

Imbalance in Doha Round Market Access Outcomes in Trade in Agricultural and Allied Sectors:

Evidences from selected developed and developing countries



Working Paper

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Abstract

The WTO, through the Doha Ministerial Declaration (DMD) of 2001, seeks to address the issue of market access through tariff and non-tariff liberalization in a comprehensive manner. The primary goal is to remove the imbalance in market access for the WTO Members, in particular for developing country exporter of primary and processed agricultural and allied products. Based on the outcome of Uruguay Round, it was widely expected that the developing countries would gain from tariff liberalisation (simple MFN) in the agriculture sector and developed countries would benefit largely in the industrial sector and services.

However, the reality has been contrary to this, the developing countries with the exception of a few “emerging economies” continue to suffer a comparative disadvantage in the agricultural sector. One of the fundamental reasons has been the non-inclusion of specific duties (Non-Ad-Valorem) of the agricultural sector in the developed economies for calculation of MFN simple average tariffs. Although the imbalance in tariffs has been raised as issues related to “Tariff Simplification” (TS) and Ad Valorem equivalents (AVEs) in the WTO negotiation process since 2006, this has not been discussed at length in the literature. The usage of Ad Valorem Equivalents (AVEs) tariffs which then reflect the true market access provided to the imported agricultural goods.

The simple average MFN calculations are showcased as liberalisation measures in the WTO’s annual reports on tariff. Most of the CGE-based studies have thus used these simple MFN averages as a variable of the extent of liberalisation granted by each country and have performed complex modelling exercises to arrive at detailed income, distribution and welfare gains from tariff liberalisation in agricultural trade. However, when it comes to analysing the external sector (in the agricultural context) of developed economies, the simple MFN average tariff is not the true representative of the tariff scenario due to the presence of a huge number of specific duties in the total tariff lines. This continues to be a critical and fundamental obstacle in the process of obtaining a balanced market access outcome in agricultural negotiations in the WTO.

What is being highlighted through this paper is that in the context of agricultural negotiations, the usage of MFN simple averages is grossly misplaced and that we need a better variable to measure the true extent of tariff liberalisation. This could only emerge out of the process of tariff simplification (TS) exercise that has been initiated in 2006 - under the committee on market access negotiations of the Agreement on Agriculture (AoA). The process of TS has seen its own share of negotiating dynamics with the latest developments suggesting that it would not be part of the Doha Mandate; however, it may be implemented in phases. The manner in which the AoA negotiation are being undertaken, it is clear that the usage of

these specific duties (which was to be disciplined) would continue even after Doha Round conclusions.

The second reason is the growing usage of non-tariff measures (NTMs) such as SPS and TBT measures; these have increased tremendously in the recent past. The use of NTMs has been documented beyond doubt in many studies. What has never been explored is the continuing imbalance due to the “systemic lacunae” in the existing WTO negotiations process since the Uruguay Round. In the process of negotiations, it is unfortunate that many of the decisions of Doha Round Mandate have taken a backseat. The aim was “to reduce, or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, in particular on products of export interest to developing countries”. The negotiations shall take fully into account the special needs and interests of developing and least-developed countries, and recognise that these countries do not need to match or reciprocate in full tariff reduction commitments by other participants.

Going beyond agriculture, this paper also presents an analysis of the SPS and TBT notifications made by WTO Member countries during January 1995-December 2010, in order to understand their impact on agricultural trade. While applying standards it was observed that the developed countries are more frequent user of national standards (instead of the internationally harmonised standards). The adoption of different national standards by the countries may create barriers to trade for primary agricultural exporting countries. The national standards in the developed market are no match for the developing countries; who lack the technological capabilities to comply with the stringent standards. Further, there has an increasing case of sub-atomic (nano-technology) standards in the case of agricultural products. There are also some systemic issues in the SPS Agreement and its implementation that bias its outcome against developing and least developed countries.

The paper seeks to find evidence for these from a detailed analysis of 7 developed and 8 developing countries. It is argued that there is an urgent need for discipline in the usage of SPS measures as a tool for “disguised” protectionism. This can be best achieved by multilateral harmonizing the standards through the SPS Agreement. Considering that these standards have to be applied (national treatment) the other two aspects of Mutual Recognition Agreement (MRA) and equivalence aspects would have to be considered too. Further, the need for developing country governments to support the technological up gradation of their domestic agricultural sectors has become more urgent than ever before.

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Dr. Murali Kallummal

1. Introduction

The developed and developing countries have negotiated under the GATT on the various binding commitments; which have been undertaken for the smooth conduct of trade, commerce and business. The simplest and age tested processes of simple average tariffs which has been undertaken was tariff liberalisation. This process was being carried out both under Agreement on Agriculture for agricultural products¹ and Committee on the Market Access for Non-Agricultural products (NAMA).

The WTO's tariff reduction has been adopted from the market access negotiation under the General Agreement on Tariff and Trade (GATT) regime. But, since under the GATT negotiations were largely between the developed countries, it was very rarely that developing countries were involved in such market access negotiation of the manufacturing sector and most of these negotiations were conducted through request and offer approach. A brief history on the Non-Agricultural tariff reductions, during GATT (General Agreement on Tariffs and Trade) years: eight rounds of tariff negotiations were held between 1947 and 1994: Geneva (1947), Annecy (1949), Torquay (1950-51), Geneva (1956), Geneva (1960-61) - also known as the Dillon Round, the Kennedy Round (1964-67), the Tokyo Round (1973-79) and the Uruguay Round (1986-94). In the first four rounds, negotiations were conducted on a product-by-product basis (known as the "request/offer" approach), whereby GATT members exchanged lists of requests and offers on products of interest to them in order to reach an agreement on tariff concessions. First five rounds reduced average trade weighted tariffs from 50 to 12 percent. Uruguay Round led to an average

¹ See Annex 1 product coverage as mentioned in the Agreement on Agriculture, "The Legal Text: The Results of Uruguay Round of Multilateral Trade Negotiation", p.47. [HS Chapters 1 to 24 less fish and fish products, plus; 290543; 290544; 3301; 3501-3505; 380910; 382360; 4101-4103; 4301; 5001-5003; 5101-5103; 5201-5203; 5301 and 5302.]

tariff reduction of 36 percent (minimum 15%) over 6 years by the developed countries and an average tariff reduction of 24 percent (minimum 10%) over 10 years by the developing countries².

Table 1: Various Round and Details under the GATT and WTO 1946 to 2012

Name	Start	Duration	Countries	Subjects covered	Achievements
Geneva	Apr. 1946	7 months	23	Tariffs	Signing of GATT, 45,000 tariff concessions affecting \$10 billion of trade
Currency	Apr. 1949	5 months	13	Tariffs	Countries exchanged some 5,000 tariff concessions
Turkey	Sep. 1950	8 months	38	Tariffs	Countries exchanged some 8,700 tariff concessions, cutting the 1948 tariff levels by 25%
Geneva II	Jan. 1956	5 months	26	Tariffs, admission of Japan	\$2.5 billion in tariff reductions
Dillon	Sep.1960	11 months	26	Tariffs	Tariff concessions worth \$4.9 billion of world trade
Kennedy	May-64	37 months	62	Tariffs, Anti-dumping	Tariff concessions worth \$40 billion of world trade
Tokyo	Sep. 1973	74 months	102	Tariffs, non-tariff measures, "framework" agreements	Tariff reductions worth more than \$300 billion dollars achieved
Uruguay	Sep.1986	87 months	123	Tariffs, non-tariff measures, rules, services, intellectual property, dispute settlement, textiles, agriculture, creation of WTO, etc.	The round led to the creation of WTO, and extended the range of trade negotiations, leading to major reductions in tariffs (about 40%) and agricultural subsidies, an agreement to allow full access for textiles and clothing from developing countries, and an extension of intellectual property rights.
Doha	Nov-01	?	153	Tariffs, non-tariff measures, agriculture, labour standards, environment, competition, investment, transparency, patents, etc.	The Doha Round is not yet concluded.

Source: WTO website.

Most of these tariff reductions were based on Most Favoured nation (MFN) simple averages which is not suitable for a balanced reduction mechanism when countries have considerable number of total tariff lines in non Ad-Valorem terms. However, since the formation of WTO in January 1995- series of ministerial meeting have happened but most of them have stopped short of any conclusive agreement on how to address the issues of non ad valorem tariffs.³ The commitment in the WTO only managed to find a consensus on the issue of tariff reductions were largely based on simple averages of "Ad Valorem" tariff. This process excluded a large number of tariff lines in agricultural sector which had

² There was exception given to the Least Developed Countries (LDCs).

³ The Least Developed Countries have been exempted under the Doha Mandate from the comprehensive tariff line commitments, but they have been encouraged to increase their coverage of commitments.

'Specific Duties'⁴ (Non Ad-Valorem duties), which were not taken into account in Uruguay Round and into substantial period of the Doha Round.

Bringing the agriculture sector into the ambit of WTO with S&D provisions and single undertaking clauses was a difficult issue for the developed countries; as it meant opening up the domestic market for international competition. The constrained feeling was expressed with the introduction of the so-called "peace clause" in agriculture⁵ - a special case until January 1, 2004. It therefore, avoided the so called "unnecessary" disputes in the WTO. Such were the special treatments which were offered to the developed members by WTO membership to lure to bring agriculture into the ambit of WTO process of negotiations.

2. WTO's Approach on "Tariff Simplification" under AoA

In Agriculture negotiations the issue of "Tariff Simplification" was officially recorded in 2006 which is a process of converting Non Ad-Valorem (NAV)/Specific tariffs to Ad-Valorem terms or popularly known as Ad-Valorem Equivalents (AVEs). Majority of duties (tariff) in the developed countries are represented in the form of complex NAV duties. Some of the examples of Specific Duties (non Ad-Valorem) can be represented in four major forms:

1. **Quantitative duty** is expressed in the form of 35 CHF/Euro/Dollar per 1 Kg and CHF/Euro/Dollar 1.34 per 1000 onions.
2. **Mixed duty** would read as **(1)** 35 CHF/Euro/Dollar per 1 Kg. or 125 percent of the value (whichever is the higher); **(2)** 280 CHF/Euro/Dollar per 1 bottle or 55 percent (the lesser); **(3)** 360 CHF/Euro/Dollar per 1 ton, but not less than 125percent of the value of imports; and **(4)** 1.92 special unit for tariff lines per 1 Kg. or 204 percent of the value (the higher).

⁴ A specific tariff is levied as a fixed charge for each unit of imported goods, for example, \$1 per kg of cheese. An ad valorem tariff on the other hand is levied as a fraction of the value of imported goods, for example, 25% tariff on the value of imported cars.

⁵ Generally, Article 13 of the AoA is referred as the Peace Clause. Article 13 holds that domestic support measures and export subsidies of a WTO Member that are legal under the provisions of the Agreement on Agriculture cannot be challenged by other WTO Members on grounds of being illegal under the provisions of another WTO agreement.

3. **Compound duty** would read as **(1)** 12.8 Percent + 17 CHF/Euro/Dollar per one ton; **(2)** 10% + 125 CHF/Euro/Dollar per 1 Kg.; **(3)** 5% + 661.4 CHF/Euro/Dollar per 1 ton; **(4)** 29.8% + 400 CHF/Euro/Dollar per 1 Kg.; and
4. **Other duty types** will read as **(1)** 35 CHF/Euro/Dollar per one Kg. -0.0207 CHF/Euro/Dollar for each lost bond of sweetness, but not more than 3.14 CHF/Euro/Dollar per 1 Kg.; **(2)** 13 percent + Maximum of 7.2 percent + bound tariff for agricultural products **(3)** 48 CHF/Euro/Dollar per bottle + 1.3 percent per bottle; and **(4)** 10.4 percent + 71 CHF/Euro/Dollar + specific fee that can be zeroed if entry price is not less than 373 CHF/Euro/Dollar.

These are few of the examples of NAV tariffs which countries have been applying and further these tariff lines need to be converted into Ad Valorem duties (tariffs) through a process called in Agreement of Agriculture as “Tariff simplification”.⁶ This process is important in the context of fulfilment of WTO’s “line-by-line” binding’s commitments under AoA – which is primarily based on MFN Simple averages in Ad Valorem terms. The Doha Round Mandate did specify some course of action with regard to the whole process of conversion of non Ad-Valorem (specific) tariffs/duties. The WTO Members lacking any clear cut Mandate on the binding commitments on the inclusion of NAV duties continued it as trade policy tool even after the 2001. However, it can be argued that there was a clear violation of the spirit of free trade, when the binding commitments agreed at the end of Uruguay Round (Marrakesh Declaration, 1995) under the trade in goods in general.

There are differences in the proportion of usage of the NAV duties across the agricultural and non-agricultural sectors. The proportion of usage of NAV duties by the developed countries in agricultural and allied sectors was more in comparison to their usage of NAV in the non agricultural sectors. The developing countries market access interests in the developed country’s agricultural markets and developed countries market access interests in the non agricultural markets have been the fundamental cause of the imbalance in Doha Round and it has been debated beyond doubt.

⁶ The process would have helped in 100 percent of coverage of tariff lines for the purposes of WTO Members MFN average calculation.

It has been recognised that there were inherent inequality of 'players' in the Multilateral Trading System and the special needs and development concerns of the developing countries figured, for the first time, in the Havana Charter.⁷ The preamble of the Marrakesh Agreement establishing the WTO clearly recognises the same need and suggests for positive efforts to ensure that developing countries and the least developed countries secure a share in the growth in international trade commensurate with the needs of their economic development.⁸ Thereby, suggesting that the developed countries have a much larger role to play in the Multilateral Trading System. However, what has been recorded in this paper has been virtually the opposite of these suggestions being carried-out from the Havana Charter days. The eight round negotiation process under the Uruguay Round brought Agriculture into the ambit of negotiation under the "Single Undertaking" of the WTO.

Only under the Doha Round negotiation process in 2006 the NAV Duty issues were raised through two separate process of "Tariff Simplification" under AoA and Ad-Valorem Equivalent (AVEs) under the Non Agricultural Market Access (NAMA) were raised. However, with respect to agricultural sector the December 6, 2008 Draft Text Mandate has been the overall guide.

The Agricultural Chair concluding the overall negotiation process said and quote:

....By and large that has been the case, and some other issues have come somewhat closer also since even in July. But, clearly, there is still not formal agreement on any or all of this. Indeed, there is still certain divergence where even the device of square brackets has been dropped, and I have felt it was both instructive and fair to highlight within the text itself a few points where there is still very real divergence (sensitive products being a principal example) or where there is, to say the least, somewhat more heat detectable than on some others (tariff simplification being an example).⁹

So it is clear that among the few of the contentious issues in the agricultural negotiations was prominently the issue of Tariff Simplifications.

To quote Das & Sharma (2011):

⁷ Toye Richard, 2003, "Developing Multilateralism: The Havana Charter and the Fight for the International Trade Organisation, 1947 – 1948", **The International History Review**, vol. 25, no. 2, June, pp 253 – 504.

⁸ See WTO Document no: WT/GC/W/442, dated 19 September 2001.

⁹ See WTO Committee on Agriculture Special Session, "Revised Draft Modalities for Agriculture", TN/AG/W/4/Rev.4, December 6, 2008

“The extent to which non- Ad Valorem tariffs will be converted and bounded as Ad Valorem tariffs is being negotiated. One of the negotiating options specified in July 2006 text was that all bound duties in agriculture shall be expressed as simple ad valorem duties. This was reiterated in August 2007 text. This obligation has been considerably diluted in December 2008 text, wherein one of the options included in paragraph 104 requires expressing at least 90 per cent of the tariff lines as simple ad valorem tariffs. However, even this diluted requirement is subject to terms and conditions of the methodology specified in Annex N of December 2008 text. If this methodology results in less than 90 per cent of the tariff lines being simplified, there will be no obligation to achieve the target specified in paragraph 104. It is apprehended that the methodology specified in Annex N would result in less than 90 per cent of tariff lines being expressed in ad valorem terms. This would represent a backsliding from the potential obligation to convert all agriculture tariffs on Ad Valorem basis.

One of the options contained in February 2008 text would have required at least 90 per cent of all agriculture tariffs to be expressed on ad valorem basis. This was applicable to all developed countries, without any exception. In footnote 17 December 2008 text, a carve out has been provided for EC. As an exception to the generally applicable requirement of expressing at least 90 per cent of the tariff lines in simple ad valorem terms, EC would be required to meet this obligation only in respect of 85 per cent of the tariff lines.

As the negotiations have progressed, simplification of compound tariffs and mixed tariffs appears to have receded into the background. In February 2008 text, there was a specific obligation to convert these tariffs into simple ad valorem tariffs or specific tariffs at the end of the first year of implementation. **In December 2008 text there is no specific requirement to convert these tariffs into more simplified forms, if the option of mandatory simplification of all non- ad valorem tariffs is not agreed.**

Another aspect in which the trend in negotiations provides greater comfort to developed countries relates to the time frame in which obligations relating to tariff simplification will be implemented. From February 2008 text it can be inferred that tariff simplification would generally be effected on the first day of the implementation period and in respect of certain WTO members by no later than the end of the second year of the implementation period. However, December 2008 text appears to be silent on the completion of the obligation for tariff simplification. In other words it could be completed at the end of the implementation period. This would provide developed countries more time than what would have otherwise been available under February 2008 text for simplifying non ad valorem tariffs.¹⁰

Therefore, it could be concluded that even if Doha Round were to be concluded, it may not assure solution to the real market access problems caused by these large quantum of Non Ad Valorem tariff lines in agricultural and allied sector. This will bring some sort of parity in scenario in the global market access between the agricultural and non agricultural sectors.

3. Why Simple Average MFN Duty is Unfit for Negotiation?

Agriculture was a sector which was protected traditionally across the developed and developing countries for addressing the concerns like food security and livelihood security respectively. The agricultural sector due to its strategic nature has always been embedded

¹⁰ Das Abhijit and Sharma S.K., 2011, *“Evolution of WTO Agriculture Modalities: Survival of the Financially Fattest”*, Occasional Paper No. 1, Centre for WTO Studies, IIFT.

with “NAV tariff” on the tariff lines. While engaging in international trade, one fundamental requirement has been that imported agricultural products must be safe for human consumption and not pose risks to human, animal or plant health. Thus, countries have always imposed regulations or standards in order to ensure food safety as well as to avoid the introduction of diseases and pests through trade. Trade in agricultural commodities and related standards or regulations have co-existed since the beginning of international trade.¹¹ These have further distorted free trade in agricultural goods of the developing countries.

The imbalance in the tariff that was still prevalent in the global arena between developed and developing countries was exacerbated by the increased use of non-tariff measures such as standards/regulations as trade policy instruments, while artificially the simple average most-favoured nation (MFN) tariffs continued to decline. This issue is really alarming in the case of agricultural trade, wherein the WTO negotiations have led to substantial disciplining of the tariff structure and are expected to further it at the culmination of the Doha Round, while the use of non-tariff measures (NTMs) such as Sanitary and Phytosanitary (SPS) standards is on the rise.

Under the GATT 1947, it was in the Tokyo Round when the first multilateral agreement regulating standard in international trade (also referred to as “Standards Code”), was introduced. However, some issues related to agriculture continued to remain outstanding in the GATT framework. The first recorded comprehensive effort to address the issue of NTMs together with tariffs was in the “Meeting notes by the secretariat” (May 1973)¹² with specific emphasis on non-agricultural products.¹³ However, under Article XX (b), some exceptions were provided to enable members to implement domestic measures necessary for protecting human, animal or plant life, or health. Members had the right to take such measures as long as they were not applied in a manner that would be arbitrary or

¹¹ Previously, this excluded the exchange of food and other agricultural products as part of any aid programmes.

¹² Available on the web at Stanford University digital library.

¹³ Basically, this meeting addressed all issues related to standards that were first introduced in the Tokyo Round of GATT, when it was known as the “Standard Codes”.

unjustifiably discriminatory among countries, or serve as a disguised restriction on international trade.¹⁴

On the one hand, Members have been doing away with the use of tariffs as a trade policy tool. Although in GATT and the Uruguay Round the emphasis was primarily on ad-valorem tariffs, with the completion of the Doha Round it is expected that certain unattended aspects of tariffs such as non-ad-valorem tariffs will be addressed under the Ad-Valorem Equivalent (AVEs). The Doha Round will thus address tariff liberalisation more comprehensively, even if the most “balanced” outcome under the tiered-tariff approach (currently under consideration) may still be biased in favour of the developed countries and against the developing countries. However, the imbalance for developing country exporters will be particularly noticeable in the case of agricultural products, given the growing evidence that the use of non-tariff measures (NTMs- like the SPS and TBT measures) has increased tremendously. Despite this concern of a growing protectionist use of NTMs in the wake of trade liberalisation, there have been limited attempts to rigorously study the wholesome effects of trade liberalization that go beyond the tariff liberalisation.

To understand the issue of Non Ad Valorem (NAV) duties¹⁵ and its impact on the Agricultural market access negotiations and its significance for the global trade, we have taken 15 countries from the developed and developing countries.

3.1. The Case of Developed countries

Tariff simplification was introduced in the case of agricultural sector in order to address the issues related to large number of tariff lines with NAV duty. Thereby, to bring these tariff lines under the ambit of binding commitments and various other disciplines of the WTO. This sub-section will specifically address the issue of presence of Specific duties (non Ad-Valorem tariff). The detail examination will involve QUAD countries plus Switzerland, Australia and New Zealand.

¹⁴ See Jaiswal, 2003, and Das, 2008.

¹⁵ In this paper where ever the term specific duties is used it would also mean the non ad-valorem (NAV) duty, these terms are alternately used.

3.1.1 European Union's usage of Specific Tariffs

The European Union has been a very active member in the WTO negotiation process both in nearly all the committees, requiring tariff liberalisation by all the other Member countries.

Table 2: EU's Highly Skewed Usage of Specific (Non-ad Valorem) Duties

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	9.6	443	365	808	8.6	450	355	805
2	Vegetable products	5.7	428	248	702	6.1	400	175	579
3	Animal or vegetable fats and oils and	5.9	115	10	125	6.0	114	10	124
4	Prepared foodstuffs, beverages, sp	13.7	450	391	841	13.6	430	503	1016
<i>Agriculture and Allied Sectors</i>		8.7	1436	1014	2476	8.6	1394	1043	2524
<i>% Share</i>		--	15.4	94.1	23.7	--	16.6	94.7	26.4
5	Mineral products	0.9	251	3	254	0.8	231	3	234
6	Products of the chemical or allied i	4.2	1260	27.0	1287.0	4.2	1141	27	1168
7	Plastics and articles thereof, rubbe	5.1	371		371	4.6	301		301
8	Raw hides and skins, leather, fursk	2.7	138		138	3.0	147		147
9	Wood and articles of wood; wood c	2.8	192		192	2.4	215		215
10	Pulp of wood or of other fibrous ce	2.1	244		244	0.0	209		209
11	Textiles and textile articles	8.6	1289	3	1292	8.0	1168	1	1169
12	Footwear, headgear, umbrellas, su	8.0	114		114	8.0	109		109
13	Articles of stone, plaster, cement, a	3.8	259	8	267	4.1	232	7	239
14	Natural or cultured pearls, preciou	0.7	62		62	0.6	56		56
15	Base metals and articles of base m	2.5	1116		1116	1.8	980		980
16	Machinery and mechanical applian	2.2	1687		1687	2.3	1381		1381
17	Vehicles, aircraft, vessels and asso	4.6	292		292	4.9	273		273
18	Optical, photographic, cinematogra	2.1	372	23	395	2.4	308	20	328
19	Arms and ammunition; parts and a	2.5	27		27	2.2	24		24
20	Miscellaneous manufactured articl	2.7	237		237	2.6	203		203
21	Works of art, collectors' pieces and	0.0	7		7	0.0	7		7
<i>Non Agriculture Sector</i>		3.3	7918	64	7982	3.3	6985	58	7043
<i>% Share</i>		--	84.6	5.9	76.3	--	83.4	5.3	73.6
MFN Avg./ Total Tariff Lines		4.8	9354	1078	10458	4.7	8379	1101	9567

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

Table 2 shows the prevalence and the usage of specific duties that go unaccounted in process of simple average calculations, thereby creating an unbalanced scenario. The futility of the WTO negotiation process in comparing the simple MFN duties across countries is evidently brought out in the Table 2.

The EU which is an integral part of WTO's market access negotiation process under AoA and NAMA, clearly violates its commitments in the true spirit. As discussed above, the EU's

usage of specific duties is unparalleled and does not in any manner justify the spirits of WTOs negotiation and free trade.

Specific duties and their impact will be clearly far greater for the AoA market access negotiations, as their usage has been observed highly skewed in favour of sections 1 to 4 which are primary agricultural goods and processed food products. Table 2, clearly suggests that simple average of Ad Valorem duty rates have shown reduction of 0.1 percent for more than a decade from 2001 to 2011. Interestingly, the Doha Round also began around the same year (2001) and was mandated to conclude by December 2004. Based on the results of simple averages we can establish that the EU has not made any liberalisation at the MFN level – hovering around the 4.8 to 4.7 percentages. However, total tariff lines have decreased by about 1000 lines from 10,458 lines in 2001 to 9,567 tariff lines in 2011. Substantial portion of this reduction happened in the manufacturing sector with total tariff lines decreasing by 938 lines, while in the sections 1 to 4, which account for the raw agricultural goods and processed food products only marginal reductions were seen.

The specific duties were 10.3 percent of the total tariff lines of the EU in 2001 this increased to 11.5 percent by the 2011. The relative usage of specific duties in the agricultural sections (1 to 4) in EU has shown a marginal increase from 1014 numbers to 1043 in numbers in 2011. However, the sections 1 to 4, which account for the raw agricultural goods and processed food products accounted for substantial portion of these specific duties accounting for nearly 95 percentages of the total number of specific duties in both the years. Thus, clearly the adverse impact if any would be borne by exporter's to the EU's for in raw agricultural goods and processed food products.

This has been over the years certainly negatively impacting the terms of trade in agricultural products. Total tariff lines in the section of prepared foodstuffs, beverages, spirits and vinegar, tobacco and manufactured tobacco substitutes have shown an increase from 841 to 1016 tariff lines.

The count of total Ad Valorem tariff lines has shown a decreasing trend while the specific duty have shown an increase in counts by 112 tariff lines from 391 in 2001 503 tariff lines in 2011. The section-wise trend suggests Section 4 (prepared foodstuffs, beverages, spirits

and vinegar, tobacco and manufactured tobacco substitutes) was the most “*protected*”¹⁶ by the use of specific duties. This section covers about nine chapters and the highest number of specific duty i.e., 245 tariff lines was seen in the Chapter 22 (Beverages, spirits and vinegar). The other dominant Chapters were: chapter 2, vegetable products with 169 tariff lines followed by chapter 4 dairy produce and birds’ eggs and natural honey edible and products of animal origin with 157 tariff lines.

Table 3: Usage of Specific Duty at HS 4 Digit Level (2011) - European Union

4 digit	Description	Number of Specific Duties
2204	Wine of fresh grapes including fo	219
0207	Meat and edible offal of the poul	82
0406	Cheese and curd	42
1104	Cereal grains otherwise worked (34
2009	Fruit juices (including grape mus	34
1006	Rice	33
0403	Butter milk, curdled milk & creat	30
0404	Whey & prdcts constng of ntrl m	30
0204	Meat of sheep or goats,fresh,chill	27
0402	Milk & cream concentrated/conta	25
0210	Meat/edbl meat ofl,sltcd,in brine	24
1905	Bread,pstry&othr bkrs wars, w/r	23
1806	Chocolate & other food preparan	20
2309	Preparations of a kind used in an	20
Sub Total		643
% Share		58.4
Grand Total		1101

Source: Author’s calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

Clearly one can find that European Union wanted to protect these three sectors from the point of view of their economic interest. This again can be seen as the violation of the basis spirit of free trade in especially higher value added products.

Table 3 indicates that at the four digit level the products which faced the stiffest possible entry barriers were all belonging to the agricultural and allied sectors. The top most products are the HS 2204 (wine of fresh grapes) with nearly 20 percent share in the total specific duties used in 2011. Some of lesser protected agricultural products were Meat

¹⁶ Since these tariff lines (expressed in specific duty terms) are not bound by the Uruguay Round commitments or ceilings of any kind under the WTO. As there is no clarity in terms of a mandate on the Member, the member is free to apply varying rates since these tariff lines are not subjected to discipline by any formula or systematic approach. Therefore, these tariff lines are deemed to be protected in comparison to other tariff lines which are disciplined under the bound rate ceilings; for example like all the Ad Valorem tariff lines.

(0207); Curd and Cheese (0406); Cereal grains otherwise worked (1104); Fruit juices (2009) and Rice (1006). This clearly indicated that European Union was violating the free trade spirits and also the special needs and development concerns of the developing countries and thereby facilitating their exports. The varieties of specific duties used in (4 digit) tariff lines 2203 to 2208 by the European Union are shown in Annex 1, page 53.

3.1.2 Canada's Usage of Specific Tariffs

Canada has been relatively non-partisan member in the WTO's negotiation process in the agriculture, when it comes to expressing views and country position on the negotiation process. However, Table 3 clearly highlights that just like European Union, Canada too had specific duty at the beginning of the Doha Round with 385 tariff lines, which was 3.5 percent of the total tariff lines, then dropped by 43 tariff lines by 2011 to 342 tariff lines.

However, the total tariff lines of Canada has seen a substantial drop by 10,568 tariff lines in 2001 to 8,354 tariff lines¹⁷. The drop in tariff lines with specific duties was more than commensurate by the reduction seen in total tariff lines by 2,214 during the decade. This immediately indicates towards Canada's strategy of retaining the specific duty tariff lines as intact. There has been a substantially higher proportion of specific duty usage in the agriculture and allied sectors (Section 1 to 4). Shares of this sector to the total specific duties of all the sections increased from 94.5 percent in 2001 to 98.8 percent in 2011. Canada had virtually 99 percent of specific duties in the agriculture and allied sector; with only one percent share in the non agricultural sector. Animal or vegetable fats and oils and their cleavage products had the lowest number of specific duties.

In the Table 4 we can observe that in both years the largest number of specific duties were in the prepared foodstuffs, beverages, spirits and vinegar, tobacco and manufactured tobacco substitutes (Section 4) followed by live animals and animal products (Section 1) and vegetable products (Section 2).

¹⁷ The reduction in tariff lines were primarily driven by decreases seen in Section 16, (machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles) of 1,034 tariff lines and Section 15 (base metals and articles of base metal) which also had a substantial drop in tariff lines over the years by about 422 lines.

However, in 2011, 15 four digit products accounted for nearly 61 percent share of total specific duties (342).

Table 4: Canada's MFN Avg. Tariff Rates and the Highly Skewed Specific Duties

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	1.9	219	117	336	1.7	235	114	349
2	Vegetable products	2.2	402	101	515	2.5	352	98	450
3	Animal or vegetable fats and oils and	4.5	68	2	70	5.1	64	2	66
4	Prepared foodstuffs, beverages, spir	6.3	447	144	592	6.0	452	124	582
Agriculture and Allied Sectors		3.7	1136	364	1513	3.8	1103	338	1447
% Share			11.2	94.5	14.3		13.8	98.8	17.3
5	Mineral products	0.6	195		195	0.3	174		174
6	Products of the chemical or allied ind	2.6	1220	4	1224	0.9	1123	4	1127
7	Plastics and articles thereof, rubber	4.1	445		445	1.5	383		383
8	Raw hides and skins, leather, furskin	3.2	159		159	1.8	183		183
9	Wood and articles of wood; wood ch	2.4	117		117	2.4	136		136
10	Pulp of wood or of other fibrous cell	0.6	295		295	0.0	177		177
11	Textiles and textile articles	9.7	1489	17	1506	5.1	1504		1504
12	Footwear, headgear, umbrellas, sun	11.1	110		110	10.7	100		100
13	Articles of stone, plaster, cement, ash	2.7	273		273	1.9	195		195
14	Natural or cultured pearls, precious	2.0	76		76	1.6	65		65
15	Base metals and articles of base met	2.0	1308		1308	1.0	886		886
16	Machinery and mechanical appliance	1.5	2221		2221	0.8	1187		1187
17	Vehicles, aircraft, vessels and associa	2.9	353		353	5.4	238		238
18	Optical, photographic, cinematograp	1.6	489		489	1.6	324		324
19	Arms and ammunition; parts and acc	3.5	36		36	3.8	31		31
20	Miscellaneous manufactured articles	5.0	240		240	5.0	188		188
21	Works of art, collectors' pieces and a	1.6	8		8	1.4	9		9
Non Agriculture Sector		3.4	9034	21	9055	2.7	6903	4	6907
% Share			88.8	5.5	85.7		86.2	1.2	82.7
MFN Avg./ Total Tariff Lines		3.5	10170	385	10568	2.6	8006	342	8354

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

Canada had very stringent market access for products like: (0406) cheese and curd; (0207) meat and edible offal of the poultry of heading no.0105, fresh chilled or frozen; other fermented beverages (2206); fermented beverages *nesoi* (cider, berry, mead etc; (0402) milk & cream concentrated/containing sugar/sweetening material; (0709) other vegetables fresh or chilled and foods prepared by roasting/swelling cereal, cereal *nesoi*, grain form, corn flakes (1904).

Table 5: Usage of Specific Duty at HS 4 Digit Level (2011) - Canada

Four Digit HS	Description	Count of Specific Duty Rate
406	Cheese and curd	34
207	Meat and edible offal of the poultry of heading	26
2206	Othr fermntd bevrsg (cider perry mead)	23
1905	Bread,pstry&othr bkrs wars, w/n wth cocoa;c	13
402	Milk & cream concentrated/contaning sugar/sv	12
709	Other vegetables fresh or chilled	12
1904	Prpd foods obtnd by swlng/rostng of crls prdc	12
1702	Othr sugr in solid form incl chmclly pure lctse,r	11
2208	Undnatrd ethyl alchl wth<80% alchl strngth;sp	11
809	Apricots cherries peaches (incl nectarins)plum	10
1602	Other prepared/preseved meat meat offal/blo	10
1901	Malt extract;food preparations of flour,starch	9
704	Cabbages,cauliflowers,kohirabi,kale & similar c	8
706	Carrots,turnips,salad beetroot,salsify, celeriac,	8
1701	Cane/beet sugr chmclly pure sucrose in solid	8
Sub Total		207
% Share		60.5
G. Total		342

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

Canada too was violating the true spirit of free trade by having these specific duties concentrated in the agriculture and allied sectors with impunity and continuing to have it even as late as in 2011.

3.1.3 USA's Usage of Specific Tariffs

USA indicated an increase in the count of specific duties; it witnessed an increasing trend in terms of its relative shares from 61.6 percent in 2001 to 63.5 percent in 2011. In terms of absolute number, there was an increase from 702 in 2001 to 730 in 2011.

Agriculture and allied Sectors had witnessed signs of tariff escalation, with value added sections/products being protected more and more in comparison to less value added sections/products. This is evident from the increase by 22 count of specific duty in the Section 4 – from 264 counts in 2001 to 286 in 2011. This again suggests that USA too lacked market access for imported good in the domestic agriculture and allied sectors.

Table 6: USA's MFN Avg. Tariff Rates and the Highly Skewed Specific Duties

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	6.3	317	185	502	5.9	345	184	529
2	Vegetable products	5.2	270	222	492	5.6	273	229	502
3	Animal or vegetable fats and oils and their c	3.5	35	31	66	3.7	36	31	67
4	Prepared foodstuffs, beverages, spirits and v	12.0	461	264	725	11.9	454	286	740
<i>Agriculture and Allied Sectors</i>		6.7	1083	702	1785	6.8	1108	730	1838
<i>% Share</i>			12.0	61.6	17.5		10.4	63.5	15.6
5	Mineral products	0.2	160	19	184	0.4	166	36	203
6	Products of the chemical or allied industries	3.8	1523	142	1665	2.7	2564	16	2580
7	Plastics and articles thereof, rubber and arti	3.7	350	3	353	3.2	465		465
8	Raw hides and skins, leather, furskins and a	4.9	155	1	156	4.3	219	1	220
9	Wood and articles of wood; wood charcoal; c	2.2	184	2	186	2.4	234	5	239
10	Pulp of wood or of other fibrous cellulosic m	0.6	217	6	223	0.0	279		279
11	Textiles and textile articles	9.4	1436	120	1556	8.7	1490	110	1600
12	Footwear, headgear, umbrellas, sun umbrell	11.1	144	24	168	11.3	148	26	174
13	Articles of stone, plaster, cement, asbestos, r	5.1	292	7	299	5.3	293	7	300
14	Natural or cultured pearls, precious or semi	3.0	104		104	3.0	105		105
15	Base metals and articles of base metal	2.3	938	44	982	1.7	974	50	1024
16	Machinery and mechanical appliances; elect	1.6	1432	5	1437	1.6	1570	5	1576
17	Vehicles, aircraft, vessels and associated tra	2.6	238		238	2.4	253		253
18	Optical, photographic, cinematographic, me	2.8	489	41	530	1.7	477	136	626
19	Arms and ammunition; parts and accessorie	1.7	36	1	37	1.2	35	4	39
20	Miscellaneous manufactured articles	2.8	255	22	277	2.8	259	23	282
21	Works of art, collectors' pieces and antiques	0.0	7		7	0.0	7		7
<i>Non Agriculture Sector</i>		3.4	7960	437	8402	3.1	9538	419	9972
<i>% Share</i>		--	88.0	38.4	82.5	--	89.6	36.5	84.4
MFN Avg./ Total Tariff Lines		4.6	9043	1139	10187	3.9	10646	1149	11810

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

Table 6 shows that the USA has approximately 40 percent specific duty in the non agricultural sector. However, in terms of the usage of these specific duties in the non agricultural sector a clear shift in strategies can be spotted. While in 2001 the protected sections with use of specific duties were products of chemical or allied industries (Section 6) and textiles and textiles articles (Section 11). In 2011, the textiles and textile articles continued to be the dominant section which was protected by the use of specific duty. In addition the Section 18, optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories showed an increase in the count of specific duty from 41 in 2001 to 136 by 2011. It is clear that for the US, besides textiles and textiles articles the priority has shifted in the last decade from chemicals (Section 6) to optical instruments (Section 18).

This is evident from the top 15 products with highest concentration of specific duty counts in Section 18. The count of specific duty under this section with four digit products like 9102, 9108, 9105, 9101 and 9109 accounted for nearly 50 percent of the top 15 products out of the total 177 counts.

Table 7: Usage of Specific Duty at HS 4 Digit Level (2011) - USA

4 digit HS	Description	Count of Specific Duty Rate
9102	Wrist- watches, pocket- watches & other watches,i	36
2009	Fruit juices (including grape must)/vegetable juice	14
9108	Watch movements, complete and assembled	14
402	Milk & cream concentrated/contaning sugar/sweet	12
8211	Knives with cutting blades, separated or not (inclu	12
9105	Other clocks	12
9101	Wrist-watches, pocket-watches & other watches, ir	11
2005	Other vegetables prepared/preserved otherwise th	10
406	Cheese and curd	9
1806	Chocolate & other food preparations containing co	9
2204	Wine of fresh grapes including fortified winesgrap	8
2401	Unmanufactured tobacco, tobacco refuse	8
9109	Clock movements, complete & assembled	8
401	Milk & cream not concentrated nor containing add	7
802	Other nuts fresh or dried w/n shield or peeled	7
Sub Total		177
% share		32.6
Grand Total		543

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

The USA is a classic case of lack of competitiveness in certain agricultural and industrial goods of domestic sectors, which is being protected through a number of trade policy instruments like NTMs (SPS and TBT measures) and specific duties. Over the decade of 2001 to 2011, the US notified a number of SPS and TBT measures making it the number one notifying country among the 154 WTO members. Majority of these measures have been notified by Federal Environmental Protection Agency (EPA) which relates to regulating the contents of chemicals and pesticides. It further used specific duty as an effective trade policy instrument to evade the binding commitments of the WTO.

3.1.4 Japan's Case of Specific Tariffs Usage

Japan's usage of specific duties has been more scattered across the agricultural and allied sectors (section 1-4) and non-agricultural sectors (section 5 – 21) with the latter having an edge over the agricultural and allied sectors. Table 8 of the total 1973 and 2042 tariff lines in 2001 and 2011 respectively, 290 were the count of specific duties in both the years. The

shares of the count of specific duties were the same during the two years 2001 and 2011 – 48.3 percent for agriculture and allied sectors and for the non-agricultural sector it was 51.7 percent.

Table 8: Japan's MFN Avg. Tariff Rates and Trends in Specific Duties

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	9.6	486	74	560	9.0	516	74	590
2	Vegetable products	6.6	509	58	567	6.6	515	57	572
3	Animal or vegetable fats and oils and their cle	3.6	49	33	82	3.6	50	36	86
4	Prepared foodstuffs, beverages, spirits and v	14.9	639	125	764	14.8	671	123	794
Agriculture and Allied Sectors		8.7	1683	290	1973	8.5	1752	290	2042
% Share		--	19.5	48.3	21.3	--	19.6	48.3	21.4
5	Mineral products	0.5	183	24	207	0.5	196	20	216
6	Products of the chemical or allied industries	2.0	1220	5	1226	1.9	1483	5	1488
7	Plastics and articles thereof, rubber and artic	2.5	282	6	288	2.1	346	6	352
8	Raw hides and skins, leather, furskins and art	10.7	173		173	10.9	225		225
9	Wood and articles of wood; wood charcoal; c	3.0	213		213	3.4	263		263
10	Pulp of wood or of other fibrous cellulosic m	0.8	174		174	0.0	169		169
11	Textiles and textile articles	7.9	1851	228	2079	6.7	1772	215	1987
12	Footwear, headgear, umbrellas, sun umbrella	14.8	117	28	145	14.4	102	25	127
13	Articles of stone, plaster, cement, asbestos, m	1.2	171		171	1.2	164		164
14	Natural or cultured pearls, precious or semi-	1.4	77		77	1.3	79		79
15	Base metals and articles of base metal	1.4	818	17	835	0.8	815	37	852
16	Machinery and mechanical appliances; electr	0.1	991		991	0.0	918		918
17	Vehicles, aircraft, vessels and associated tran	0.1	152		152	0.1	146		146
18	Optical, photographic, cinematographic, mea	0.2	308		308	0.2	278		278
19	Arms and ammunition; parts and accessories	6.7	21		21	6.9	24		24
20	Miscellaneous manufactured articles	1.8	207	2	209	1.6	187	2	189
21	Works of art, collectors' pieces and antiques	0.0	7		7	0.0	7		7
Non Agriculture Sector		3.2	6965	310	7276	3.1	7174	310	7484
% Share		--	80.5	51.7	78.7	--	80.4	51.7	78.6
MFN Avg./ Total Tariff Lines		4.9	8648	600	9249	4.5	8926	600	9526

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

The signs of tariff escalations are seen in the case of Japan – with section 4 (prepared foodstuffs, beverages, spirits and vinegar, tobacco and mfg. tobacco substitutes) having higher absolute counts of specific duties of 125 in 2001 and 123 in 2011 respectively. It could be argued that having a larger number of tariff lines under the specific duty could act as tariff escalation phenomenon and effectively lead to higher applied tariffs in some of the lines.

This suggests that for Japan it was the non-agricultural sector which was strategically important. It was Section 11, Textile and textile articles which had a dominant share of 73.5 percent in 2001. There was a gradual reduction in terms of shares to the total specific

duty counts to 69.4 percent. However, the non-agricultural count of specific duty share remaining the same at 51.7 percent to the total count of specific duty, there was evidence of shifting seen in Section 15 (Base metal and articles of base metal). Section 15, recorded an increase in the count of specific duty by 20 units between the period 2001 to 2011.

Therefore, it could be concluded that Japan, a developed member of the WTO, was also part of the overall process of denial of market access for developing countries. There is an evidence of denial of market access particularly in textile and textile articles, which is one of the sectors in which many of the developing countries are competitive and has an export interest. It is observed that both USA and Japan had effectively denied market access in this section as they continued to retain relatively very high counts of specific duty even in 2011.

Table 9: Usage of Specific Duty at HS 4 Digit Level (2011) - Japan

HS 4 digit	Description	Count of Specific Duty Rate
5205	Cotton yarn (other than sewing thread) containing 85% or more by w	58
5208	Woven fabrics of cotton containing >=85% by with of cotton weighing	50
5209	Woven fabrics of cotton, containing >=85% cotton by with weighing>	23
5206	Cotton yarn (other than sewing thread) containing cotton <85% by w	20
1702	Othr sugar in solid form incl chmclly pure lctse,mltse,glcse & frctse;su	18
1901	Malt extract;food preparations of flour,starch etc without cocoa powd	18
2710	Petroleum oils& oils obtnd frm bitmns mnrl other than crude prpn ne	18
6403	Ftwear wth outr soles of rubr,plstcs, lthr/cmpstn lthr & upprs of lthr	18
5211	Wovn fbrcs of coton,contng<85% cotton,mxd mainly wth mnmd fbrs	17
402	Milk & cream concentrated/contaning sugar/sweetng matrial	16
5210	Wovn fbrcs contng<85% coton,mxd mainly or solely wth manmade ft	16
7403	Refined copper & copper alloys,unwrought	16
2009	Fruit juices (incl grape must)/vgtbl juiceunfrmtd & not wth added s	15
203	Meat of swine,fresh,chilled or frozen	12
404	Whey & prdcts constng of ntrl milk cnstitntw/n containing added sgr	12
Sub Total		327
% share		54.5
Grand Total		600

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

This is evident from Table 9, which listed the top specific duty lines at HS 4 digit level. Many of intermediary products belonging to the section 11 (textile and textile articles) have been found with the presence of specific duties and these are 5205, 5208, 5209, 5206, 5211 and 5210. These six products in total accounted for 56.3 percent of the sub total of 327 specific duties. Therefore, clearly Japan has been not helping the developing countries and

the least developed countries to achieve the market access provision mandated in the Doha Round Mandate of 2001. Having an average of 6.5 percent of the total tariff lines under the specific duty (and specifically in agriculture and allied sector with nearly 15 percent share) does not help the improvement of market access especially when it is used as strategic trade policy instrument. This does not help in the process of negotiated outcome which is balanced and supportive of free trade under the Doha Round.

3.1.5 Switzerland's Usage of Specific Tariffs

Switzerland has spread across agricultural and allied sectors and non agricultural sectors. In over a decade, the total specific duty count showed a marginal drop from 6946 tariff lines under the specific duty in 2001 to 6898 tariff lines by 2011 (48 tariff lines).

Table 10: Switzerland's MFN Avg. Tariff Rates and Trends in Specific Duties

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	0.0	102	329	431	0.0	123	322	445
2	Vegetable products	0.0	139	918	1057	0.0	194	876	1070
3	Animal or vegetable fats and oils and their	0.0	24	146	170	0.0	40	149	189
4	Prepared foodstuffs, beverages, spirits and	0.0	76	512	588	0.0	104	547	651
Agriculture and Allied Sectors		0.0	341	1905	2246	0.0	461	1894	2355
% Share		--	24.6	27.4	27.0	--	31.2	27.5	28.1
5	Mineral products	0.0	117	64	181	0.0	119	63	182
6	Products of the chemical or allied industries	0.0	389	619	1008	0.0	412	609	1021
7	Plastics and articles thereof, rubber and articles	0.0	31	198	229	0.0	30	211	241
8	Raw hides and skins, leather, furskins and articles	0.0	22	55	77	0.0	15	59	74
9	Wood and articles of wood; wood charcoal	0.0	11	92	103	0.0	14	116	130
10	Pulp of wood or of other fibrous cellulose	0.0	21	138	159	0.0	24	157	181
11	Textiles and textile articles	0.0	37	1059	1096	0.0	34	1060	1094
12	Footwear, headgear, umbrellas, sun umbrellas			66	66			61	61
13	Articles of stone, plaster, cement, asbestos	0.0	2	167	169	0.0	2	158	160
14	Natural or cultured pearls, precious or semi-precious	0.0	7	53	60	0.0	7	54	61
15	Base metals and articles of base metal	0.0	39	892	931	0.0	39	874	913
16	Machinery and mechanical appliances; electrical	0.0	249	1060	1309	0.0	204	1030	1234
17	Vehicles, aircraft, vessels and associated transport	0.0	18	179	197	0.0	18	178	196
18	Optical, photographic, cinematographic, radio	0.0	62	217	279	0.0	55	202	257
19	Arms and ammunition; parts and accessories			25	25			28	28
20	Miscellaneous manufactured articles	0.0	33	155	188	0.0	34	142	176
21	Works of art, collectors' pieces and antiques	0.0	8	2	10	0.0	8	2	10
Non Agriculture Sector		0.0	1046	5041	6087	3.3	1015	5004	6019
% Share		--	75.4	72.6	73.0	--	68.8	72.5	71.9
MFN Avg./ Total Tariff Lines		0.0	1387	6946	8333	0.0	1476	6898	8374

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

It is interesting to note that Switzerland had lesser number of tariff lines with Ad Valorem tariffs in comparison to specific duty tariff lines. The overall pattern of usage of Ad Valorem

and Specific duty suggest that it is skewed in favour of latter. Table 12 clearly indicates this in both years (2001 and 2011) analysed. In 2001 of the total 8333 tariff lines specific duty lines accounted for a majority share of 83.4 percent (6946 lines) by 2011 it dropped by one percentage points to 82.4 with 6898 lines. Thus in Switzerland the use of specific duty was not limited to the agricultural and allied sectors. The problem of distortion of market access to developing country exporters can be serious as it is prevalent across the 21 sections generally and particularly to two specific sectors like Section 12 and 19. One of the two is export interest product for developing country namely the footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof prepared feathers and articles made therewith; artificial flowers; articles of human hair.

However, the usage of specific duties in the agriculture and allied sector saw relatively better result in comparison to the totals. In this sector there was drop of 4.4 percentage points. The market access scenario in Switzerland (2011) suggested a marginal improvement for developing countries exporters in agricultural and allied sector goods when compared to the scenario in 2001.

Such rampaged usage of specific duty (nearly 85 percent of tariff lines even in 2011) by Switzerland cannot be ignored as the simple average MFN tariff is not representative of the actual market access scenario in the country. It is evident that even Switzerland is not serious on the issue and is making unnecessary fuss about tariff reduction and other negotiation process happening at Geneva, Switzerland.

3.1.6 Australia's and New Zealand's Usage of Specific Tariffs

Both Australia and New Zealand have been less of users of specific duties. It has been found that Australia's use of AVEs has varied from 15 in 2001 to 17 in 2011 whereas New Zealand's use was higher with nearly 274 tariff lines in 2001 which subsequently dropped to 37 in 2011. In Table 10, it can be observed that Australia used minimal number of tariff lines under the category of specific duties. The basic interest in the agriculture and allied sector was in a very limited manner to intervene in sections like live animals and animal products (section 1) and prepared foodstuffs, beverages, spirits and vinegar, tobacco and manufactured tobacco substitutes (Section 4) and among the non-agriculture sectors it was

vehicles, aircraft, vessels and associated transport equipment (Section 17). As already discussed, Australia had 0.3 percent of the total tariff lines under the specific duties and rest 99.7 percent in Ad Valorem terms- therefore Australia's MFN was true representative of the market access in terms of tariff liberalisation.

Table 11: Australia's MFN Avg. Tariff Rates and Trends in Specific Duties

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	0.0	198	5	203	0.0	226	5	231
2	Vegetable products	0.7	281		281	0.7	262		262
3	Animal or vegetable fats and oils and their c	1.7	47		47	2.0	46		46
4	Prepared foodstuffs, beverages, spirits and v	2.6	279	2	281	2.7	263	4	267
Agriculture and Allied Sectors		1.2	805	7	812	1.4	797	9	806
% Share		--	13.4	46.7	13.5	--	13.2	52.9	13.4
5	Mineral products	0.4	182		182	0.4	191		191
6	Products of the chemical or allied industries	1.2	830		830	1.4	878		878
7	Plastics and articles thereof, rubber and arti	5.8	221		221	4.5	238		238
8	Raw hides and skins, leather, furskins and a	3.8	85		85	3.6	92		92
9	Wood and articles of wood; wood charcoal,	3.2	94		94	3.4	150		150
10	Pulp of wood or of other fibrous cellulosic r	3.3	186		186	3.7	288		288
11	Textiles and textile articles	12.6	1061		1061	5.4	925		925
12	Footwear, headgear, umbrellas, sun umbrell	6.5	69		69	2.6	64		64
13	Articles of stone, plaster, cement, asbestos, r	3.7	165		165	3.5	162		162
14	Natural or cultured pearls, precious or semi	1.0	54		54	1.0	53		53
15	Base metals and articles of base metal	3.7	588		588	3.5	588		588
16	Machinery and mechanical appliances; elect	3.3	961		961	2.9	955		955
17	Vehicles, aircraft, vessels and associated tra	4.5	229	8	237	3.4	231	8	239
18	Optical, photographic, cinematographic, me	0.9	326		326	0.9	246		246
19	Arms and ammunition; parts and accessorie	1.8	17		17	1.5	20		20
20	Miscellaneous manufactured articles	3.7	140		140	3.5	134		134
21	Works of art, collectors' pieces and antiques	0.0	7		7	0.0	7		7
Non Agriculture Sector		3.5	5215	8	5223	3.3	5222	8	5230
% Share		--	86.6	53.3	86.5	--	86.8	47.1	86.6
MFN Avg./ Total Tariff Lines		4.4	6020	15	6035	2.9	6019	17	6036

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

Table 12: New Zealand's MFN Avg. Tariff Rates and Trends in Specific Duties

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	1.0	224		224	0.8	251		251
2	Vegetable products	1.3	312		312	1.1	300		300
3	Animal or vegetable fats and oils and their cleav	1.3	58		58	0.9	58		58
4	Prepared foodstuffs, beverages, spirits and vine	3.2	371	70	442	2.5	478	4	482
Agriculture and Allied Sectors		1.7	965	70	1036	1.3	1087	4	1091
% Share		--	13.9	25.5	14.3	--	15.0	10.8	15.0
5	Mineral products	0.3	189	6	197	0.3	189		189
6	Products of the chemical or allied industries	0.7	890	3	894	0.7	951		951
7	Plastics and articles thereof, rubber and article	4.4	375	4	380	2.9	388	1	389
8	Raw hides and skins, leather, furskins and artic	3.4	94	3	97	2.5	102		102
9	Wood and articles of wood; wood charcoal; co	2.8	152		152	2.5	205		205
10	Pulp of wood or of other fibrous cellulosic mat	4.6	210		211	0.0	228		228
11	Textiles and textile articles	7.9	1042	186	1230	4.1	1055	4	1059
12	Footwear, headgear, umbrellas, sun umbrellas,	10.3	117		117	5.7	106		106
13	Articles of stone, plaster, cement, asbestos, mic	3.3	218		218	2.2	226		226
14	Natural or cultured pearls, precious or semi-pr	1.7	67		67	1.2	68		68
15	Base metals and articles of base metal	3.2	792		792	2.4	802		802
16	Machinery and mechanical appliances; electric	3.8	1106		1124	2.6	1162	16	1178
17	Vehicles, aircraft, vessels and associated transp	5.3	233		234	3.3	233		233
18	Optical, photographic, cinematographic, measu	1.0	253		262	0.9	232	8	240
19	Arms and ammunition; parts and accessories th	3.0	32		36	1.8	33	2	35
20	Miscellaneous manufactured articles	5.2	188	2	191	3.6	177	2	179
21	Works of art, collectors' pieces and antiques	0.0	7		7	0.0	7		7
Non Agriculture Sector		3.6	5965	204	6209	3.3	6164	33	6197
% Share		--	86.1	74.5	85.7	--	85.0	89.2	85.0
MFN Avg./ Total Tariff Lines		3.7	6930	274	7245	2.3	7251	37	7288

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

In the case of New Zealand two sections were protected the most: Section 4 (prepared foodstuffs, beverages, spirits and vinegar, tobacco and mfg. tobacco substitutes) accounted for 70 tariff lines and Section 11 (textile and textile articles) which accounted for 186 tariff lines in 2001. However, from Table 12, it can be observed that in both these Sections there was a drastic reduction in the usage by 2011. This suggest that although New Zealand's market exhibited some market access distortions in the beginning of Doha Round but gradually it seems to have improved it's market access conditions with 99.4 percent of it's tariff lines represented in Ad Valorem terms. Therefore, in terms of simple average MFN duties it seems like New Zealand has given better market access over the years.

Table 13: Summary Table of the Usage of Specific Duty in Agriculture and Allied Sectors - 2011

Section	Section Description	2011						
		Switzerland	Australia	New Zealand	EU-27	Japan	USA	Canada
1	Live animals; animal products	322	5		355	74	184	114
2	Vegetable products	876			175	57	229	98
3	Animal or vegetable fats and oils and their cle	149			10	36	31	2
4	Prepared foodstuffs, beverages, spirits and vi	547	4	4	503	123	286	124
Agriculture and Allied Sectors		1894	9	4	1043	290	730	338
% Share		27.5	52.9	10.8	94.7	48.3	63.5	98.8
5	Mineral products	63			3	20	36	
6	Products of the chemical or allied industries	609			27	5	16	4
7	Plastics and articles thereof, rubber and articl	211		1		6		
8	Raw hides and skins, leather, furskins and art	59					1	
9	Wood and articles of wood; wood charcoal; co	116					5	
10	Pulp of wood or of other fibrous cellulosic ma	157						
11	Textiles and textile articles	1060		4	1	215	110	
12	Footwear, headgear, umbrellas, sun umbrella	61				25	26	
13	Articles of stone, plaster, cement, asbestos, mi	158			7		7	
14	Natural or cultured pearls, precious or semi-p	54						
15	Base metals and articles of base metal	874				37	50	
16	Machinery and mechanical appliances; electri	1030		16			5	
17	Vehicles, aircraft, vessels and associated trans	178	8					
18	Optical, photographic, cinematographic, meas	202		8	20		136	
19	Arms and ammunition; parts and accessories	28		2			4	
20	Miscellaneous manufactured articles	142		2		2	23	
21	Works of art, collectors' pieces and antiques	2						
Non Agriculture Sector		5004	8	33	58	310	419	4
% Share		72.5	47.1	89.2	5.3	51.7	36.5	1.2
Total Specific Tariff Lines		6898	17	37	1101	600	1149	342

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

Table 13 provides a summary of specific duties usage across seven developed countries. In terms of import market these countries account nearly 69 percent (average of 2002 to 2011) of the total global agricultural products.¹⁸ So these countries are important in the context of market access. In terms of relative share of agricultural and allied sector USA and EU-27 were leading in terms of denial of market access to the developing countries. While the least market access denials were caused by Australia and New Zealand. Switzerland was an exception to the lot with denial of market access seen across both sectors – agricultural and allied and non-agricultural sectors.

¹⁸ WTO's definition of agricultural products as defined in Annex I (product coverage) of the Agreement of Agriculture. See for details WTO, 2002, *"WTO Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiation"*, WTO Secretariat, Geneva.

3.2. The Case of Developing countries

The specific duty of the developing countries are analysed in this sub-section. This analysis is carried out for eight developing countries. Some of the prominent economies are analysed here to understand their pattern of usage of specific duties. The countries studied are Russian Federation, Republic of Korea, Singapore, Brazil, Argentina, China, Mexico and India. The specific duties across 21 sections would be analysed based on the two categories agricultural and allied sectors (Sections 1 to 4) and non-agricultural sectors (sections 5 to 21).

3.2.1 *Russia's Usage of Specific Tariffs*

After 18 years of negotiations, Russia joined the World Trade Organisation (WTO) as its 156th member on 22 August, 2012. Russian Federation is one of the largest economies in world with GDP estimated at 1.465 trillion US dollars in 2010, nevertheless it was treated as a developing country.

Table 14 reflects the scenario in 2001; Russia had relatively closed market with close to 1579 tariff line under the specific tariffs; of this nearly 50 percent tariff lines belonged to in the agriculture and allied sectors. Nearly 86 percent of the specific duties in the agriculture and allied sectors were in just two sections (i.e., Section 1 and 4); Live animals & animal products with 342 tariff lines and Prepared foodstuffs & beverage, spirits and vinegar, tobacco & manufactured tobacco substitutes with another 338 tariff lines. The other important sectors were textile and textile articles accounting for 60 percent share and the section of footwear & headgear and articles made therewith; artificial flowers; articles of human hair etc having a share of nearly 10 percent of subtotal of non agricultural sector.

There were 136 four digit tariff lines with specific duties in Russian Federation. Out of which, belonged to the agricultural and allied products nine out of the top fifteen products with average protection of 94 percent of total tariff lines see Table 15. The situation would have witnessed a drastic change after the prolonged bilateral negotiations for accession of Russia.

Table 14: Russia and its MFN Avg. Tariff Rates and the Specific Duties

Section	Section Description	2001			Total Tariff Lines
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	
1	Live animals; animal products	10.2	468	342	810
2	Vegetable products	9.3	620	99	719
3	Animal or vegetable fats and oils and their clea	9.9	120	8	128
4	Prepared foodstuffs, beverages, spirits and vin	13.2	533	338	871
<i>Agriculture and Allied Sectors</i>		<i>10.6</i>	<i>1741</i>	<i>787</i>	<i>2528</i>
<i>% Share</i>		<i>--</i>	<i>18.4</i>	<i>49.8</i>	<i>22.9</i>
5	Mineral products	5.1	256		256
6	Products of the chemical or allied industries	6.4	1285		1285
7	Plastics and articles thereof, rubber and article	10.4	353	10	363
8	Raw hides and skins, leather, furskins and artic	7.5	164	42	206
9	Wood and articles of wood; wood charcoal; cor	14.8	222		222
10	Pulp of wood or of other fibrous cellulosic mate	12.6	247	5	252
11	Textiles and textile articles	10.6	867	488	1355
12	Footwear, headgear, umbrellas, sun umbrellas,	17.3	40	81	121
13	Articles of stone, plaster, cement, asbestos, mic	15.4	268	9	277
14	Natural or cultured pearls, precious or semi-pr	19.7	62	5	67
15	Base metals and articles of base metal	9.7	1148	3	1151
16	Machinery and mechanical appliances; electric	10.5	1832	53	1885
17	Vehicles, aircraft, vessels and associated transp	10.9	336	22	358
18	Optical, photographic, cinematographic, measu	9.7	386	24	410
19	Arms and ammunition; parts and accessories t	20.0	28		28
20	Miscellaneous manufactured articles	17.7	211	50	261
21	Works of art, collectors' pieces and antiques	0.0	7		7
<i>Non Agriculture Sector</i>		<i>11.7</i>	<i>7712</i>	<i>792</i>	<i>8504</i>
<i>% Share</i>		<i>--</i>	<i>81.6</i>	<i>50.2</i>	<i>77.1</i>
MFN Avg./ Total Tariff Lines		10.3	9453	1579	11032

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

Table 15: Usage of Specific Duty at HS 4 Digit Level (2001) - Russia

4 digit	Descriptions	Count of Specific Duty Rate	% share to Total Tariff lines (Coverage)
207	Meat and edible offal of the poultry of heading n	104	100.0
2009	Fruit juices (incl grape must)/vgtbl juiceunfrmn	89	78.8
406	Cheese and curd	53	100.0
6204	Women's/girls' suits,ensembles,jackets, dresses,	53	100.0
805	Citrus fruit fresh or dried	49	98.0
2208	Undnatrd ethyl alchl wth <80% alchl strngth;spr	48	100.0
1602	Other prepared/preseved meat meat offal/blood	42	97.7
6203	Men's or boys' suits,ensembles,jackets blazers,tr	42	100.0
6403	Ftwear wth outr soles of rubr,plstcs, lthr/cmpst	37	100.0
403	Buttr milk,crldd milk & crm,yogrt,kphir & othr f	30	100.0
6104	Women's/girls' suits,ensembles,jackets dresses,s	30	100.0
6302	Bed linn,tbl linn,toilt linn & ktchn linn	28	100.0
204	Meat of sheep or goats,fresh,chilled or frozen	27	100.0
210	Meat/edbl meat ofl,silted,in brine,dried/ smokd,	26	74.3
4202	Trunks,suit cases,and other cases hlstr & travelli	25	100.0
Sub Total of Top 15 4 digit		683	
% Share		43.3	
Grand Total		1579	

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

3.2.2 Singapore's Usage of Specific Tariffs

Table 16: Singapore's Average MFN Tariffs

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	0.0	247		247	0.0	344		344
2	Vegetable products	0.0	317		317	0.0	391		391
3	Animal or vegetable fats and oils and	0.0	49		49	0.0	150		150
4	Prepared foodstuffs, beverages, spirits	0.0	282	4	286	0.0	380	6	386
<i>Agriculture and Allied Sectors</i>		0.0	895	4	899	0.0	1265	6	1271
<i>% Share</i>		--	14.8	100.0	14.8	--	15.3	100.0	15.3
5	Mineral products	0.0	176		176	0.0	198		198
6	Products of the chemical or allied indus	0.0	879		879	0.0	1098		1098
7	Plastics and articles thereof, rubber an	0.0	233		233	0.0	392		392
8	Raw hides and skins, leather, furskins	0.0	85		85	0.0	84		84
9	Wood and articles of wood; wood char	0.0	95		95	0.0	136		136
10	Pulp of wood or of other fibrous cellul	0.0	154		154	0.0	224		224
11	Textiles and textile articles	0.0	928		928	0.0	928		928
12	Footwear, headgear, umbrellas, sun u	0.0	61		61	0.0	63		63
13	Articles of stone, plaster, cement, asbe	0.0	153		153	0.0	185		185
14	Natural or cultured pearls, precious or	0.0	56		56	0.0	75		75
15	Base metals and articles of base metal	0.0	620		620	0.0	825		825
16	Machinery and mechanical appliances	0.0	1118		1118	0.0	1805		1805
17	Vehicles, aircraft, vessels and associat	0.0	157		157	0.0	427		427
18	Optical, photographic, cinematographi	0.0	272		272	0.0	339		339
19	Arms and ammunition; parts and acces	0.0	17		17	0.0	28		28
20	Miscellaneous manufactured articles	0.0	157		157	0.0	212		212
21	Works of art, collectors' pieces and an	0.0	8		8	0.0	10		10
<i>Non Agriculture Sector</i>		0.0	5169	0	5169	0.0	7029	0	7029
<i>% Share</i>		--	85.2	0.0	85.2	--	84.7	0.0	84.7
<i>MFN Avg./ Total Tariff Lines</i>		0.0	6064	4	6068	0.0	8294	6	8300

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

3.2.3 Brazil's Usage of Specific Tariffs

Table 17: Brazil's Average MFN Tariffs

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	12.1	294	--	294	9.4	376	--	376
2	Vegetable products	9.6	385	--	385	7.7	353	--	353
3	Animal or vegetable fats and oils and th	11.9	74	--	74	9.6	71	--	71
4	Prepared foodstuffs, beverages, spirits	17.7	297	--	297	14.8	273	--	273
<i>Agriculture and Allied Sectors</i>		12.8	1050	--	1050	10.4	1073	--	1073
<i>% Share</i>		--	9.8	--	9.8	--	10.9	--	10.9
5	Mineral products	4.7	213	--	213	2.4	206	--	206
6	Products of the chemical or allied indus	9.5	2919	--	2919	6.8	2968	--	2968
7	Plastics and articles thereof, rubber an	14.3	403	--	403	11.2	424	--	424
8	Raw hides and skins, leather, furskins	13.1	110	--	110	11.4	115	--	115
9	Wood and articles of wood; wood char	10.3	100	--	100	8.4	129	--	129
10	Pulp of wood or of other fibrous cellul	12.8	248	--	248	11.1	226	--	226
11	Textiles and textile articles	19.3	972	--	972	25.6	1018	--	1018
12	Footwear, headgear, umbrellas, sun u	22.0	62	--	62	25.7	66	--	66
13	Articles of stone, plaster, cement, asbe	13.4	214	--	214	10.7	217	--	217
14	Natural or cultured pearls, precious or	12.4	61	--	61	9.6	64	--	64
15	Base metals and articles of base metal	15.1	834	--	834	11.9	744	--	744
16	Machinery and mechanical appliances;	14.3	2404	--	2404	11.8	1752	--	1752
17	Vehicles, aircraft, vessels and associate	17.7	260	--	260	17.9	215	--	215
18	Optical, photographic, cinematographi	15.1	717	--	717	12.5	459	--	459
19	Arms and ammunition; parts and acces	22.5	20	--	20	20.0	20	--	20
20	Miscellaneous manufactured articles	20.9	166	--	166	19.1	163	--	163
21	Works of art, collectors' pieces and an	6.5	7	--	7	4.0	7	--	7
<i>Non Agriculture Sector</i>		14.4	9710	--	9710	12.9	8793	--	8793
<i>% Share</i>		--	90.2	--	90.2	--	89.1	--	89.1
<i>MFN Avg./ Total Tariff Lines</i>		13.4	10760	--	10760	11.6	9866	--	9866

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

3.2.4 Argentina's Usage of Specific Tariffs

Table 18: Argentina's MFN Avg. Tariffs and the Specific Duties

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	10.9	259	--	259	9.4	376	--	376
2	Vegetable products	9.7	362	--	362	7.7	353	--	353
3	Animal or vegetable fats and oils and animal or vegetable products	12.0	69	--	69	9.6	71	--	71
4	Prepared foodstuffs, beverages, spirits and vinegars	17.3	264	--	264	14.9	273	--	273
<i>Agriculture and Allied Sectors</i>		12.5	954	--	954	10.4	1073	--	1073
<i>% Share</i>		--	10.1	--	10.1	--	10.9	--	10.9
5	Mineral products	4.2	208	--	208	2.4	206	--	206
6	Products of the chemical or allied industries	9.7	2867	--	2867	6.8	2968	--	2968
7	Plastics and articles thereof, rubber and articles thereof	14.3	379	--	379	11.3	425	--	425
8	Raw hides and skins, leather, furskins and articles thereof	13.4	108	--	108	11.4	115	--	115
9	Wood and articles of wood; wood charcoal	10.3	100	--	100	8.4	129	--	129
10	Pulp of wood or of other fibrous cellulose material	13.4	183	--	183	11.3	226	--	226
11	Textiles and textile articles	19.5	945	--	945	25.6	1018	--	1018
12	Footwear, headgear, umbrellas, sun umbrellas, parasols and similar articles	21.6	62	--	62	25.7	66	--	66
13	Articles of stone, plaster, cement, asbestos, mica and similar materials	13.4	212	--	212	10.7	217	--	217
14	Natural or cultured pearls, precious or semi-precious stones, and diamonds	12.4	61	--	61	9.6	64	--	64
15	Base metals and articles of base metal	14.8	725	--	725	11.9	744	--	744
16	Machinery and mechanical appliances, electrical machinery and electrical apparatus	14.7	1759	--	1759	11.8	1757	--	1757
17	Vehicles, aircraft, vessels and associated transport equipment	20.0	204	--	204	14.0	215	--	215
18	Optical, photographic, cinematographic, measuring, weighing, measuring, measuring, measuring instruments	15.2	474	--	474	12.6	459	--	459
19	Arms and ammunition; parts and accessories thereof	22.5	18	--	18	20.0	20	--	20
20	Miscellaneous manufactured articles	21.0	160	--	160	18.0	163	--	163
21	Works of art, collectors' pieces and antiques	6.5	7	--	7	4.0	7	--	7
<i>Non Agriculture Sector</i>		14.5	8472	--	8472	12.7	8799	--	8799
<i>% Share</i>		--	89.9	--	89.9	--	89.1	--	89.1
MFN Avg./ Total Tariff Lines		13.3	9426	--	9426	11.5	9872	--	9872

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

3.2.5 South Korea's Usage of Specific Tariffs

Table 19: S. Korea's Average MFN Tariffs

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	21.2	518	1	519	20.4	582	4	586
2	Vegetable products	91.1	536	25	561	86.1	547	43	590
3	Animal or vegetable fats and oils and their cle	10.6	96	1	97	9.3	101	1	102
4	Prepared foodstuffs, beverages, spirits and vi	24.0	496	1	497	24.1	513	3	516
<i>Agriculture and Allied Sectors</i>		36.7	1646	28	1674	35.0	1743	51	1794
<i>% Share</i>		--	14.5	51.9	14.7	--	14.7	58.6	15.0
5	Mineral products	3.7	325		325	3.5	345		345
6	Products of the chemical or allied industries	8.6	2250	20	2270	7.5	2306	30	2336
7	Plastics and articles thereof, rubber and articl	7.6	414		414	6.7	381		381
8	Raw hides and skins, leather, furskins and arti	7.7	255		255	7.7	242		242
9	Wood and articles of wood; wood charcoal; co	5.7	223		223	5.7	314		314
10	Pulp of wood or of other fibrous cellulosic ma	5.9	238		238	0.0	291		291
11	Textiles and textile articles	9.7	1353	5	1358	9.5	1302	5	1307
12	Footwear, headgear, umbrellas, sun umbrellas	10.2	106		106	10.3	108		108
13	Articles of stone, plaster, cement, asbestos, mi	7.9	289		289	7.8	343		343
14	Natural or cultured pearls, precious or semi-p	5.5	125		125	5.2	118		118
15	Base metals and articles of base metal	6.5	914		914	4.2	1023		1023
16	Machinery and mechanical appliances; electri	6.0	1903	1	1904	5.7	2067	1	2068
17	Vehicles, aircraft, vessels and associated trans	5.8	355		355	5.8	333		333
18	Optical, photographic, cinematographic, meas	6.6	596		596	6.6	593		593
19	Arms and ammunition; parts and accessories	4.2	23		23	3.7	87		87
20	Miscellaneous manufactured articles	7.3	303		303	5.4	270		270
21	Works of art, collectors' pieces and antiques	0.0	13		13	0.0	15		15
<i>Non Agriculture Sector</i>		6.4	9685	26	9711	5.6	10138	36	10174
<i>% Share</i>		--	85.5	48.1	85.3	--	85.3	41.4	85.0
MFN Avg./ Total Tariff Lines		12.7	11331	54	11385	11.6	11881	87	11968

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

3.2.6 Mexico's Usage of Specific Tariffs

Table 20: Mexico's MFN Avg. Tariffs and the Specific Duties

Section	Section Description	2001				2011			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	40.3	276	8	286	33.0	326	7	333
2	Vegetable products	18.4	414	3	420	14.6	459	9	468
3	Animal or vegetable fats and oils	21.1	66		66	16.4	69		69
4	Prepared foodstuffs, beverages, s	24.1	280	44	325	23.3	295	46	341
Agriculture and Allied Sectors		25.9	1036	55	1097	21.8	1149	62	1211
% Share		--	9.1	94.8	9.6	--	9.6	77.5	10.0
5	Mineral products	11.5	193		193	0.3	211		211
6	Products of the chemical or allied	10.9	2703	3	2717	1.6	2845	14	2859
7	Plastics and articles thereof, rubi	16.0	520		520	4.3	565	1	566
8	Raw hides and skins, leather, fur	18.0	91		91	6.0	123	1	124
9	Wood and articles of wood; woo	19.4	124		124	7.3	186		186
10	Pulp of wood or of other fibrous	13.1	292		294	2.8	316	2	318
11	Textiles and textile articles	23.6	1209		1209	14.0	1255		1255
12	Footwear, headgear, umbrellas, s	31.8	101		101	17.3	104		104
13	Articles of stone, plaster, cement	18.7	291		291	5.9	311		311
14	Natural or cultured pearls, preci	13.2	65		65	4.2	65		65
15	Base metals and articles of base	15.9	1161		1161	3.6	1272		1272
16	Machinery and mechanical appli	14.4	2493		2493	3.1	2480		2480
17	Vehicles, aircraft, vessels and ass	17.1	366		366	8.8	402		402
18	Optical, photographic, cinematog	15.0	458		458	2.8	453		453
19	Arms and ammunition; parts and	20.5	29		29	11.2	33		33
20	Miscellaneous manufactured arti	23.5	232		232	9.9	243		243
21	Works of art, collectors' pieces a	3.0	12		12	0.0	14		14
Non Agriculture Sector		16.8	10340	3	10356	6.1	10878	18	10896
% Share		--	90.9	5.2	90.4	--	90.4	22.5	90.0
MFN Avg./ Total Tariff Lines		16.4	11376	58	11453	6.4	12027	80	12107

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

3.2.7 China's Usage of Specific Tariffs

Table 21: China's MFN Avg. Tariffs and the Specific Duties

Section	Section Description	2001				2010			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	18.9	311	6	317	12.3	370	7	377
2	Vegetable products	21.4	429	--	429	14.4	469	--	469
3	Animal or vegetable fats and oils an	39.4	50	--	50	13.1	54	--	54
4	Prepared foodstuffs, beverages, spi	28.5	250	1	251	18.0	287	--	287
Agriculture and Allied Sectors		27.1	1040	7	1047	14.4	1180	7	1187
% Share		--	14.6	7.8	14.5	--	14.9	14.3	14.9
5	Mineral products	4.1	186	1	187	3.7	200	--	200
6	Products of the chemical or allied in	9.8	1103	74	1177	6.5	1204	37	1241
7	Plastics and articles thereof, rubber	15.9	244	--	244	9.4	270	--	270
8	Raw hides and skins, leather, furski	16.4	88	--	88	12.3	106	--	106
9	Wood and articles of wood; wood cl	8.7	113	--	113	4.4	205	--	205
10	Pulp of wood or of other fibrous cel	13.3	160	1	161	5.3	161	--	161
11	Textiles and textile articles	21.2	1067	--	1067	11.5	1140	--	1140
12	Footwear, headgear, umbrellas, sun	23.2	60	--	60	17.9	68	--	68
13	Articles of stone, plaster, cement, as	17.7	175	--	175	13.4	188	--	188
14	Natural or cultured pearls, precious	12.6	67	--	67	10.6	86	--	86
15	Base metals and articles of base me	9.6	660	--	660	7.3	750	--	750
16	Machinery and mechanical applianc	14.6	1345	7	1359	8.3	1488	5	1498
17	Vehicles, aircraft, vessels and assoc	23.9	288	--	288	13.2	349	--	349
18	Optical, photographic, cinematogra	14.3	314	--	314	10.0	330	--	330
19	Arms and ammunition; parts and ac	13.0	17	--	17	13.0	21	--	21
20	Miscellaneous manufactured article	19.5	172	--	172	11.6	178	--	178
21	Works of art, collectors' pieces and	9.7	9	--	9	9.6	9	--	9
Non Agriculture Sector		14.6	6068	83	6158	9.9	6753	42	6800
% Share		--	85.4	92.2	85.5	--	85.1	85.7	85.1
MFN Avg./ Total Tariff Lines		15.9	7108	90	7205	9.7	7933	49	7987

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

3.2.8 India's Usage of Specific Tariffs

Table 22: India's MFN Avg. Tariffs and the Specific Duties

Section	Section Description	2001				2010			
		Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines	Simple MFN Avg. Tariff	Count of Ad Valorem Tariff	Count of Specific Duty Rate	Total Tariff Lines
1	Live animals; animal products	35.9	205		205	30.2	349		349
2	Vegetable products	36.8	286	2	288	35.4	556	2	558
3	Animal or vegetable fats and oils and their preparations	78.6	102		102	17.7	119		119
4	Prepared foodstuffs, beverages, spirits and preparations	47.6	198		198	43.8	423		423
	<i>Agriculture and Allied Sectors</i>	<i>49.7</i>	<i>791</i>	<i>--</i>	<i>793</i>	<i>31.8</i>	<i>1447</i>	<i>--</i>	<i>1449</i>
	<i>% Share</i>	<i>--</i>	<i>15.1</i>	<i>--</i>	<i>14.0</i>	<i>--</i>	<i>13.5</i>	<i>--</i>	<i>12.4</i>
5	Mineral products	20.5	152		152	5.8	313		313
6	Products of the chemical or allied industries	33.4	798		798	8.5	2245		2245
7	Plastics and articles thereof, rubber and articles thereof	34.7	198		198	9.6	585		585
8	Raw hides and skins, leather, furskins and articles thereof	21.9	74		74	7.5	134		134
9	Wood and articles of wood; wood charcoal	28.9	83		83	9.1	197		197
10	Pulp of wood or of other fibrous cellulose	28.6	150		150	9.2	272		272
11	Textiles and textile articles	29.7	574	339	995	9.5	1249	808	2203
12	Footwear, headgear, umbrellas, sun umbrellas	35.0	55		55	10.0	105		105
13	Articles of stone, plaster, cement, asbestos	34.1	155		155	9.3	263		263
14	Natural or cultured pearls, precious or semi-precious stones	35.0	52		52	8.8	88	3	91
15	Base metals and articles of base metal	33.2	575		575	7.0	1263		1263
16	Machinery and mechanical appliances; electrical machinery	23.3	1021		1021	6.9	1714		1714
17	Vehicles, aircraft, vessels and associated equipment	37.4	132		132	20.6	265		265
18	Optical, photographic, cinematographic, cinematograph	25.4	277		277	7.6	353		353
19	Arms and ammunition; parts and accessories	35.0	17		17	10.0	20		20
20	Miscellaneous manufactured articles	33.3	132		132	10.0	215		215
21	Works of art, collectors' pieces and antiques	30.0	7		7	10.0	17		17
	<i>Non Agriculture Sector</i>	<i>30.5</i>	<i>4452</i>	<i>339</i>	<i>4873</i>	<i>9.4</i>	<i>9298</i>	<i>811</i>	<i>10255</i>
	<i>% Share</i>	<i>--</i>	<i>84.9</i>	<i>99.4</i>	<i>86.0</i>	<i>--</i>	<i>86.5</i>	<i>99.8</i>	<i>87.6</i>
	MFN Avg./ Total Tariff Lines	31.7	5243	341	5666	12.1	10745	813	11704

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

Looking at the case of eight developing countries patterns on the usage of AVEs, clearly reveals the extent of fault line in negotiation process in goods market access in general and agriculture in particular. The eight developing countries can be categorised into three groups: 1) those who do not use specific duty; therefore, these countries can be seen to have simple average MFN Applied rates which were truly representative to reality; 2) those with mild usages in agricultural sector and 3) those with low usage in agricultural and allied sector but highly concentrated use in non agricultural sector. The last category, contains two of the Asian giants like China and India; with both countries accounting for above 90 percent shares to the total specific duties. However, in the first category there are two countries of South American (Brazil and Argentina) and one Asian country (Singapore). In the very mild user are countries like South Korea and Mexico.

So clearly in the case of tariffs the simple ad-valorem averages in not truly representative of the actual market access scenario in the agricultural and allied sectors for the developed countries; it hides more than it reveals in the case nearly all the countries analysed in this

paper. While, in case of developing countries the tariff simplification will not make much of difference as the simple ad valorem tariffs in agricultural and allied sectors are fairly representative. It will be only be a problem in the case of non agriculture market access (NAMA), here the two countries (China and India) would have to reduce specific duties through the process of Ad Valorem Equivalents (AVEs), see Table 23.

Table 23: Summary Table of the Usage of Specific Duty in Agriculture and Allied Sectors – 2010/2011

Section	Section Description	2010/2011						
		Brazil	India	China	S. Korea	Singapore	Mexico	Argentina
1	Live animals; animal products	--		7	4		7	--
2	Vegetable products	--	2	--	43		9	--
3	Animal or vegetable fats and oils	--		--	1			--
4	Prepared foodstuffs, beverages, s	--		--	3	6	46	--
<i>Agriculture and Allied Sectors</i>		--	--	7	51	6	62	--
<i>% Share</i>		--	--	14.3	58.6	100.0	77.5	--
5	Mineral products	--		--				--
6	Products of the chemical or allied	--		37	30		14	--
7	Plastics and articles thereof, rubb	--		--			1	--
8	Raw hides and skins, leather, furs	--		--			1	--
9	Wood and articles of wood; wood	--		--				--
10	Pulp of wood or of other fibrous c	--		--			2	--
11	Textiles and textile articles	--	808	--	5			--
12	Footwear, headgear, umbrellas, s	--		--				--
13	Articles of stone, plaster, cement,	--		--				--
14	Natural or cultured pearls, precio	--	3	--				--
15	Base metals and articles of base m	--		--				--
16	Machinery and mechanical applia	--		5	1			--
17	Vehicles, aircraft, vessels and assc	--		--				--
18	Optical, photographic, cinematogr	--		--				--
19	Arms and ammunition; parts and	--		--				--
20	Miscellaneous manufactured artic	--		--				--
21	Works of art, collectors' pieces an	--		--				--
<i>Non Agriculture Sector</i>		--	811	42	36	0	18	--
<i>% Share</i>		--	99.8	85.7	41.4	0.0	22.5	--
Total Specific Tariff Lines		--	813	49	87	6	80	--

Source: Author's calculations based on Tariff Analysis Online (TAO), IDB data extracted on 12-12-2012.

In the Doha round, what is important is that the trends based on the NAV usage of the selected 15 (developed and developing) countries in the agricultural and allied sectors clearly indicates that usages are skewed in favour of the developed countries.

4. Market Access and Non Tariff Measures (SPS and TBT measures)

The Agreement on Agriculture (AoA) was formalised with the signing of the WTO Agreement in 1995, it was considered important to govern agriculture-specific standards and regulations. The Agreement on Sanitary and Phytosanitary measures thus came into existence, setting out the basic rules for food safety, and animal and plant health standards.

The need for these standard/regulations arose primarily from the tariff reduction commitments under the WTO Agreement.¹⁹ Therefore, these regulations ensured food safety and other objectives that largely originated from domestic production processes and technological capabilities related to agricultural products in different countries as well as their local health requirements. Hence, they were fundamentally discriminatory and led to disguised protection of the domestic agricultural sector in particular countries.

The SPS Agreement allows countries to set their own standards. It also mandates that these regulations must be based on science and should be applied only to the extent necessary to protect human, animal or plant life, or health. Further, these standards or regulations should not arbitrarily or unjustifiably discriminate between countries where identical or similar conditions prevail, thus stressing the need for the application of the MFN principle. In order to achieve this objective, the SPS Agreement encourages Members to use international standards, guidelines and recommendations where they exist. Members may adopt SPS measures that result in higher levels of health protection, or introduce measures related to health concerns for which international standards do not exist, provided that a thorough and scientific risk assessment validates the claim for a regulation. Since the use of these measures may have a negative impact on market access, the WTO makes it mandatory for all Members to notify such SPS regulations/standards to the WTO Secretariat, which are passed onto WTO Members for transparency purposes.²⁰

The SPS Agreement also established a Committee on Sanitary and Phytosanitary Measures to provide a forum for consultations about food safety or animal and plant health measures that affect trade, and to ensure the implementation of the SPS Agreement. The committee normally meets three times per year and issues regular guidelines that address consistency in the decisions dealing with safety and health risks, and which are designed to aid governments in avoiding arbitrary or unjustifiable decisions.

While the agreement was meant to harmonise Member countries' NTMs related to agricultural products, the use of international standards, guidelines and recommendations

¹⁹ The Agreement bound developed and developing countries equally into many disciplines on tariff and quotas.

²⁰ This is in accordance with the transparency clause of Annex B of the SPS Agreement and Article 21 of the TBT Agreement of WTO.

is not legally binding. Hence, any WTO Member can maintain higher standards based on appropriate assessment of risks as long as the approach is consistent and there is scientific justification. That is, the agreement still allows Member countries to use different standards and different methods of inspecting products. However, these exceptions in the application of SPS and Technical Barriers to Trade (TBT) measures have led to some imbalance in the process of WTO negotiations as a whole.

In this context, the Centre for WTO Studies (CWS) has collated and created databases on WTO-compatible, non-tariff measures such as SPS and TBT that are being implemented by countries, based on Members' submissions to the WTO Secretariat as mandated under the SPS and TBT Agreements. Approximately 18,273 (under TBT) and 13,762 (under SPS) measures were notified to the WTO from January 1995 to September 2012. In terms of product coverage, while the TBT notifications relate to approximately 95,955 products at the HS four-digit level, the SPS notifications are applicable to more than 1,14,072 products. The average product coverage of a single NTM notification (SPS and TBT) is approximately eight products (HS 4 digit level). However, this paper presents the findings of an analysis based on the CWS database²¹ of SPS measures notified by WTO Members from 1995 to 2010.

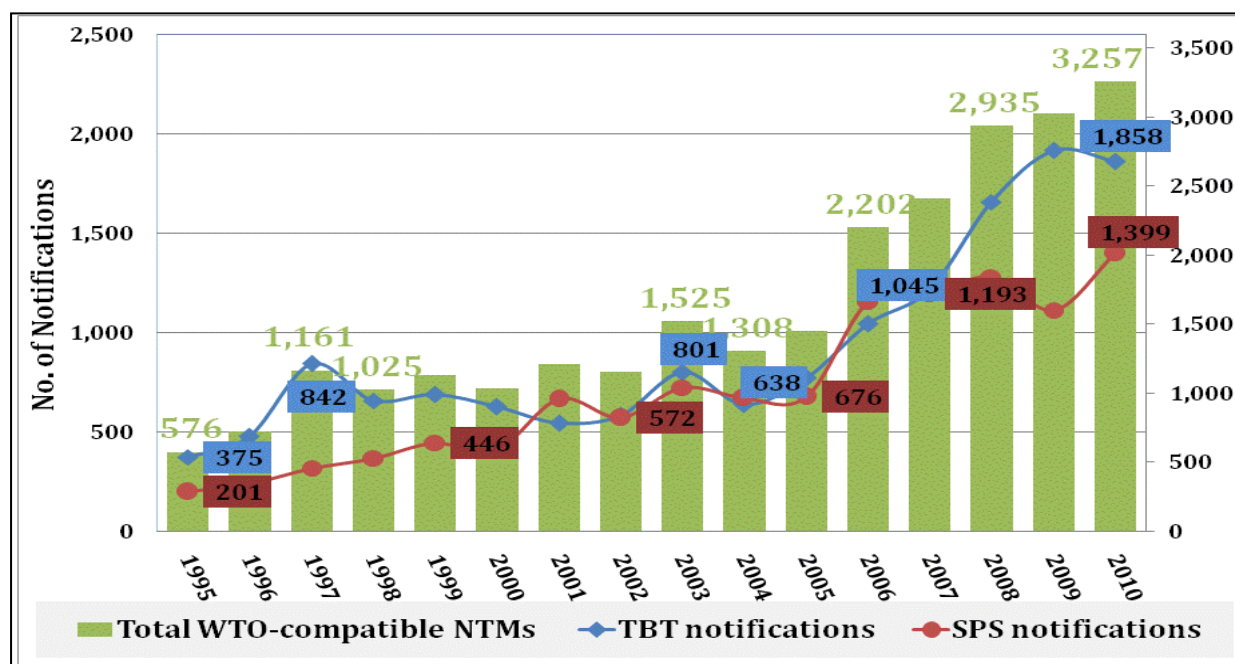
It presents the global scenario regarding the use of SPS measures as well as the Indian scenario. It also briefly discusses the use of SPS measures in the context of the proliferation of FTAs and related problems..

4.1. An analysis of NTM standards (SPS and TBT) since 1995

The number of non-tariff measures (SPS and TBT Standards) increased from a meager 576 notifications in 1995 to 1,305 notifications in 2004, and subsequently doubled to 3,257 notifications by 2010 (Figure 1).

²¹ Visit the CWS web link at <http://wtocentre.iift.ac.in/>. Individual links for the database on SPS are available at <http://cc.iift.ac.in/sps/index.asp> and for TBTs at <http://cc.iift.ac.in/tbt/index.asp>.

Figure 1. Non-tariff measures: Notifications to the WTO



Source: Centre for WTO Studies online database.

Therefore, NTM notifications have seen an upward trend since 1995, contrary to the trend of falling average tariffs of WTO Members. Total WTO-compatible NTMs have increased at a rate of nearly 11 per cent per year (see table: Exponential growth rates in NTMs).

Table 24: Exponential growth rates in NTMs

NTMs	Pre-Doha Round	Post-Doha Round	Exp. growth, 1995-2010
TBT notifications	4.6	21.6	9.2
SPS notifications	16.7	12.5	13.2
Yearly NTMs	9.4	17.4	10.7
Cumulative NTMs	37.8	16.1	23.8

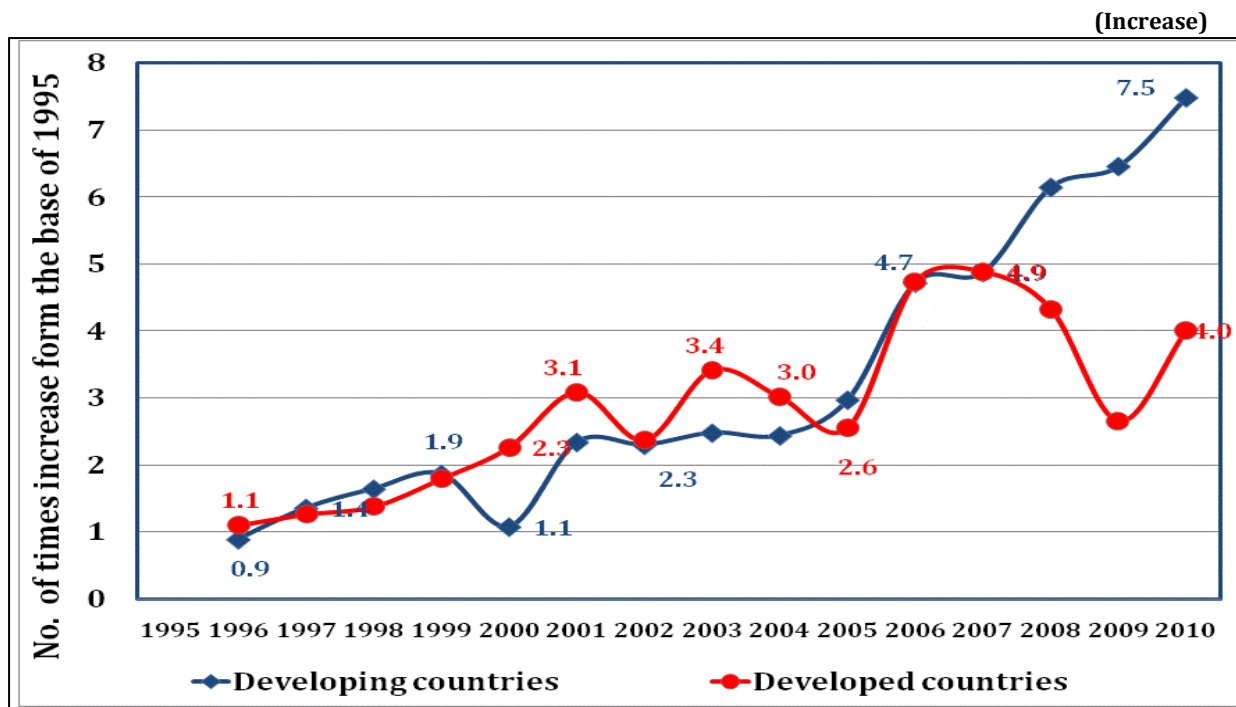
Source: Based on the CWS online database.

This study primarily focuses on SPS standards and their impact on agricultural trade. The role of SPS standards is emphasized since they recorded a higher growth rate of 13 per cent per year compared with 9 per cent per year in case of TBT standards.

The increasing trend in the use of SPS-related standards can be divided into two phases: (a) the pre-Doha Round (1995-2004); and (b) the post-Doha Round (2005-2010). While the total notifications of developed and developing countries showed an increase of 3.5 times

(over and above the 1995 notifications) in the first phase, it increased by 5.9 times (over and above the 2004 notifications) during the second phase.

Figure 2: Increase in SPS notifications in 2010 compared with 1995 notifications



Source: Centre for WTO Studies online database on SPS notifications.

This clearly suggests a surge in notifications in the second phase after the deadline for the Doha Round was not met in December 2004. There are probably two reasons behind this. First, more and more countries have resorted to protectionism using the SPS measures, as the Doha Round-mandated goals of “market access” (tariff and non-tariff measures) have been turning into an unattainable task. Second, growing regionalism with the surge in preferential trade agreements (PTAs)²² around the world during this period was another reason for the increase in protectionism expressed in the form of rising SPS standards. Both reasons reflect the weakness of the multilateral system in one way or the other.

By tracing the SPS measures from January 1995 to December 2010, the present paper presents the empirical evidence on the use of non-tariff measures. This analysis also

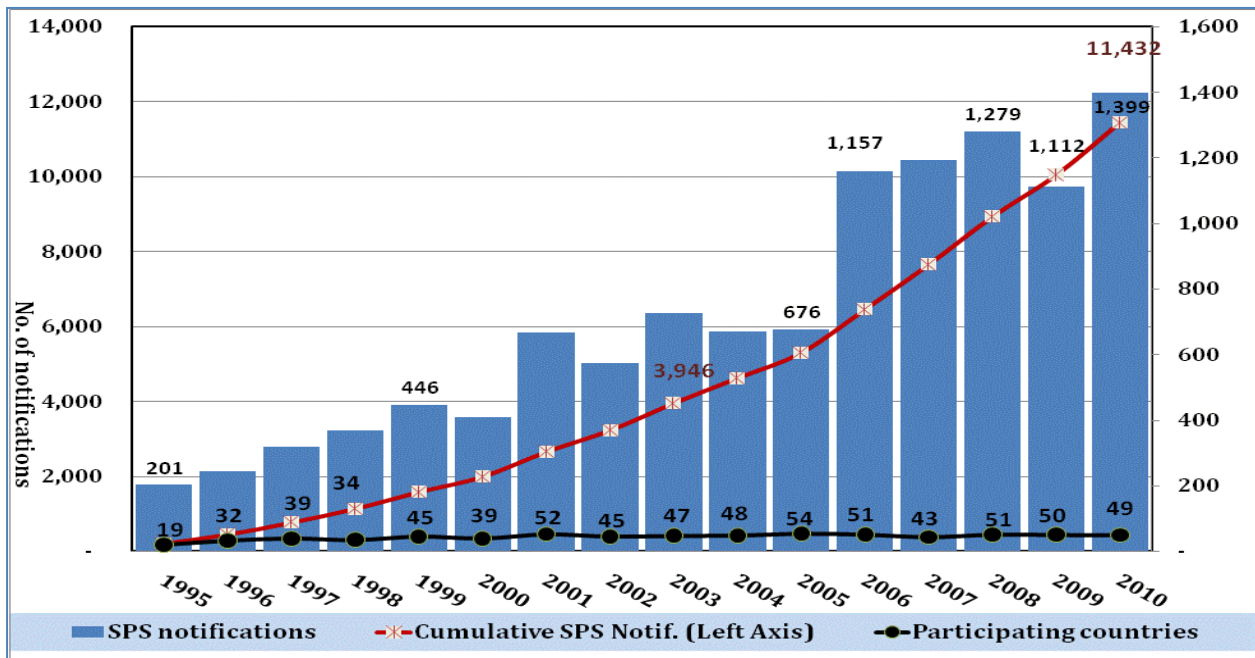
²² During 1995 to 2011 the number of new Free Trade Agreements (FTAs), Economic Integration Agreements (EIAs) and Custom Unions (CU) were close to 179. Most of these were signed with the primary goal of reducing tariffs, with only a few having mutual recognition agreements (MRAs). Of these 179 agreements, only 11 addressed issues related to services, investment and TRIPS etc., thus allowing limited scope for MRAs. This assessment is based on the WTO database of RTAs.

provides interesting feedback on the changing global dynamics as a result of the WTO tariff reduction negotiations, since there are only a few trade policy instruments available for use with the tariff defense being lowered.

As seen in Figure 3, a total of 102 WTO Members used the process of SPS notifications from 1995 to 2010. By 2009, the number of notifications had increased by seven times compared with the 1995 level. However, not all countries actively participated in making submissions in each year. When compared with the WTO's total membership in 1995 (123), only 15.4 per cent participated in the notifications of SPS measures.

However, there has been a clear rise in the participation rate in recent years.²³ The second highest participation rate was observed in 2010 (32 per cent) during the global recession period, once again suggesting increased usage of such measures as strategic trade policy tools in order to protect the domestic market. This clearly points towards the increasing imposition of WTO-compatible standards or NTBs such as SPS and TBT measures.

Figure 3. SPS measures, 1995 to 2010



Source: Centre for WTO Studies online database on SPS notifications.

Although there were only 201 notifications by 19 Members in 1995, this figure increased significantly to 1,279 notifications by 51 Members in 2008. Although the highest

²³ Total membership of WTO is currently 153 countries.

participation rate was recorded in 2005 when 54 countries took part in notifications, the single-year number of notifications was the highest in 2008. In 2009, the cumulative total of SPS notifications crossed the benchmark of 10,000.²⁴ Up until July 2010, participating countries had lodged 10,897 notifications.²⁵

4.2. SPS measures: Trends in developed and developing countries

In terms of country status, in 1995 developed WTO Members made 79 of the SPS notifications, while developing WTO Members made 122 notifications. By 2000, this trend had reversed, with developing WTO Member countries showing a decrease in notifications. In 2001, notifications by developing Member countries started to increase again, and continued to rise until 2005, together with those by developed Member countries. One significant reason for this increase in developing country participation in this phase was notifications by China following its accession to the WTO.

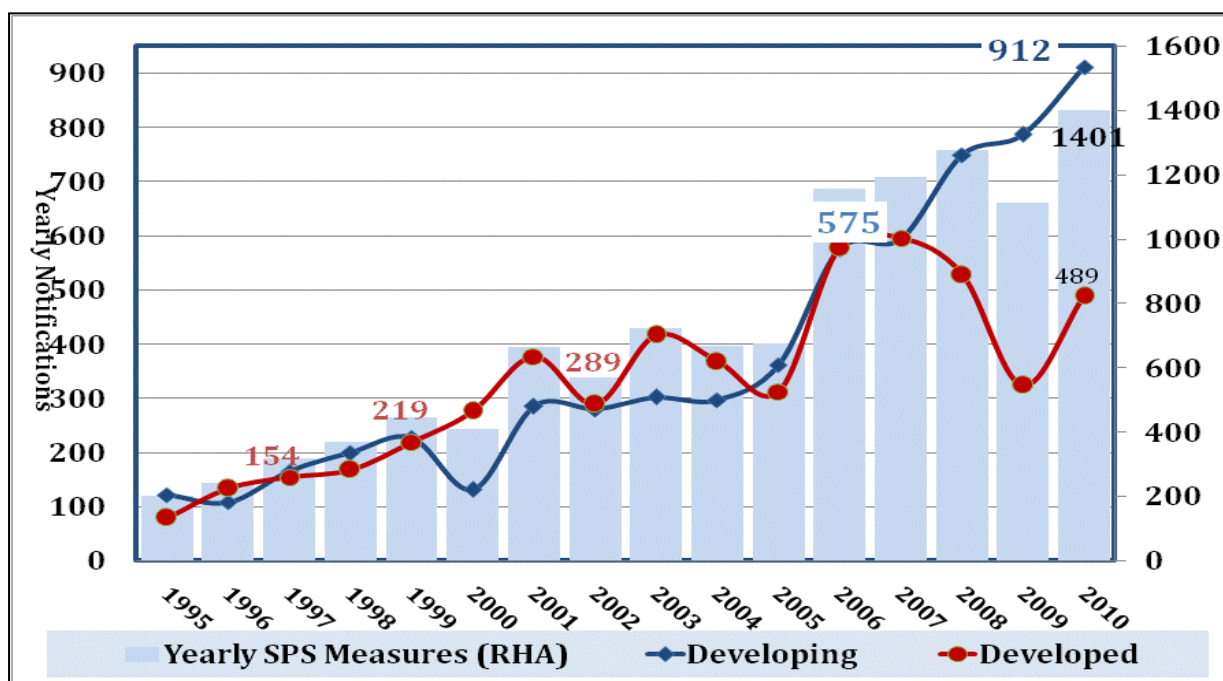
In 2006, there was a sudden increase in the notifications by both developed and developing WTO Members, which led to near-doubling of the annual notifications. This again was a clear reflection of the increased tendency to use SPS measures as a strategic trade policy tool with the collapse of the Doha Round. In 2008, the notifications by developed Member countries started decreasing, while those made by developing Members increased. In later years, both developed and developing Member country notifications started decreasing, but there was a bigger drop in developed Member country notifications. Thus, the rising trend during 2006-2009 was dominated by developing countries.

It became clear that with the lack of progress in Doha Round negotiations, developing countries had lost faith in developed countries' ability to keep their promise to lower agricultural tariffs/subsidies, which would have given them any meaningful access in those markets. Thus, developing countries began resorting to the increased use of SPS measures, as they wanted to defend their domestic markets against further import penetration.

²⁴ The NTM notifications are added up on a yearly basis until they are cancelled or withdrawn. But in the case of a drop in tariffs, the impact is immediate and it gets reflected in lower national average tariffs.

²⁵ Observer countries were also part of this notification exercise for SPS measures, including countries such as Azerbaijan (two notifications in 2009) and Belarus (three notifications in 2002).

Figure 4. SPS notifications: Developed vs. developing countries



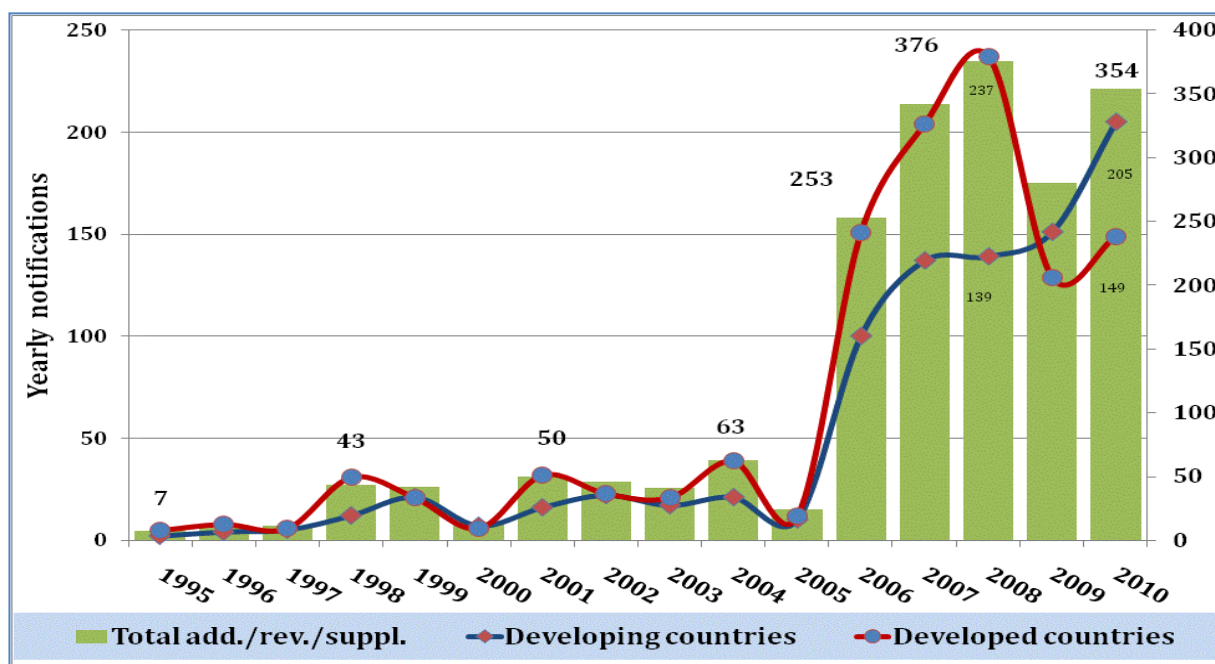
Source: Centre for WTO Studies online database on SPS notifications.

Of a cumulative total of 11,434 notifications up until December 2010, developed Member countries had made 5,308 notifications, constituting 47 per cent of the total SPS notifications, while developing Member countries had made 6,096 notifications, constituting 53 per cent of the total SPS notifications.²⁶

Nearly 16 per cent of the total notifications comprised additions, revisions and corrigenda. In fact, the rise in total notifications observed in 2006 was also partly related to the sudden rise in the notifications pertaining to additions and revisions, both by developed and by developing Member countries. Developed Member countries made 141 add./rev./corr. notifications, while developing Member countries made 99 similar notifications in that year. Overall, developed Member countries (1,074) carried out more of these notifications than did developing Member countries (869). An analysis of these sets of notifications clearly showed that developed countries had begun putting more stringent measures in place through the corrections and revisions to the original notifications.

²⁶ Of the total SPS notifications, 30 notifications (0.28 per cent) were by the WTO Secretariat, which contained details about the nodal agencies and addresses in the Member countries.

Figure 5. Additions and revisions of SPS measures



Source: Centre for WTO Studies online database on SPS notifications.

Of the total SPS notifications, about 12 per cent were emergency measures.²⁷ Developing countries' share of total emergency notifications (16 per cent) was much higher than the share of developed countries (6 per cent). The reasons for this are obvious – first, these are temporary in nature and can be immediately put in place from the date of notification or even before; second, these notifications do not require any scientific justification or criterion in the strictest terms and, above all, developing Member countries are desperate to protect their domestic markets.

However, it was found that while the majority of emergency measures (close to 73 per cent) imposed by developing Member countries was in the category of international standards, developed Member countries made relatively higher use of national and regional standards (60 per cent).

Of the 20 Members among the developed category, the largest notifiers of SPS measures were: United States (2,560); Canada (629); the European Union (536); New Zealand (523);

²⁷ Both developed and developing Member countries have withdrawn only 0.1 per cent of their notifications from the WTO.

Australia (285); and Japan²⁸ (262). Notifications by developed countries were in the 50 to 100 range. With regard to SPS measures, some of the developing Members with significantly high notifications were: Brazil (851); Republic of Korea (412); China (364); Peru (358); Chile (351); Colombia (289); the Philippines (286); Taiwan Province of China (271); Mexico (245); and Thailand (225). That is, the highest presence of standards was among the Asian and Latin American countries.

It is significant that China, which had acceded to the WTO only in December 2001, is ranked third among developing Member countries in terms of the number of notifications. This clearly highlights the strategic use of standards by China as an instrument of trade policy as it has opened up rapidly to global trade.

Only two studies have directly addressed the impact on trade and related issues in the context of WTO-notified SPS and TBT standards. These studies concluded that these SPS and TBT standards have, on the whole, had a negative impact on trade. What is interesting is the fact that the measures do not deter exports/imports between the Organisation for Economic Co-operation and Development (OECD) members.²⁹ However, they do constrain exports from developing and least-developed countries. Therefore, it is evident that these standards do have an impact on the overall market access scenario in the developed countries.³⁰

The increasing use of SPS measures around the world is making market access even more challenging, as these measures are opaque and mostly applied without any guidelines with regard to HS nomenclature. While tariff reduction can be traced in terms of HS nomenclature, the main lacuna in “standard” is that no association exists with the HS nomenclature; approximately 90 per cent of the SPS notifications submitted to the WTO Secretariat (1995 onwards) do not contain HS code details. Therefore, the interpretation is left to the discretionary powers vested in customs authority at the border of the importing country.

²⁸ A study of the cut flower market in Japan suggested a significant impact on Japanese imports of cut flowers if the SPS measures did not exist at the border. See Liu Lan and Yue Chengyan, 2009.

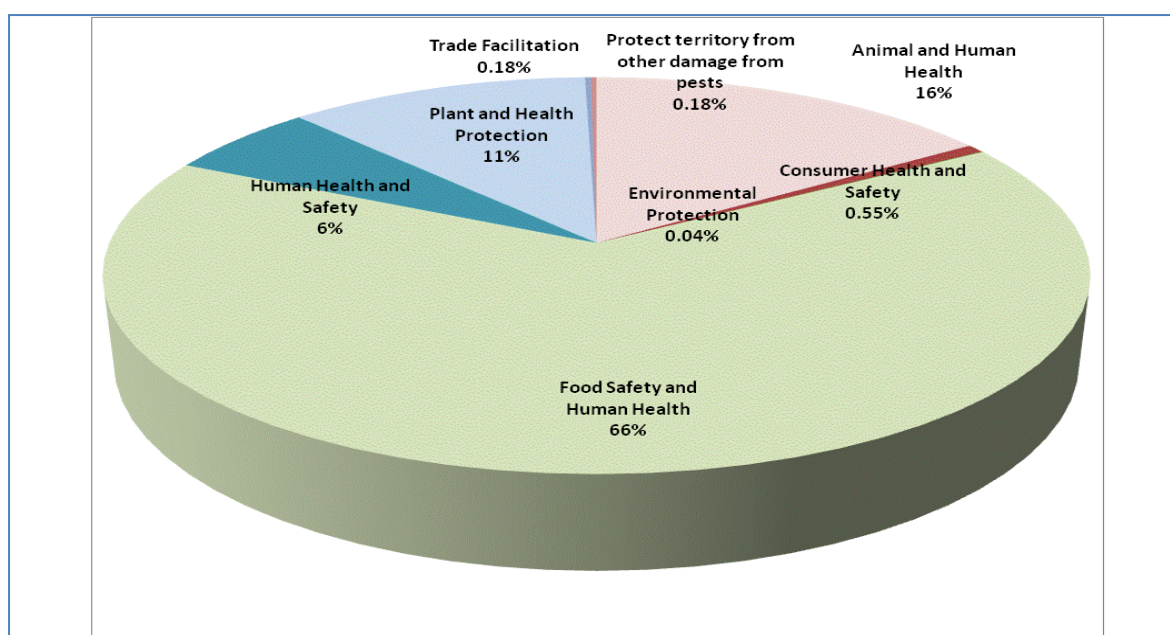
²⁹ One fundamental reason for this is that the OECD countries are operating on similar technological production structures or production processes.

³⁰ For a detailed analysis of the impacts of standards on trade, see Disdier, Fontagne and Mimouni, 2007; and Fontagne, Mimouni and Pasteels, 2005.

4.3. Trends in the use of SPS objectives

In terms of objective, the largest number of notifications by developed Members were on food safety and human health³¹ (66 per cent), followed by: animal health (15 per cent); plant protection (12 per cent); human health (5 per cent); and consumer protection and animal and human health (1 per cent each). Very few notifications were made in the categories of harmonization and trade facilitation (0.18 per cent),³² protect territory from pests (0.16 per cent), and human and plant health (0.10 per cent). The lowest number of notifications was related to human, plant and animal health (0.02 per cent).

Figure 6. Developed Members' application of objectives



Source: Centre for WTO Studies online database on SPS notifications.

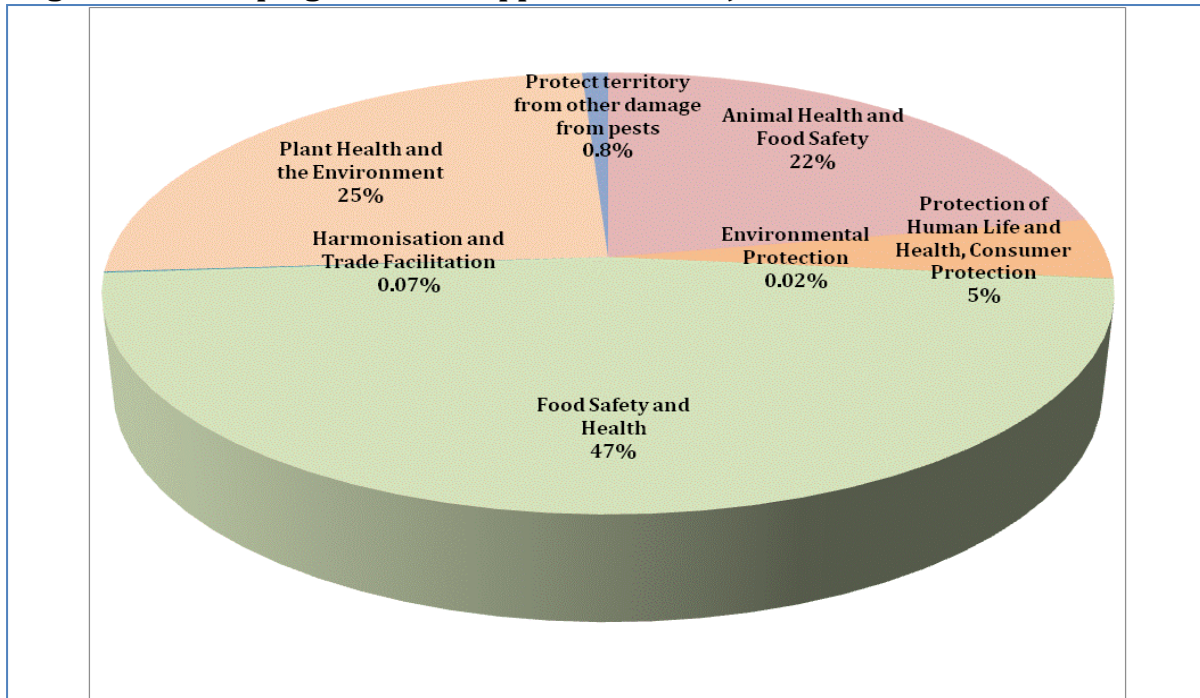
Thus, developed countries did give paramount importance to food safety and human health issues. Such notifications were largely related to maximum residue limits (MRLs) and particles per million (PPM) with regard to residuals of chemicals and pesticides. They also regulated the use of food additives. MRLs are often set at levels higher than the internationally accepted standards. On the other hand, developed countries addressed

³¹ Changing socio-economic situations such as single households, single parents, working women and the availability of multi-optional consumers have often been used as justification for the use of these measures in developed countries (Lehmann and Karrer, 2004).

³² Trade facilitation and infrastructure are often taken up in the general sense at the policy level, and only partly address the specific issues related to the reduction of risks and transaction costs in the context of agricultural trade – i.e., the invisible infrastructure such as easy documentation, customs procedures, regulatory regimes and mutual recognition.

concerns on animal health, often with reference to “good agricultural practices”.³³ Being “consumer-centric”, these practices are often biased in favour of the “big” (organized sector) animal farms. However, animal husbandry activities are often subsidiary activities in developing countries supporting the primary income source; so adhering to “good agricultural practices” would mean higher expenditures. This would take away their advantage in terms of cost competitiveness.

Figure 7. Developing Members’ application of objectives



Source: Centre for WTO Studies online database on SPS notifications.

Close to 47 per cent of the notifications made by developing countries also fell under the categories of “food safety and human health”. Measures with regard to “plant protection” were given second preference with a 25 per cent share of the total notifications by developing countries, followed by “animal health” with a 21 per cent share. These three measures together accounted for 93 per cent of the total SPS notifications by developing countries.

³³ “Good agricultural practice” is a concept evolved by the United Nations Food and Agriculture Organization (FAO). It involves the production of animal and animal products with the following goals: (a) the production of safe, healthy, high-quality food for consumers; (b) the provision of jobs with fair incomes for rural communities; (c) socially and environmentally sustainable production; and (d) the implementation of high standards of animal welfare.

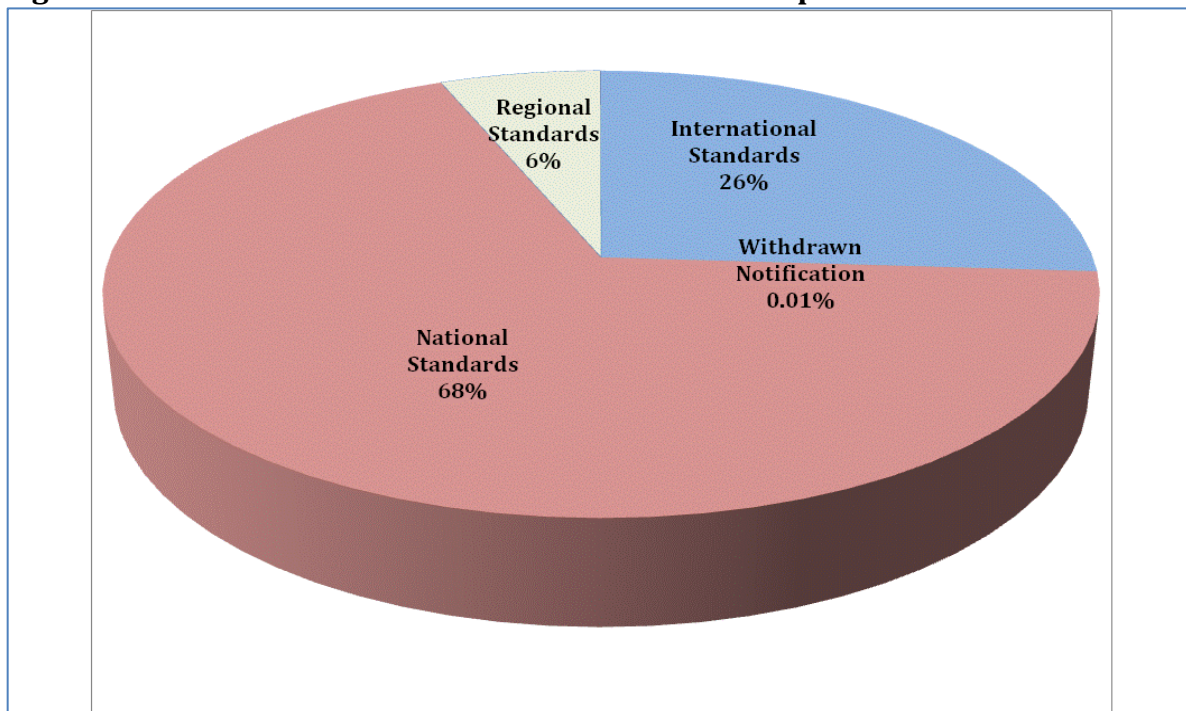
This concentration was followed by smaller proportions of notifications in other categories: (a) “human health”, 4 per cent; “animal and human health”, 2 per cent; and “protect territory from pests”, 1 per cent. Further highly insignificant percentages of SPS notifications were notified by these countries under: “human and plant health” (0.35 per cent); “consumer protection” (0.28 per cent); “harmonization and trade facilitation” (0.12 per cent); and “plant and animal health” (0.02 per cent).

Clearly, SPS notifications by developing countries have been relatively less skewed to “food safety and human health” when compared to developed countries.

4.4. Trends in the use of international standards

Some studies did find that the effect of national standards on trade exceeded the effects of international standards. Some specific studies on agricultural products found that higher standards in a country can constrain imports into that country, thereby denying market access for third countries (Swann, 2010).

Figure 8. National vs. international standards – developed Members



Source: Centre for WTO Studies online database on SPS notifications.

Among the various SPS measures prevalent among developed and developing countries, there are also differences in terms of the usage of national, international and regional

standards.³⁴ This suggests that the use of these measures is not actually as visualized under the SPS Agreement.

For developed countries, the SPS Agreement provided leeway in the application of national standards even if they were not found to be scientifically consistent. This is because there are provisions in the SPS Agreement for the application of a “risk-based approach” in the use of new measures.³⁵ In terms of scale on rigidity, the risk assessment criterion is considered to be on a lower level and therefore less stringent than the scientific justification.

Developed countries have greater technological capabilities in terms of production processes; in addition, a gradual shifting of the production activities of the so-called “dirty industries”³⁶ to developing countries has been seen since the 1980s (Grossman and Krueger, 1995). Even the international standards by the Food and Agricultural Organization (FAO), an international standard-setting body, appear to be biased in favour of developed countries.³⁷ As a result, the implementation of the SPS Agreement has been weakened, thus favouring developed countries and having a negative impact on the exporting interests of developing countries.

Developed Members have applied their own national standards in 68 per cent of their total notifications. International standards (26 per cent) have only been given second preference. Regional standards have been applied in 6 per cent of the notifications by these Members. Thus, a prevalence of “national standards” was found to be correct in the case of

³⁴ The three international standard setting organizations are OIE, IPPC, and CODEX Alimentarius (FAO/WHO joint committee). For details, see Annex A(2) of the Agreement on Sanitary and Phytosanitary Measures, “The legal text: The results of Uruguay Round of multilateral trade negotiations”, p.67.

³⁵ As clearly stated under Article II as part of the “Basic Rights and Obligations”, and “Assessment of Risk and Determination of the Appropriate Level of Sanitary or Phytosanitary Protection Criterion”, the risk-based approach is mentioned as an additional effort only for emergency situations under the SPS Agreement (Article 5.7). The risk-based approach can only be used provisionally to address the SPS concern of a Member.

³⁶ The conventional approach in the literature has been to identify “dirty industries” as those that incur high levels of abatement expenditure per unit of output (Robinson, 1988; Tobey, 1990; and Mani, 1996). Accordingly, five sectors are classified as “dirty industries” – iron and steel, non-ferrous metals, industrial chemical and chemical products, pulp and paper, and non-metallic minerals.

³⁷ This is particularly true in developing countries where even pesticide-related health studies are few in number (Ante and Pingali, 1992; Crissman and others, 1994; Dung and Dung, 2003; and Pingali and others, 1994). An FAO analysis of pesticide composition revealed high shares of toxic chemicals that are known to cause cancer, genetic damage, foetal damage, and severe allergic responses in exposed populations (e.g., carbamates and organophosphates in insecticides, and dithiocarbamates and inorganics in fungicides). As cited by Dasgupta, Meisner and Mamingi, 2005.

developed countries. This could be detrimental to developing countries' market access prospects in the case of raw agricultural and processed food products. For example, a study by CWS in 2010 suggested the prevalence of national standards across the QUAD countries.

In Canada, for example, the cyromazine MRL permissible in potato and potato products, and trimethylsulfonium salt MRL in lentil were both found to be more stringent. In the European Union members, it was glyphosate MRLs in eggs and egg products, and milk and milk products. Another case was MRLs for pesticides in cereals, fruit and vegetables, and products of animal origin. The United States' case was similar with phorate MRLs in beets, garden, tops; beets, garden, roots; and in spinach, corn, beans, sugar cane, soybeans, sorghum, potatoes, hops, wheat and coffee.

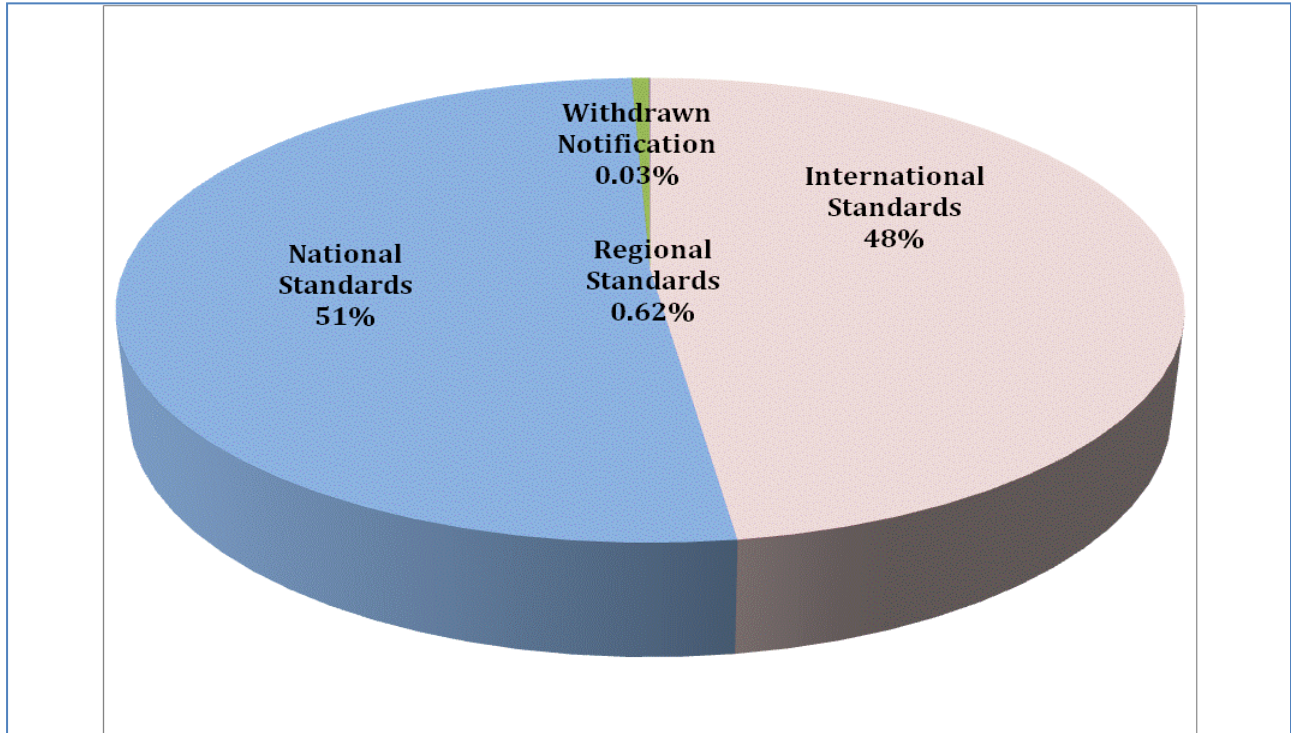
In the case of Japan, it was the cadmium presence in brown rice and polished rice as well as the cyazofamid MRL for various agricultural products that were found to be more stringent than international standards. These are just some of the more conspicuous examples of the violation of the "spirit" of the SPS Agreement, i.e., not to cause unfair obstacles to trade. Overall, the study (CWS, 2010) reached the following conclusions:

- (a) There was a movement towards higher thresholds that were more stringent than internationally accepted norms.
- (b) There was an increase in the product coverage.
- (c) There was a change in objectives, with movement from general to specific objectives.³⁸
- (d) The language of national notifications was a barrier (only in the case of Japan).

It should also be noted that the prevalence of national standards based on risk assessments point and an increased use of provisional maximum residue limits (P-MRLs)- in combinations these are can be trade distorting and against the very principle of free market. Higher P-MRLs are proposed when residue trials and toxicological data show an unacceptable risk to consumers.

³⁸ Although Canada's second case on lentil products can be seen as a relaxation of the measure in terms of MRLs, the nature has changed from protecting its territory from other damage by pests (general) to food safety (specific). A further analysis is required to understand what is the linkage between the changes observed in the movement of objective/nature and subsequent movement in the MRL (measured in the form of particles per million).

Figure 9. National vs. international standards – developing Members



Source: Centre for WTO Studies online database on SPS notifications.

However, any additional residue and toxicology data from WTO Members concerning MRLs to be changed will be judged by local experts of the importing country. This is a lengthy and time-consuming process and can possibly destroy the related production capacities in developing countries. This will also give developed countries additional flexibility to use their discretion. All these effectively block market access by developing countries' agricultural exports (Swann, 2010; Disdier, Fontagne and Mimouni, 2007; and Fontagne, Mimouni and Pasteels, 2005). Developing Members have also applied their national standards to 51 per cent of their notifications. However, the share of notifications following international standards (48 per cent) was not significantly lower. Only 1 per cent of these Members' notifications applied regional standards. It was found that even in the case of emergency measures, while the majority of such measures (73 per cent) imposed by developing countries were international standards, developed countries made relatively higher use of national and regional standards (60 per cent).

5. Conclusions

The overall imbalances in both tariff and non tariff measures (SPS and TBT) have thereby constrained the market access for developing countries exports of agricultural and allied sectors. As the Doha negotiations have progressed, tariff simplification of compound tariffs and mixed tariffs appears to have receded into the background. In the December 2008 text there is no specific requirement to convert these tariff lines into more simple form. Which might be the reason for having the very usage of NAVs tariff in nearly all the developed countries even in 2011- specifically in the case of agricultural and allied sector.

As simple ad valorem tariff barriers are being increasingly reduced under successive rounds of international trade negotiations, concerns have been expressed that these are increasingly being replaced with NAV tariff protection and tighter regulation of agriculture and food imports through WTO-compatible measures. This paper has established that both NAVs and standards have indeed become increasingly important as trade policy instruments in the developed world for protection or regulatory purposes- in agricultural and allied sectors. Further, the evidence based on the manner of usage of NTMs Vs NAVs suggests that if the European Union were to bring down the intensity of NAV incidence in the agricultural and allied sectors; it then may be replaced with the SPS measures as their seems to be high correlation between the two. The developed countries seem to be using these two main channels in order to protect their domestic sector (the agriculture and allied sector) which happen to be the lowest contributor of their GDP.

There is sufficient evidence that the SPS measures are increasingly becoming barriers to international trade flows; which have been characteristics of domestic regulation. It was found that even though 53 per cent of total SPS notifications from 1995 to July 2010 were made by developing countries, flexibilities built into the Agreement for basing standards on scientific evidence has made the SPS Agreement biased against developing country exporters' interests. The SPS Agreement considers developed and developing Members to be on a similar platform in terms of technologies and domestic needs, while the reality is completely different. It was also found that developed countries were using national standards to a more significant degree than developing countries. However, differences in national standards create barriers to trade, with developed country standards being higher

in many cases and often much higher than developing countries' technological capabilities. Thus, the discretion provided in the Agreement for basing standards on scientific evidence and the use of local health requirements have led to disguised protection of domestic agricultural sectors, especially among developed countries. Developing country exporters are unable to realize their market access potential in the QUAD plus countries because of these trade-restrictive measures. Exports of food products from developing countries are up against a formidable hurdle in the form of SPS measures imposed for health and safety reasons in developed countries. The cost of complying with these are often stringent as the SPS standards are highly burdensome (for example sub-atomic standards or commonly know as nano standards³⁹), particularly for low-income countries and non-compliance would entail a damaging loss of export earnings.

It is clear that for those small and medium-sized countries in which a significant proportion of their population depends on agricultural and processed food exports, an increase in market access is crucial in the short term. The primary concern of market access will not be addressed in its true sense for the majority of such WTO Members, unless NAV and NTMs are simultaneously addressed in the Doha Round together. While there have been some negotiations within the WTO committees, there has been little progress in addressing these true concerns.

In summary, developing countries' agricultural sector has, in general, come under even greater stress because of the technological divide between developed and developing countries. The distortion effects of NAVs and NTMs has exceeded the impact generated by an equivalent measure of Ad valorem tariff imposed by importing countries and thus has a prolonged effect on the various segments of production and marketing value chains because of the uncertainty generated around the rules of trade. This may have significant implications for the allocation of production, consumption and trading activities across developing countries.

Furthermore, there are some systemic issues in the SPS Agreement and its implementation that bias its outcome against developing and least developed countries. Thus there is an

³⁹ It is EU (No 1935/2004) and USA which has these standards in processed food products.

urgent need for more discipline in the usage of SPS measures as a tool for “disguised” protectionism. This can be best achieved by harmonizing the standards across WTO Members under the three intra-governmental bodies already identified by the SPS Agreement. Given the principle of national treatment, this means that the imperative for developing country governments to support the technological up-gradation of their domestic agricultural sectors has become more urgent than ever before.

As the developing country trade negotiators are grappling with unresolved implementation issues under the Doha Round. It is important for the developing country negotiators to press upon the WTO membership to have specific requirement to convert the Non-Ad-Valorem tariffs into more simplified forms so as to simplification of all non- ad valorem tariff under the agriculture.

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Annex 2: Tariff Levels in European Union for Wine and Spirits Industry (Non-Ad Valorem Tariffs)

(Number of Products)

Tariff levels Ad Valorem & Non ad Valorem	4 Digit for 2003						Total
	2203	2204	2205	2206	2207	2208	
Ad Valorem							
Zero Tariff	3					56	59
32 percentage		1					1
Non Ad Valorem (Specific Duty)							
0.6 EUR/%vol/hl/alcool						5	5
0.6 EUR/%vol/hl/alcool + 3.2 EUR/hl						2	2
0.9 EUR/%vol/hl/alcool			1				1
0.9 EUR/%vol/hl/alcool + 6.4 EUR/hl			1				1
1 EUR/%vol/hl/alcool						2	2
1 EUR/%vol/hl/alcool + 6.4 EUR/hl						2	2
1.3 EUR/%vol/hl/alcool MIN 7.2 EUR/hl				1			1
1.75 EUR/%vol/hl/alcool		6					6
10.2 EUR/hl					2		2
10.9 EUR/hl			1				1
12.1 EUR/hl		10					10
13.1 EUR/hl		58					58
14.2 EUR/hl		1					1
14.8 EUR/hl		4					4
15.4 EUR/hl		20					20
15.8 EUR/hl		3					3
18.6 EUR/hl		5					5
19.2 EUR/hl				2	2		4
20.9 EUR/hl		6					6
22.4% + 0.8 EUR/hl + 20.6 EUR/100 kg/net		1					1
22.4% + 1.7 EUR/hl + 20.6 EUR/100 kg/net		1					1
22.4% + 12.6 EUR/hl + 20.6 EUR/100 kg/net		1					1
22.4% + 131 EUR/hl + 20.6 EUR/100 kg/net		1					1
22.4% + 16.8 EUR/hl + 20.6 EUR/100 kg/net		1					1
22.4% + 2.5 EUR/hl + 20.6 EUR/100 kg/net		1					1
22.4% + 20.6 EUR/100 kg/net		2					2
22.4% + 27 EUR/hl + 20.6 EUR/100 kg/net		1					1
22.4% + 3.4 EUR/hl + 20.6 EUR/100 kg/net		1					1
22.4% + 4.2 EUR/hl + 20.6 EUR/100 kg/net		1					1
22.4% + 8.4 EUR/hl + 20.6 EUR/100 kg/net		1					1
3.84 EUR/hl							0
32 EUR/hl		11					11
4.8 EUR/hl							0
40% + 0.8 EUR/hl + 20.6 EUR/100 kg/net		1					1
40% + 1.7 EUR/hl + 20.6 EUR/100 kg/net		1					1
40% + 12.7 EUR/hl + 20.6 EUR/100 kg/net		1					1
40% + 121 EUR/hl + 20.6 EUR/100 kg/net		1					1
40% + 17.4 EUR/hl + 20.6 EUR/100 kg/net		1					1
40% + 2.5 EUR/hl + 20.6 EUR/100 kg/net		1					1
40% + 20.6 EUR/100 kg/net		2					2
40% + 27 EUR/hl + 20.6 EUR/100 kg/net		1					1
40% + 3.4 EUR/hl + 20.6 EUR/100 kg/net		1					1
40% + 4.2 EUR/hl + 20.6 EUR/100 kg/net		1					1
40% + 8.5 EUR/hl + 20.6 EUR/100 kg/net		1					1
5.12 EUR/hl							0
5.76 EUR/hl				2			2
6.4 EUR/hl							0
7.7 EUR/hl				2			2
9 EUR/hl			1				1
9.9 EUR/hl		32					32
Total Number of National Lines	3	181	4	7	4	67	266

Source: see Kallummali Murali, 2005, "Impact of CAP Payments on Upstream Indian Wine and Spirits Industry: Study of the Common Agricultural Policy of the EU", Annex Table 1, p.35.