST agencies and other stakeholders. It was clear that more work was still needed on NTMs and procedural obstacles and hoped that the resources would be forthcoming to carry out further work on quantification. UNCTAD Secretariat also thanked the Panel of Eminent Persons for their comments and insights and their participation since the process was launched in 2006.

Multi Agency Support Team (MAST) Members

Participants from the MAST agencies included: Mr. Bernard Hoekman, Ms. Elsa Gamberoni and Mr. Richard Newfarmer of the World Bank; Mr. Stephen Tokarick of International Monetary Fund; Mr. Marc Bacchetta, Roy Santana of the World Trade Organization (WTO); Ms. Barbara Fliess of the Organization for Economic Co-operation and Development (OECD); Mr. Anders Aeroe, Ms. Caroline Averbeck and Mr. Mondher Mimouni of the International Trade Centre UNCTAD/WTO (ITC); Mr. John Wainio of the United States Department of Agriculture (USDA); Mr. José Signoret and Mr. Christopher Johnson of the United States International Trade Commission (USITC); and Ms. Maryse Coutsouradis of the European Commission.

Other participants

The Pilot Project Country Reporting Officers (CRO) included: Mr. Roberto Iglesias, Brazil; Mr. Pablo Serra, Chile; Mr. Samir Gandhi, India; Ms. Gloria Passadilla, Philippines; Mr. Santi Chaisrisawatsuk, Thailand; Mr. Ahmed Cheikh-Rouhou, Tunisia; and Ms. Noreen Kamoti Balibali, Uganda.

Representatives of the following **regional organizations** participated in the meeting: Ms. Blanca Brisci-Brause of ALADI, Uruguay; Ms. Susanna Manurung, ASEAN, Indonesia; and Mr. Subash Sharma, SAARC, Nepal.

UNCTAD secretariat: Ms. Mina Mashayekhi, Mr. Khalilur Rahman, Mr. Victor Ognivtsev, Mr. Hiroaki Kuwahara, Mr. Samuel Munyaneza, Mr. Sudip Ranjan Basu, Ms. Narmin Khalilova, Mr. Alessandro Nicita, Ms. Denise Penello Rial, Ms. Miho Shirotori, Mr. Guillermo Abramowitz, Ms. Fatoumata Keita, Ms. Jenifer Tacardon-Mercado and Mr. Jerzy Rozanski (Consultant).

ANNEX 2

Multi-Agency Classification of Non-Tariff Measures, November 2009

CLASSIFICATION OF NON-TARIFF MEASURES

A000 SANITARY AND PHYTOSANITARY MEASURES

Laws, decrees, regulations, requirements, standards and procedures to protect human, animal or plant life or health from certain risks such as the establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms; risks from additives, contaminants, toxins, disease-causing organisms in foods, beverages or feedstuffs.

A100 Prohibitions or restriction of products or substances for SPS reasons

A110 Temporary geographic prohibition for SPS reasons

Prohibition on imports of specified products from countries or regions due to infectious/contagious diseases: measures included in this category are typically more of an ad hoc and time-bound nature.

Example: Imports of poultry from areas affected by avian flu or cattle from countries affected by foot and mouth disease are prohibited.

A120 Geographical restrictions on eligibility

Prohibition of imports of specified products from specific countries or regions due to non-evidence of sufficient safety conditions to avoid sanitary and phytosanitary hazards. The restriction may be imposed automatically until the country proves employment of satisfactory sanitary and phytosanitary measures to provide a level of protection against food hazards that is considered acceptable.

Example: Imports of plants originating in tropical regions where certain plagues may exist, are restricted; imports of apples from countries that do not have proven satisfactory sanitary conditions are prohibited.

A130 Systems approach

An approach that combines two or more independent SPS measures on the same product: the combined measures can be composed of any number of interdependent measures, as well as their conformity assessment requirements such as inspection and testing. Any of the measures may be applied pre- or post-harvest.

Example: An import programme establishes a package of measures that specifies specific pest-free production locations, pesticides to be used, harvesting techniques and post-harvest fumigation, combined with inspection requirements at entry point: Hazardous Analysis and Critical Control Point (HACCP).

A140 Special authorization for SPS reasons

A requirement that an importer should receive authorization, permit or approval from a relevant government agency of the destination country for SPS reasons. In order to obtain the authorization, importers may need to comply with other related regulations and conformity assessments.

Example: An import authorization from the Ministry of Health is required.

A150 Registration requirements for importers

A requirement that importers should be registered before they can import certain products: to register, importers may need to comply with certain requirements, provide documentation and pay registration fees.

Example: Importers of certain food items need to be registered at the Ministry of Health.

A190 Prohibitions or restrictions of products or substances because of SPS reasons not elsewhere specified (n.e.s.)**A200 Tolerance limits for residues and restricted use of substances****A210 Tolerance limits for residues of or contamination by certain substances**

A measure that establishes a maximum residue limit (MRL) or “tolerance limit” of substances in foods and feed, which are used during their production process but are not their intended ingredients. It includes a permissible maximum level (ML) for contaminants.

Example: MRL is established for insecticides, pesticides, heavy metals, veterinary drug residues, persistent organic pollutants (POPs) and chemicals generated during processing; residues of “dithianon” in apples and hops; microbial contaminants.

A220 Restricted use of certain substances in foods and feed

Restriction or prohibition on the use of certain substances in foods and feed, which are part of their ingredients.

Example: Certain restrictions exist for food and feed additives used for colouring, preservation or sweeteners.

A300 Labelling, marking and packaging requirements**A310 Labelling requirements**

Measures defining the information directly related to food safety, which should be provided to the consumer. Labelling is any written, electronic, or graphic communication on the consumer packaging or on a separate but associated label.

Example: Labels must specify storage conditions such as “5 degree C maximum”, or “room temperature for dry foods”.

A320 Marking requirements

Measures defining the information directly related to food safety, which should be carried by the packaging of goods for transportation and/or distribution.

Example: Transport containers must be marked on the outside with instructions such as handling for perishable goods, refrigeration needs, or protection from direct sunlight, etc.

A330 Packaging requirements

Measures regulating the mode in which goods must be or cannot be packed, or defining the packaging materials to be used, which are directly related to food safety.

Example: Use of PVC films for food packaging is restricted.

A400 Hygienic requirements

Requirements related to food quality, composition and safety, which are usually based on hygienic and good manufacturing practices (GMPs), recognized methods of analysis and sampling: requirements may be applied to the final product (A410) or to the production processes (A420).

A410 Microbiological criteria on the final product

Statement of the micro-organisms of concern and/or their toxins/metabolites and the reason for that concern, the analytical methods for their detection and/or quantification in the final product: microbiological limits should take into consideration the risk associated with the micro-organisms, and the conditions under which the food is expected to be handled and consumed. Microbiological limits should also take account of the likelihood of uneven distribution of micro-organisms in the food and the inherent variability of the analytical procedure.

Examples: Liquid eggs should be pasteurized or otherwise treated to destroy all viable salmonella micro-organisms.

A420 Hygienic practices during production

Requirements principally intended to give guidance on the establishment and application of microbiological criteria for foods at any point in the food chain from primary production to final consumption. The safety of foods is principally assured by control at the source, product design and process control, and the application of good hygienic practices during production, processing (including labelling), handling, distribution, storage, sale, preparation and use.

Examples: Cow-milking equipment on farms should be cleaned weekly with a specified detergent.

A490 Hygienic requirements n.e.s.

A500 Treatment for elimination of plant and animal pests and disease-causing organisms in the final product (e.g. post-harvest treatment)

Various treatments that can be applied during production or as a post-production process, in order to eliminate plant and animal pests or disease-causing organisms in the final product.

A510 Cold/heat treatment

Requirement of cooling/heating of products below/above certain temperatures for a certain period of time to kill targeted pests, either prior to, or upon arrival at the destination country: specific facilities on land or ships are requested. Containers should be equipped properly to conduct cold/heat treatment and should be equipped with temperature sensors.

Example: Citrus fruits must undergo cold (disinfection) treatment to eliminate fruit flies. Kiwifruit must go through steam heat treatment with acetic acid to control botrytis cinerea.

A520 Irradiation

Requirement to kill or devitalize micro-organisms, bacteria, viruses, or insects that might be present in food and feed products by using irradiated energy (ionizing radiation).

Example: This technology may be applied to meat products, fresh fruits, spices and dried vegetable seasonings.

A530 Fumigation

A process of exposing insects, fungal spores or other organisms to the fumes of a chemical at a lethal strength in an enclosed space for a given period of time. The fumigant is a chemical, which at a required temperature and pressure can exist in a gaseous state in sufficient concentration to be lethal to a given pest organism.

Example: Use of acetic acid is mandatory as a post-harvest fumigant to destroy fungal spores on peaches, nectarines, apricots, and cherries; methyl bromide for fumigating cut flowers and many other commodities.

A590 Treatment for elimination of plant and animal pests and disease-causing organisms in the final product n.e.s.**A600 Other requirements on production or post-production processes**

Requirement on other (post-) production processes not classified above: it also excludes those specific measures falling under **A200: Tolerance limits for residues and restricted use of substances** (or its subcategories).

A610 Plant growth processes

Requirements on how a plant should be grown in terms of conditions related to temperature, light, spacing between plants, water, oxygen, mineral nutrients, etc.

Example: Seeding rate and row spacing of soybean plants are specified to reduce the risk of frogeye leaf spots.

A620 Animal raising or catching processes

Requirements on how an animal should be raised or caught because of SPS concerns.

Example: Chickens should not be fed with feed containing the offal of cows suspected of carrying BSE.

A630 Food and feed processing

Requirements on how food or feed production should take place in order to satisfy the sanitary conditions of the final products.

Example: New equipment or machinery for handling or processing feed in or around an establishment producing animal feed shall not contain polychlorinated biphenyls (PCBs).

A640 Storage and transport conditions

Requirements on certain conditions under which foods and feed, plants and animals should be stored and/or transported.

Example: Certain foodstuffs should be stored in a dry place, or below a certain temperature; conditions on not transporting foods in the same wagons with certain other products; rules on how to locate animals while transporting them.

**A690 Other requirements on production or post-production processes
n.e.s**

A700 Regulation of foods or feed derived from, or produced using genetically modified organisms (GMO)

Restriction on imports of foods and feed produced using genetically modified organisms: these regulations may include labelling requirements, authorization or outright prohibition.

Example: GMO products need to be labelled because of health concerns.

A800 Conformity assessment related to SPS

Requirement for verification that a given SPS condition has been met: it could be achieved by one or combined forms of inspection and approval procedures, including procedures for sampling, testing and inspection, evaluation, verification and assurance of conformity, accreditation and approval etc.

A810 Product registration requirement

Product registration requirement in the importing country.

Example: Only registered pesticides may be imported.

A820 Testing requirement

A requirement for products to be tested against a given regulation, such as MRL: includes sampling requirements.

Example: A test is required for the maximum residue level of pesticides on a sample of orange imports.

A830 Certification requirement

Certification of conformity with a given regulation: required by the importing country but may be issued in the exporting or the importing country.

Example: Certificate of conformity for materials in contact with foods (containers, papers, plastics, etc.) is required.

A840 Inspection requirement

Requirement for product inspection in the importing country: may be performed by public or private entities. It is similar to testing, but does not include laboratory testing.

Example: Animals or plant parts must be inspected before entry is allowed.

A850 Traceability information requirements

Disclosure requirement of information that allows a product to be followed through the stages of production, processing and distribution.

A851 Origin of materials and parts

Disclosure of information on the origin of materials and parts used in the final product.

Example: For vegetables, disclosure of information on the location of the farm, name of the farmer, fertilizers used, may be required.

A852 *Processing history*
Disclosure of information on all stages of production: may include their location, processing methods and/or equipment and materials used.
Example: For meat products, disclosure of information on the origin of the animals, the slaughterhouse, and the food processing factory may be required.

A853 *Distribution and location of products after delivery*
Disclosure of information on when and how goods have been distributed, from the time of delivery to distributors until they reach the final consumer.
Example: For rice, disclosure of information on the location of its temporary storage facility may be required.

A859 *Traceability requirements, n.e.s.*

A860 **Quarantine requirements**

Requirement to detain or isolate animals, plants or their products on arrival at a port or place for a given period in order to prevent the spread of infectious or contagious disease or contamination.
Example: Live dogs must be quarantined for two weeks before entry into the territory is authorized. Plants need to be quarantined to terminate or restrict the spread of harmful organisms and mitigate the adverse impacts thereof.

A890 **Conformity assessment related to SPS n.e.s.**

A900 **SPS measures n.e.s.**

B000 **TECHNICAL BARRIERS TO TRADE**

Measures referring to technical specification of products or production processes and conformity assessment systems thereof: they exclude SPS measures, but a TBT measure may be applied to food products, if the measure is not for food safety.

B100 **Prohibitions or restrictions on products or substances for TBT reasons (e.g. environment, security)**

B110 **Prohibition for TBT reasons**

Import prohibition for non-economic, non-SPS reasons such as national security reasons, environment protection etc.

Example: Imports are prohibited for hazardous substances including explosives, certain toxic substances covered by the Basel Convention such as aerosol sprays containing CFCs, a range of HCFCs and BFCs, halons, methyl chloroform and carbon tetrachloride.

B140 **Authorization requirement for TBT reasons**

Requirement that importers should receive authorization, permit or approval from a relevant government agency of the destination country, for non-economic, non-SPS reasons.

Example: Imports must be authorized for drugs, waste and scrap, firearms, etc.

- B150 Registration requirement for importers for TBT reasons**
Requirement that importers should be registered in order to import certain products: to register, importers need to comply with certain requirements, documentation and registration fees. Also includes the registration of establishments producing certain products.
Example: Importers of “sensitive products” such as medicines, drugs, explosives, firearms, alcohol, cigarettes, gaming machines, etc. may be required to be registered in the importing country.
- B190 Prohibitions or restrictions of products or substances because of TBT reasons n.e.s.**
- B200 Tolerance limits for residues and restricted use of substances**
- B210 Tolerance limits for residues of or contamination by certain substances**
A measure that establishes a maximum level or “tolerance limit” of substances, which are used during the production process but are not the intended ingredients.
Example: Salt level in cement must be below a specified amount.
- B220 Restricted use of certain substances**
Restriction on the use of certain substances as components or materials to prevent the risks arising from their use.
Example: For food containers made of polyvinyl chloride plastic, vinyl chloride monomer must not exceed 1 mg per kg; restricted use of solvents in paints; the maximum level of lead allowed in consumer paint.
- B300 Labelling, marking and packaging requirements**
- B310 Labelling requirements**
Measures regulating the kind, colour and size of printing on packages and labels, and defining the information that should be provided to the consumer: Labelling is any written, electronic, or graphic communication on the packaging or on a separate but associated label, or on the product itself. It may include requirements on the official language to be used as well as technical information on the product, such as voltage, components, instruction on use, safety and security advice, etc.
Example: Refrigerators need to carry a label indicating size and weight as well as electricity consumption level.
- B320 Marking requirements**
Measures defining the information for transport and customs that the transport/ distribution packaging of goods should carry.
Example: Handling or storage conditions according to type of product, typically signs such as “FRAGILE” or “THIS SIDE UP” etc. must be marked on the transport container.
- B330 Packaging requirements**
Measures regulating the mode in which goods must be or cannot be packed, and defining the packaging materials to be used.
Example: Palletized containers or special packaging need to be used for the protection of sensitive or fragile products.
- B400 Production or post-production requirements**

- B410 TBT regulations on production processes**
 Requirements on production processes not classified under SPS above. Also excludes those specific measures falling under B200: Tolerance limits for residues and restricted use of substances (or its subcategories).
Example: A minimum labour standard in producing certain products is established. Use of environmentally-friendly equipment is mandatory.
- B420 TBT regulations on transport and storage**
 Requirements on certain conditions under which products should be stored and/or transported.
Example: Medicines should be stored below a certain temperature.
- B490 Production or post-production requirements n.e.s.**
- B500 Regulation on genetically modified organisms (GMO) (for reasons other than food safety) and other foreign species**
 Restriction on imports of products produced using genetically modified organisms: these regulations may include labelling requirements, authorization or outright prohibition.
Example: GMO products need to be labelled because of concerns that they may be less nutritious. GMO products are restricted to protect biodiversity.
- B600 Product identity requirement**
 Conditions to be satisfied in order to identify a product with a certain denomination (including biological or organic labels).
Example: Minimum percentage of cocoa content should be assured in chocolate.
- B700 Product quality or performance requirement**
 Conditions to be satisfied in terms of performance (e.g. durability, hardness) or quality (e.g. content of defined ingredients).
Example: Door must resist certain minimum high temperature.
- B800 Conformity assessment related to TBT**
 Requirement for verification that a given TBT requirement has been met: it could be achieved by one or combined forms of inspection and approval procedures, including procedures for sampling, testing and inspection, evaluation, verification and assurance of conformity, accreditation and approval etc.
- B810 Product registration requirement**
 Product registration requirement in the importing country.
Example: Only registered batteries and accumulators may be imported.
- B820 Testing requirement**
 A requirement for products to be tested against a given regulation, such as performance level: includes sampling requirement.
Example: A test on a sample of imports of motor vehicles and related equipment for compliance with safety standards.

B830 Certification requirement

Certification of conformity with a given regulation: required by the importing country but may be issued in the exporting or importing country.

Example: Certificate of conformity for electrical products is required.

B840 Inspection requirement

Requirement for product inspection in the importing country: may be performed by public or private entities. It is similar to testing, but it does not include laboratory testing.

Example: Textile and clothing imports must be inspected for size and materials used before entry is allowed.

B850 Traceability information requirements

Disclosure requirement of information that allows a product to be followed through the stages of production, processing and distribution.

B851 Origin of materials and parts

Disclosure of information on the origin of materials and parts used in the final product.

Example: Manufactures of automobiles must keep records of the origin of the original set of tyres for each individual vehicle.

B852 Processing history

Disclosure of information on all stages of production: may include their location, processing methods and/or equipment and materials used.

Example: For wool apparel products, disclosure of information on the origin of the sheep, location of the textile factory and identity of the final apparel producer may be required.

B853 Distribution and location of products after delivery

Disclosure of information on when and how goods have been distributed, from the time of delivery to distributors until they reach the final consumer.

Example: For some precision products such as personal computers, a complete record of distribution and location of the product after delivery may be required in order to trace the cause of faulty products.

B859 Traceability requirements n.e.s.

B890 Conformity assessment related to TBT measures n.e.s.

B900 TBT measures n.e.s.

C000 PRE-SHIPMENT INSPECTION AND OTHER FORMALITIES

C100 Pre-shipment inspection

Compulsory quality, quantity and price control of goods prior to shipment from the exporting country, conducted by an independent inspecting agency mandated by the authorities of the importing country.

Example: A pre-shipment inspection of textile imports by a third party for verification of colours and types of materials is required.

- C200 Direct consignment requirement**
Requirement that goods must be shipped directly from the country of origin, without stopping in a third country.
Example: Goods imported under a preferential scheme such as GSP must be shipped directly from the country of origin in order to satisfy the scheme's rules of origin condition. (i.e. to guarantee that the products have not been manipulated, substituted or further processed in any third country of transit).
- C300 Requirement to pass through a specified customs port**
Obligation for imports to pass through a designated entry point and/or customs office for inspection, testing, quarantine, etc.
Example: DVD players need to be cleared at a designated customs office for inspection.
- C400 Import monitoring and surveillance requirements and other automatic licensing measures**
Monitoring of import value and volume of specified products: may be applied with the purpose of signalling concern over import surges.
Example: Automatic import licence is required for textile and apparel imports.
- C900 Other formalities n.e.s.**
- D000 PRICE CONTROL MEASURES**
Measures implemented to control the prices of imported articles in order to: support the domestic price of certain products when the import prices of these goods are lower; establish the domestic price of certain products because of price fluctuations in domestic markets, or price instability in a foreign market; and counteract the damage resulting from the occurrence of "unfair" foreign trade practices.
- D100 Administrative pricing**
Fixing of import prices by the authorities of the importing country by taking into account the domestic prices of the producer or consumer: could take the form of establishing floor and ceiling price limits; or reverting to determined international market values. There may be different price-fixing methods, such as minimum import prices or prices set according to a reference.
- D110 Minimum import prices**
Pre-established import price below which imports cannot take place.
Example: A minimum import price is established for rice.
- D120 Reference prices and other price controls**
Pre-established import prices which authorities of the importing country use as reference to verify the price of imports.
Example: Reference prices for agricultural products are based on the farm-gate price, which is the net value of the product when it leaves the farm, after marketing costs have been subtracted.
- D190 Administrative pricing n.e.s.**

D200 Voluntary export price restraints (VEPRs)

An arrangement in which the exporter agrees to keep the price of his goods above a certain level.² A VEPR process is initiated by the importing country and is thus considered as an import measure.

Example: Export price of video cassette tapes is set at a higher level in order to avoid anti-dumping action by major importing countries.

D300 Variable charges

Taxes or levies aimed at bringing the market prices of imported agricultural and food products in line with the prices of corresponding domestic products³: primary commodities may be charged per total weight, while charges on processed foodstuffs can be levied in proportion to the primary product contents in the final product. These charges include:

D310 Variable levies

A tax or levy whose rate varies inversely with the price of imports: it is applied mainly to primary products and may be called a flexible import fee.

Example: A tariff rate on beef is set as “\$100 per kg – price per kg of beef on the invoice”.

D320 Variable components

A tax or levy whose rate includes a fixed component and a variable component: these charges are applied mainly to processed products where the variable part is applied on the primary products or ingredients included in the final product. It may be called compensatory element.

Example: A tariff rate on sugar confectionery is set as “25% plus 25\$ per kg of contained sugar – price per kg of sugar”.

D390 Variable charges n.e.s

D400 Anti-dumping measures

A countermeasure taken against a dumping action of an exporter: it is considered that dumping takes place when a product is introduced into the commerce of an importing country at less than its normal value, i.e. if the export price of the product exported is less than the comparable price, in the ordinary course of trade, for the same product when destined for consumption in the exporting country.

D410 Anti-dumping investigations

An investigation initiated either following a complaint by local producers of similar goods or self-initiated by importing country authorities when they have cause to believe that dumping may be materially injurious to national competing producers or third party exporters. Provisional duties may be applied during the investigation.

Example: An anti-dumping investigation was initiated by the European Union against exports of steel wire rod.

² These measures were formally prohibited by the WTO Agreements, but in reality they can be applied in case, for example of situations where these products are in danger facing anti-dumping, safeguard or countervailing measures.

³ All these measures were formally prohibited by the WTO Agreement on Agriculture, Article 4.

D420 Anti-dumping duties

Duties levied on certain goods originating from specific trading partner(s) to offset the dumping margin. Duty rates are generally enterprise-specific.

Example: An anti-dumping duty of between 8.5 and 36.2 per cent has been imposed on imports of biodiesel products.

D430 Price undertakings

Undertakings to increase the export price offered by exporters to avoid the imposition of anti-dumping duties: under WTO rules, prices can be negotiated for this purpose, but only after dumping has been proved.

Example: An anti-dumping case involving grain oriented flat-rolled products of silicon-electrical steel ended in the manufacturer agreeing to raise the price.

D500 Countervailing measures

Measures intended to offset any direct or indirect subsidy granted by authorities in the exporting country: these may take the form of countervailing duties or undertakings by the exporting firms or by authorities of the subsidizing country.

D510 Countervailing investigations

An investigation initiated either following a complaint by local producers of similar goods or self-initiated by the importing country authority to determine whether the imported goods are subsidized and cause material injury.

Example: A countervailing investigation was initiated by Canada into import of oil country tubular goods.

D520 Countervailing duties

Duties levied on certain goods to offset the amount of subsidization granted by the exporter on the production or trade of these goods, when the subsidy is assumed to hurt domestic industry.

Example: A countervailing duty of 44.71 per cent has been imposed on imports of dynamic random access memory (DRAM) semiconductors.

D530 Price undertakings

Undertakings to increase the export price offered by exporters to avoid the imposition of countervailing duties: under WTO rules, prices can be negotiated for this purpose, but only after the injurious effect of the subsidy has been proved.

Example: A countervailing case involving palm oil and margarine for puff pastry ended in an undertaking to fully eliminate the subsidy.

D600 Safeguard duties

Emergency and/or temporary duties imposed as a safeguard action: a country may take a "safeguard" action (i.e., restrict imports of a product temporarily) to protect a specific domestic industry from an increase in imports of any product which is causing, or which is threatening to cause, serious injury to the domestic industry that produces similar or directly competitive products.

Example: A safeguard duty of between 15 and 23 per cent has been imposed on imports of gamma ferric oxide.

D700 Seasonal duties

Duties applicable at certain times of the year, usually in connection with agricultural products.

Example: Imports of fresh perry pears, in bulk, from 1 August to 31 December may enter free of duty, while in other months, positive duties (seasonal duty) are applied.

D900 Price control measures n.e.s.

E000 LICENCES, QUOTAS, PROHIBITIONS AND OTHER QUANTITY CONTROL MEASURES

Quantity control measures are aimed at limiting the quantity of goods that can be imported, regardless of whether they come from different sources or one specific supplier. These measures can take the form of restrictive licensing, fixing of a predetermined quota, or prohibition.⁴

E100 Non-automatic licence

An import licence which is not granted automatically: the licence may either be issued on a discretionary basis or may require specific criteria to be met before it is granted.

E110 Licence with no specific ex-ante criteria

Licence issued at the discretion of the issuing authority: it may also be referred to as a discretionary licence.

Example: Imports of automobiles are subject to discretionary licence.

E120 Licence for specified use

Licence granted only for imports of products to be used for pre-specified purposes: normally granted for use in operations generating an anticipated benefit in important sectors of the economy.

Example: Licence to import steel is granted only if it is used for the construction of a bridge.

E130 Licence linked with local production

Licence granted only for imports of products with linkage to local production.

Example: Licence to import coal is granted only if it is used for the production of electricity.

E140 Licence combined with or replaced by special import authorization

A special import authorization required, in addition to or instead of, a licence issued by the main licensing body (usually the Ministry of Trade): this authorization or a requirement for an inscription in a register is required by a specialized authority which is coordinating the sector of the domestic economy related to the products concerned.

Example: A special import authorization from the Ministry of Agriculture is required to import rice.

E180 Licence for non-economic reasons

⁴ Most quality control measures are formally prohibited by the GATT 1994, but can be applied under specifically determined circumstances (Article XI of GATT 1994).

- E181 *Licence for religious, moral or cultural reasons*
Control of imports by licence for religious, moral or cultural reasons.
Example: Imports of alcoholic beverages are permitted only by hotels and restaurants.
- E182 *Licence for political reasons*
Control of imports by licence for political reasons.
Example: Imports of all products from a given country are subject to import licences.
- E189 *Licence for non-economic reasons n.e.s.*
- E190 Non-automatic licensing n.e.s.**
- E200 Quotas**
Restriction of importation of specified products through the setting of a maximum quantity or value authorized for import.
- E210 Global quotas**
Quotas established on the basis of the total quantity or value of imports of specific products.
- E211 *Unallocated quotas*
Global quotas which can be filled on a first-come, first-served basis by different suppliers.
Example: Imports of wheat are subject to a maximum limit of 10 million tons per year from any country.
- E212 *Quotas allocated to exporting countries*
Global quotas which are pre-allocated among exporters.
Example: Imports of wheat are subject to a maximum limit of 10 million tons per year allocated to exporting countries according to the average export performance of the past three years.
- E220 Bilateral quotas**
Quotas reserved for a specific exporting country.
Example: Maximum of 1 million tons of wheat may be imported from Country A.
- E230 Seasonal quotas**
Quotas established for a given period of the year, usually set for certain agricultural goods when domestic harvest is in abundance.
Example: Quota for import of strawberries is established for imports from March to June each year.
- E240 Quotas linked with purchase of local goods**
Quotas defined as a percentage of the value of goods purchased locally (i.e. in the importing country) by the exporter.
Example: Imports of refined oil in volume are limited to the volume of crude petroleum purchased locally.
- E250 Quotas linked with domestic production**
Compulsory linkage of imports (of materials or parts) with local production.

Example: Import of coal is limited to the amount used in the previous year in the production of electricity.

E270 Tariff rate quotas

A system of multiple tariff rates applicable to the same product: the lower rates apply up to a certain value or volume of imports, and the higher rates are charged on imports which exceed this amount.

Example: Rice may be imported free of duty up to the first 100,000 tons, after which it is subject to a tariff rate of \$1.5 per kg.

E280 Quotas for non-economic reasons

E281 Quotas for religious, moral or cultural reasons

Control of imports by quotas for religious, moral or cultural reasons.

Example: Imports of alcoholic beverages are permitted only by hotels and/or restaurants up to a certain amount.

E282 Quota for political reasons

Control of imports by quotas for political reasons.

Example: Imports of seaweed from Country A (having no diplomatic relations with the importing country) is limited to the equivalent of \$100,000 per year, a value considered to be the minimum amount necessary for subsistence of local producers.

E289 Quotas for non-economic reasons n.e.s.

E290 Quotas n.e.s.

E300 Prohibitions

E310 Total prohibition (not for SPS or TBT reasons)

Prohibition without any additional condition or qualification.

Example: Import of motor vehicles with cylinders under 1500cc is not allowed, in order to encourage domestic production.

E320 Suspension of issuance of licences

Formal announcement/declaration that import licences will not be issued: such a situation may arise in cases related to short-term balance of payments difficulties, or for other reasons.

Example: Issuance of licence to import motor vehicles with cylinders under 1500cc is suspended until further notice.

E330 Seasonal prohibition

Prohibition of imports during a given period of the year: this is usually applied to certain agricultural products while the domestic harvest is in abundance.

Example: Import of strawberries is not allowed from March to June each year.

E340 Temporary prohibition

Prohibition set for a given fixed period of time: it is usually for urgent matters not covered under the safeguard measures of E400 below.

Example: Import of certain fish is prohibited with immediate effect until the end of the current season.

E350 Prohibition of importation in bulk

Prohibition of importation in a large-volume container: importation is only authorized if the product is packed in a small retail container, which increases the per unit cost

Example: Import of wine is allowed only in a bottle of 750ml or less.

E360 Prohibition of products infringing patents or intellectual property rights

Prohibition of copies or imitations of patented or trademarked products.

Example: Import of imitation brand handbags is prohibited.

E380 Prohibition for non-economic reasons*E381 Prohibition for religious, moral or cultural reasons*

Prohibition of imports for religious, moral or cultural reasons.

Example: Imports of books and magazines displaying pornographic pictures are prohibited.

E382 Prohibition for political reasons (embargo)

Prohibition of imports from a country or group of countries, applied for political reasons.

Example: Imports of all goods from country A are prohibited in retaliation for its testing of nuclear bombs.

*E389 Prohibition for non-economic reasons n.e.s.***E390 Prohibitions n.e.s.****E400 Quantitative safeguard measures**

Quantitative restrictions (licensing, quotas, prohibition) adopted when the government of the importing country wishes to prevent or remedy serious injuries resulting from a sudden increase of imports, or to facilitate adjustment.⁵

Example: Quantitative safeguard measures (quotas) were implemented against the sudden surge of imports of certain mushrooms and vegetables.

E500 Export restraint arrangement

An arrangement by which an exporter agrees to limit exports in order to avoid imposition of restrictions by the importing country, such as quotas, raised tariffs or any other import controls.⁶ The arrangement may be concluded at either government or industry level.

E510 Voluntary export restraint arrangements (VERs)

Arrangements made by the government or industry of an exporting country to “voluntarily” limit exports in order to avoid imposition of mandatory restrictions by the importing country. Typically, VERs are a result of requests made by the importing country to provide a measure of protection for its domestic businesses producing substitute goods.

⁵ Under the WTO Agreement on Safeguards, justification should be provided on the use of such measures instead of price-based measures such as additional customs duties.

⁶ Such arrangements are formally prohibited by the WTO Agreements.

- E511 *Quota agreement*
A VER agreement that establishes export quotas.
Example: A bilateral quota on export of motor vehicles from country A to country B was established to avoid sanctions by the latter.
- E512 *Consultation agreement*
A VER agreement that provides for consultation with a view to introducing restrictions (quotas) under certain circumstances.
Example: An agreement was reached to restrict export of cotton from country C to country D where the volume of exports exceeded \$2 million tons in the previous month.
- E513 *Administrative cooperation agreement*
A VER agreement that provides for administrative cooperation with a view to avoiding disruptions in bilateral trade.
Example: An agreement was reached between country E and country F to cooperate to prevent a sudden surge in exports.
- E590 **Export restraint arrangements n.e.s.**
- E900 **Quantity control measures n.e.s.**

F000 CHARGES, TAXES AND OTHER PARA-TARIFF MEASURES

Measures, other than tariff measures, that increase the cost of imports in a similar manner, i.e. by a fixed percentage or amount: they are also known as para-tariff measures.

F100 Customs surcharges

An ad hoc tax imposed in addition to customs tariffs to raise fiscal revenues or to protect domestic industries:

Example: Customs surcharge, surtax or additional duty

F200 Service charges

Fees charged for inspections, quarantine or other services provided by the customs authorities: they include:

F210 Customs inspection, processing and servicing fees

F220 Merchandise handling or storing fees

F290 Service charges, n.e.s.

F300 Additional taxes and charges

Additional charges, which are levied on imported goods in addition to customs duties and surcharges and which have no internal equivalents.⁷ They include:

F310 Tax on foreign exchange transactions

⁷ It should be noted that Article VIII of GATT states that fees and charges other than customs duties and internal taxes “shall be limited in amount to the approximate cost of services rendered and shall not represent an indirect protection to domestic products or a taxation of imports or exports for fiscal purposes.”

- F320 **Stamp tax**
- F330 **Import licence fee**
- F340 **Consular invoice fee**
- F350 **Statistical tax**
- F360 **Tax on transport facilities**
- F390 **Additional charges n.e.s.**
- F400 Internal taxes and charges levied on imports**
Taxes levied on imports that have domestic equivalents.⁸
- F410 General sales taxes**
A tax on sales of products which is generally applied to all or most products.
Example: Sales tax, turnover tax (or multiple sales tax), value added tax.
- F420 Excise taxes**
A tax imposed on selected types of commodities, usually of a luxurious or non-essential nature: this tax is levied separately from, and in addition to, the general sales taxes.
Example: Excise tax, tax on alcohol consumption, cigarette tax.
- F430 Taxes and charges for sensitive product categories**
Charges that include emission charges, (sensitive) product taxes and administrative charges: these latter charges are meant to recover the costs of administrative control systems.
Example: CO2 emission charge on motor vehicles.
- F490 Internal taxes and charges levied on imports n.e.s.**
- F500 Decreed customs valuations**
Value of goods determined by a decree for the purpose of imposition of customs duties and other charges: this practice is presented as a means to avoid fraud or to protect domestic industry. The decreed value de facto transforms an ad valorem duty into a specific duty.⁹
Example: The so-called "valeur mercitoriale" in Francophone countries.
- F900 Para-tariff measures n.e.s**

⁸ Article III of the GATT Agreement allows internal taxes to be applied to imports; however, these taxes should not be higher than those applied to similar domestic products.

⁹ Can be appealed according to the WTO rules.

G000 FINANCE MEASURES

Financial measures are intended to regulate the access to and cost of foreign exchange for imports and define the terms of payment. They may increase import costs in the same manner as tariff measures.

G100 Advance payment requirement

Advance payment requirements related to the value of the import transaction and/or related import taxes: these payments are made at the time an application is lodged, or when an import licence is issued. They can consist of:

G110 Advance import deposit

A requirement that the importer should deposit a percentage of the value of the import transaction before receiving the goods: no interest is paid on the deposits.

Example: Payment of 50 per cent of the transaction value is required three months before the expected arrival of the goods at the port of entry.

G120 Cash margin requirement

A requirement to deposit the total amount, or a specified part of it, of the transaction value in a foreign currency, in a commercial bank, before the opening of a letter of credit.

Example: Deposit of 100 per cent of the transaction value is required at the designated commercial bank.

G130 Advance payment of customs duties

A requirement to pay all or part of the customs duties in advance: no interest is paid on these advance payments.

Example: Payment of 100 per cent of the estimated customs duty is required three months before the expected arrival of the goods at the port of entry.

G140 Refundable deposits for sensitive product categories

A requirement to pay a certain deposit which is refunded when the used product or its container is returned to a collection system.

Example: \$100 deposit is required for each refrigerator, which will be refunded when brought in for recycling after use.

G190 Advance payment requirements n.e.s.

G200 Multiple exchange rates

Varying exchange rates for imports, depending on the product category: usually, the official rate is reserved for essential commodities while other goods must be paid for at commercial rates or occasionally by buying foreign exchange through auctions.¹⁰

Example: Only payments for infant food and staple food imports may be made at the official exchange rate.

G300 Regulation on official foreign exchange allocation

¹⁰ The use of multiple exchange rates are formally prohibited by the GATT 1994.

G310 Prohibition of foreign exchange allocation

No official foreign exchange allocations available to pay for imports.

Example: Foreign exchange is not allocated for imports of luxury products such as motor vehicles, TV sets, jewellery, etc.

G320 Bank authorization

A requirement to obtain a special import authorization from the central bank.

Example: For imports of motor vehicles, a central bank permit is required in addition to the import licence.

G330 Licence linked with non-official foreign exchange

Licence granted only if non-official foreign exchange is used for the import payment.

G331 External foreign exchange

Licence granted only for imports related to technical assistance projects and other sources of external foreign exchange.

Example: Imports of construction materials are allowed only if payments may be made through the foreign direct investment fund.

G332 Importer's own foreign exchange

Licence granted if the importer has his own foreign exchange held in an overseas bank.

Example: Imports of textile materials are authorized only if the importer can pay directly to the exporter with his own foreign exchange obtained through his export activity abroad.

G339 Licence linked with non-official foreign exchange n.e.s.**G390 Regulation on official foreign exchange allocation n.e.s.****G400 Regulations concerning terms of payment for imports**

Regulations related to conditions of payment of imports and the obtaining and use of credit (foreign or domestic) to finance imports.

Example: No more than 50 per cent of the transaction value can be paid in advance of the arrival of goods to the port of entry.

G900 Finance measures n.e.s.**H000 ANTI-COMPETITIVE MEASURES**

Measures to grant exclusive or special preferences or privileges to one or more limited group of economic operators.

H100 Restrictive import channel

A requirement that all imports, or imports of selected commodities, have to be channelled through specific enterprises or agencies, sometimes state-owned or state-controlled.

- H110 State trading administration, for importing**
A requirement that all imports, or imports of selected commodities, have to be channelled through a specific state-owned or state-controlled enterprise.
Example: Imports of salt and tobacco are reserved for the respective state trading companies.
- H120 Sole importing agency**
A requirement that all imports, or imports of selected commodities, have to be channelled through a specific state-designated importing agency.
Example: Crude petroleum can only be imported by the government-designated trading company.
- H130 Importation reserved for selected importers**
A requirement that certain goods can only be imported by specific categories of importers such as manufacturers, service industry, government departments, etc.
Example: Imports of steel products are reserved for companies which are members of the national steel producers association.
- H190 Single channel for imports n.e.s.**
- H200 Compulsory national service**
- H210 Compulsory national insurance**
A requirement that imports must be insured by a national insurance company.
- H220 Compulsory national transport**
A requirement that imports must be carried by a national shipping company.
- H290 Compulsory national service n.e.s.**
- H900 Anti-competitive measures n.e.s.**
- I000 TRADE-RELATED INVESTMENT MEASURES**
- I100 Local content measures**
Requirement to use certain minimum levels of locally made components, restricting the level of imported components.
Example: Imports of clothing are allowed only if more than 50 per cent of the materials used originate from the importing country.
- I200 Trade-balancing measures**
Measures limiting the purchase or use of imported products by an enterprise to an amount related to the volume or value of local products that it exports:
Example: A company may import materials and other products only up to 80 per cent of its export earnings of the previous year.
- I900 Trade-related investment measures n.e.s.**

Categories J to O below (marked with *) are included in the classification to collect information from the private sector through surveys and web portals. Examples provided are therefore types of “complaints” that may be expected to fall under the respective categories and subcategories.

J000 DISTRIBUTION RESTRICTIONS*

Distribution of goods inside the importing country may be restricted. This may be controlled through additional licence or certification requirements.¹¹

J100 Geographical restriction

Restriction to limit the sales of goods to certain areas within the importing country.

Example: Imported beverages may only be sold in cities which have facilities for recycling the containers.

J200 Restriction on re-sellers

Restriction to limit the sales of imported products by designated retailers.

Example: Exporters of motor vehicles need to set up their own retail points, as existing car dealers in the destination country belong exclusively to car producers in that country.

K000 RESTRICTION ON POST-SALES SERVICES*

Measures restricting producers of exported goods from providing post-sales service in the importing country.

Example: After-sales servicing on imported TV sets must be provided by local service companies of the importing country.

L000 SUBSIDIES (excluding export subsidies under P700)*

Financial contribution by a government or government body to a production structure, being a particular industry or company, such as direct or potential transfer of funds (e.g. grants, loans, equity infusions), payments to a funding mechanism and income or price support.

Note: this category is to be further subdivided after further study on the subject.

Example: Price of imported wheat is much lower than local wheat because of subsidy given in the exporting country.

M000 GOVERNMENT PROCUREMENT RESTRICTIONS*

Measures controlling the purchase of goods by government agencies, generally by giving preference to national providers.

Example: Government office has a traditional supplier for its office equipment requirement, in spite of higher prices than similar foreign suppliers.

N000 INTELLECTUAL PROPERTY*

Measures related to intellectual property rights in trade: intellectual property legislation covers patents, trade marks, industrial designs, lay-out designs of integrated circuits, copyright, geographical indications and trade secrets.

Example: Clothing with unauthorized use of trade mark is sold at a much lower price than the authentic products.

¹¹ These restrictions are closely related with regulations of distribution services.

O000 RULES OF ORIGIN*

Rules of origin cover laws, regulations and administrative determinations of general application applied by governments of importing countries to determine the country of origin of goods. Rules of origin are important in implementing such trade policy instruments as anti-dumping and countervailing duties, origin marking, and safeguard measures.

Example: It is difficult for machinery products produced in a country to fulfil the rules of origin to qualify for the reduced tariff rate of the importing country, as the parts and materials originate in different countries.

P000 EXPORT-RELATED MEASURES

Export-related measures are measures applied by the government of the exporting country to exported goods.

P100 Export licence, quota, prohibition and other quantitative restrictions

Restrictions to the quantity of goods exported to a specific country or countries by the government of the exporting country for reasons such as: shortage of goods in the domestic market; regulating domestic prices; avoiding anti-dumping measures; or for political reasons.¹²

P110 Export prohibition

Prohibition of exports of certain products.

Example: Export of corn is prohibited because of shortage for domestic consumption.

P120 Export quotas

Quotas that limit value or volume of exports.

Example: Export quota of beef is established to guarantee adequate supply in the domestic market.

P130 Licensing or permit requirements to export

A requirement to obtain a licence or permit from the government of the exporting country to export products.

Example: Export of diamond ores are subject to licensing by the Ministry.

P140 Export registration requirements

A requirement to register products before being exported (for monitoring purposes).

Example: Pharmaceutical products need to be registered before being exported.

P190 Export quantitative restrictions n.e.s.

P200 State trading administration

All or parts of exports of selected commodities have to be channelled through specific enterprises identified by governments.

Example: Export of some products of strategic importance, such as precious metals might be limited only to certain enterprises authorized by the government.

¹² All of these measures are formally prohibited by the GATT 1994, but may be applied under specific situations identified in Article XI of GATT 1994.

-
- P300 Export price control measures**
Measures implemented to control the prices of exported products.
Example: Different prices for exports are applied from those for the same product sold in the domestic market (dual pricing schemes).
- P400 Measures on re-export**
Measures applied by the government of the exporting country on exported goods which have originally been imported from abroad.
Example: Re-export of wines and spirits back to the producing country is prohibited: the practice is common in cross-border trade to avoid imposition of domestic excise tax in the producing country.
- P500 Export taxes and charges**
Taxes collected on exported goods by the government of the exporting country: they can be set either on a specific or ad valorem basis.
Example: Export duty on crude petroleum is levied for revenue purposes.
- P600 Export technical measures**
Export regulations referring to technical specification of products and conformity assessment systems thereof.
- P610 Inspection requirement**
Control over the quality or other characteristics of products for export.
Example: Exports of processed food products must be inspected for sanitary conditions.
- P620 Certification required by the exporting country**
Requirement by the exporting country to obtain sanitary, phytosanitary or other certification before the goods are exported.
Example: Live animals for export must carry individual health certificates.
- P690 Export technical measures n.e.s.**
- P700 Export subsidies**
Financial contribution by a government or government body to an export structure, being a particular industry or company, such as direct or potential transfer of funds (e.g. grants, loans, equity infusions), payments to a funding mechanism and income or price support.
Example: Exports of beef, dairy products, fruit and vegetables are subsidized.
- P900 Export measures n.e.s.**

ANNEX 3

Classification of Procedural Obstacles

A. ARBITRARINESS OR INCONSISTENCY

1. Behaviour of public officials.
2. Product classification and/or valuation.
3. Application of procedures, regulations, or requirements (including inconsistencies between local and national procedures or regulations).

B. DISCRIMINATORY BEHAVIOUR FAVOURING SPECIFIC PRODUCERS OR SUPPLIERS

1. Local suppliers or producers in the destination market.
2. Suppliers from other countries.
3. Large (or small) companies.

C. INEFFICIENCY OR OBSTRUCTION

1. Excessive documentation requirements.
2. Strict/detailed/redundant testing, certification or labelling.
3. Administrative delay (e.g., in authorization, approval).
4. Complex clearance mechanisms (e.g., several entities have to approve).
5. Short submission deadlines for required information or forms.
6. Outdated procedures, (e.g., lack of automation).
7. Lack of resources, (e.g., understaffing, scarce equipment in destination markets).

D. NON-TRANSPARENCY

1. Inadequate information on laws/regulations/registration.
2. Unannounced change of procedures, regulations or requirements.
3. Lack of inquiry points.
4. Non-transparent government bid or reimbursement processes.
5. Non-transparent dispute resolution.
6. Informal payment expected or required.

E. LEGAL ISSUES

1. Lack of enforcement, e.g., patents, copyrights, trade marks, confidentiality.
2. Inadequate due process/appeals process/dispute resolution.
3. Inadequate legal infrastructure.

F. UNUSUALLY HIGH FEES OR CHARGES

(e.g. for stamps, testing or other services rendered)

QUESTIONNAIRE

NON-TARIFF MEASURES: Evidence from Selected Developing Countries and Future Research Agenda

Readership Survey

Since 1999, the Trade Analysis Branch of the Division on International Trade in Goods and Services, and Commodities of UNCTAD has been carrying out policy-oriented analytical work aimed at improving the understanding of current and emerging issues in international trade and development. In order to improve the quality of the work of the Branch, it would be useful to receive the views of readers on this and other similar publications. It would therefore be greatly appreciated if you could complete the following questionnaire and return to:

*Trade Analysis Branch, DITC
United Nations Conference on Trade and Development
Palais des Nations, Rm. E-8065
CH-1211 Geneva 10, Switzerland
www.unctad.org/tab*

1. Name and address of respondent (optional):

2. Which of the following describes your area of work?

Government	<input type="checkbox"/>	Public enterprise	<input type="checkbox"/>
Private enterprise institution	<input type="checkbox"/>	Academic or research	<input type="checkbox"/>
International organization	<input type="checkbox"/>	Media	<input type="checkbox"/>
Not-for-profit organization	<input type="checkbox"/>	Other (specify) _____	

3. In which country do you work? _____

4. Did you find this publication Very useful Of some use Little use to your work?

5. What is your assessment of the contents of this publication?
 Excellent Good Adequate Poor

6. Other comments:
