

# NAMA Negotiation : Implication on Indian Textile Sector

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## Preface

The Doha development round of negotiations in 2001 added a new dimension to the WTO negotiations on NAMA and agriculture by including the developmental aspects of the developing and Least Developing Countries (LDC). The different ministerial conferences have highlighted the need for deciding the modalities to be acceptable by member countries for undertaking tariff reduction. In the sixth ministerial conference at Hong Kong in December 2005, the Ministers decided to adopt the Swiss formula with coefficients that would reduce or, as appropriate, eliminate tariffs for products of export interest to developing countries and take into account the special needs and interests of developing countries through less than full reciprocity (LTFR) in tariff reduction commitments. The conference declaration also agreed to a non-linear mark up on the 2001 applied rate for unbound tariff rates as the base rate for commencing tariff reductions.

The textiles & clothing sectors play a pivotal role for the economic development of developing countries like India in terms of generating employment; income and accelerating balanced economic growth by reducing poverty. The NAMA negotiations with the member countries can help us to go forward in this direction. The negotiations centre around binding commitments, tariff rationalization in terms of reducing or eliminating high tariffs, tariff peaks and tariff escalation in the industrial sectors. The member countries will determine the modalities of tariff cut with the adoption of Swiss formula with various coefficients. If adopted, these measures will have substantial effects on the economies of developing and emerging nations besides the LDCs.

Since the textiles and clothing sector plays a significant role in these countries, we in this paper have attempted to analyse the effect of these measures to the Indian textiles and clothing sector. A simulation model has been developed by taking possible coefficients and have tried to assess the implications to the sector by application of these coefficients to the Swiss formula which has since been adopted. Besides, tariff reductions, non-tariff implications for the sector have also been discussed in the paper.

Though the paper is one of the maiden attempts in this area, we feel it will provide an interesting reading to the researcher and policymakers.

(Dr Rajiv Aggarwal)

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## **NAMA Negotiation: Implication on Indian Textiles Sector**

### **1. Introduction**

One of the main agenda of the Doha Round of trade negotiations is liberalisation of trade in industrial products or, in the terminology of the WTO - Non-Agricultural Market Access (NAMA). With Doha round being agreed upon as a development round, NAMA is no doubt important for the developing countries as it is likely to provide greater access to the markets of developed world. However, due to poverty related and political reasons agriculture has drawn more attention. The framework adopted for modalities for negotiations for NAMA, as contained in Annex B of the so-called July framework<sup>1</sup> (WTO 2004b), stipulates reduction of industrial tariffs in both developed and developing countries according to an agreed formula. There are several proposals on the table, including linear<sup>2</sup> and non-linear<sup>3</sup> formulas. Almost all the formulae so far proposed would entail deep cuts in bound and/or applied industrial tariffs of countries.

In the debate on the consequences of cuts in industrial tariffs for developing countries, attention has focused on two issues; their impact on imports, exports, overall economic welfare and implications on government revenues. Less attention has been paid to the implication of tariff cuts for industrialisation in developing countries and their participation in the international pool of labour. While it is generally agreed that there

may be temporary costs, there is also a widespread belief, in accordance with the prevailing orthodoxy that proposed tariff reductions would be beneficial to developing countries when adjustment to a more liberal trade regime is completed and existing resources are fully redeployed and utilised according to new incentives. For developing countries, what matters is not one-off gains or losses from various tariff cuts but the longer term implications of proposed tariff cuts on capital accumulation, technical progress and growth which hold the key to narrowing income gaps with richer countries. Even if there could be a costless adjustment to a new set of incentives allowing developing countries to fully realise the benefits of their comparative advantages as determined by their existing endowments and capabilities, an irreversible commitment to low tariffs across a whole range of sectors would carry the risk of locking them into the prevailing international division of labour. This risk may now be greater since many of the alternative policy options successfully used during the for industrialisation by today's mature and newly-industrialised countries are no longer available to developing countries because of their multilateral commitments in the WTO, notably in agreements on subsidies, TRIMs<sup>4</sup> and TRIPs.<sup>5</sup>

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## 1.1 Key elements of NAMA framework

A close analyses of the present trend of multi-lateral negotiation give rise to a vertical division of negotiating table into two blocks, one policy objectives being pursued by rich countries like US, EU, etc. and the other part being loosely centered around developing countries. In the process, there appears to be four interrelated objectives pursued by developed countries in the WTO negotiations on industrial tariffs which underlie the framework in Annex B of the July Package (i) full binding coverage, (ii) rapid and continued liberalization, (iii) harmonization across countries and (iv) greater uniformity of Tariffs across product line.

### (i) Full binding coverage

Full binding coverage with some minor exceptions provided that all tariffs should ultimately be bound. While most developed countries have almost full binding coverage, this is not the case for the majority of developing countries, particularly outside Latin America. (a) For some 30 countries binding coverage is less than 35 per cent, and about a third of these are non-LDCs from Africa. Even for India, during 2005 the tariff binding coverage is 73.8 percent. The proposal for these countries is to bind all their non-agricultural tariffs at or below the average level of bound tariffs of developing countries taken together. These countries would be exempted from making tariff reductions through the formula. (b) For others, unbound tariffs would be fully bound after applying the formula for reduction from twice the applied rate. For

some tariff lines, the newly bound rates would continue to be above the current applied rates. As the newly bound rates would fall below the current applied rates, proposed increase in binding coverage in developing countries, if adopted, would lead to a considerable reduction in the scope to use trade policy for industrialisation. Commitments are not time-bound, to be renegotiated after a pre-specified period according to the outcome obtained, but are permanent. It is true that GATT rules allow countries to resort to measures such as anti-dumping duties or safeguards when imports cause “injury to domestic production”, or even to renegotiate their tariffs. However, these are exceptional and temporary provisions, or require agreements among contracting parties and involve compensation. They are not designed to allow developing countries to pursue industrial policies in order to promote firms in more dynamic, high value added sectors by providing them infant industry support against mature firms from more advanced economies.

### (ii) Rapid and continued liberalisation

Another element of NAMA framework negotiations is that whatever be their initial positions, countries should lower their tariffs over time in successive rounds. Indeed, an overarching objective pursued by some of the most advanced countries is a rapid convergence to free trade. The US pushes up a formula for successive reduction of tariffs in two phases of five-year duration each, culminating in free trade after the second phase. Progressive liberalisation is also implicit in the proposals put forward by some

developing countries, although there is a difference in the speed of liberalisation. Furthermore, liberalisation is pursued on a line-by-line basis; that is, tariff cuts would be applied to all product categories, with some minor exceptions for what countries may consider as sensitive products. This stands in sharp contrast with the approach adopted during the Uruguay Round when commitments by developing countries were for an average level of tariffs without any obligation to apply reductions to individual tariff lines.

(iii) Harmonisation across countries

The third objective of the July framework is reduction in tariff dispersion across countries. Currently the average weighted bound tariffs are close to 14 percent in developing countries and 3 percent in industrial countries. Under the EU proposal, the difference would be cut to 4 percentage points while in the proposal by the US, it would altogether disappear after the second phase. Even the proposals by China, India and Korea would imply sizeable reduction in average tariff differences between developed and developing countries (Laird et al 2003). Again, there would be a considerable compression of tariff differences among developing countries. Even a more moderate application of the non-linear formula would reduce the intra-developing country dispersion of tariffs, as measured by standard deviation from more than 20 percentage points to 6 percentage points.

(iv) Greater uniformity of tariffs across product lines

Since the proposed tariff cuts would be applied on a line-by-line basis, the result would be a considerable decline in tariff dispersion across products. This is explicitly stated in the EU proposal where tariffs would be compressed into a range with an overall cap of 15 percent. Again the Indian proposal that tariffs on any single product should not exceed the average tariff by more than a factor of three effectively implies smaller dispersion. Similarly, the application of non-linear formula could reduce the dispersion of bound tariffs among industrial sectors by more than two-thirds.

Greater uniformity of industrial tariffs would no doubt imply a reduction in tariff peaks. In developed countries cuts in tariffs on products of export interest to developing countries such as textiles, clothing and footwear would be deeper. However, the move towards uniform tariffs would be much more rapid in developing countries where tariff dispersion is larger. This would also mean reduced ability of these countries to differentiate between imports of basic necessities and luxury consumables; among intermediate, capital and final goods; and between high and low value added manufactures in their treatment of tariffs.

## **2. Objectives**

In July 2004, WTO members in Geneva agreed on the so called July framework, which put the Doha negotiations back on track by establishing detailed guide lines/directions to

move the negotiations forward in core areas such as services, agriculture and NAMA. The negotiations aimed at reducing tariffs including the reduction or elimination of tariff peaks, high tariff, tariff escalation and non-tariff barriers on the basis of an accepted formula approach.

The developing countries have acceded their ground substantially in NAMA and services. Because of the competitive edge acquired by some of their manufacturing and services industries, India and Brazil are interested in gaining greater access for their goods and services in the markets of the developed countries. Even though developing countries had previously opposed the Swiss formula, Hongkong Ministerial declaration of December 2005 adopted it. This means higher cuts will be effected on line-by-line basis for countries levying high tariffs. Since most of the developing countries levy higher tariffs, the application of a swiss formula will lead to larger concessions on their part and inability to protect particular tariff lines. But the depth of cuts depends on the coefficients to be agreed upon. There are proposals for multiple coefficients: one for developed countries and other for developing countries and debate on application of the formula on line-by-line basis on applied or average bound tariffs of each country etc. This uncertainty raises the concerns of individual countries on the revenue and employment positions, and therefore planning to restructure them in alternative scenarios.

In the above background, the present study is an attempt to gauge the impact of

tariff cut on revenue, market access in textile and clothing sector of India by using non-linear Swiss formula with multiple coefficients. A comparative analysis on four SAARC countries (India, Pakistan, Sri Lanka and Bangladesh) and four developed countries (US, EU, Japan and Canada) has also been made in order to assess the differential impact of tariff cut on these countries with respect to the overall loss of welfare.

Before analysing the impact of tariff cuts let us examine the market access position of selected countries with respect to textiles and clothing sector.

### **3. Textiles and Clothing Sector and Tariffs**

Due to its large employment generation potential, T & C sector has historically been subjected to various controls by the importing countries. In previous rounds of multilateral negotiations, less attention was devoted to tariffs than quotas in textile and clothing sector because tariff matters less to exporters in comparison to quota as the burden was passed to consumers in importing countries. But with the phasing out of the quota system on T & C products, the attention has shifted to the reduction of tariffs. The removal of quota has driven the developed countries to protect their markets through imposition of tariffs on selective filtering basis. Their reluctance to open up their market for developing countries is more visible when the prevalence of tariff rates in T & C of these countries are examined. The developed countries are utilizing high tariffs on T & C to a greater extent than other non-agricultural products in



order to deny market access to the countries having export interest in textiles and clothing sector like India.

### 3.1 High Tariffs

Under the Uruguay Round (1986-93), tariffs on Textiles and Clothing were reduced<sup>6</sup> by a small percentage than those in other industrial sectors because of three reasons i.e. (i) The attention remained focused on the problems of quotas, (ii) Tariff negotiations set the objective of achieving a target of overall reduction of at least one-third reduction for all sectors combined. In practice developed countries achieved it by allowing high reduction of tariffs in some sectors while substantially less in textiles and clothing taking their domestic interest into account and (iii) Many developing countries were unwilling to reduce their own tariffs. Instead developing countries agreed to bind<sup>7</sup> their tariffs at ceiling rate as per the agreed negotiations under WTO framework. The developed countries also

utilised tariff as an instrument for protecting their domestic sector more aggressively.

As such, developed countries reduced their tariffs on imports of textile and Clothing by 22 percent as against 40 percent for all industrial products. The tariff reduction in T & C by US amounted to only 13 percent, compared with 35 percent for all industrial products. The comparable figures for the European Union were 17 percent for textiles and clothing against 37 percent for all industrial products. Evidently, the T & C sector has remained close to the chest of the developed countries and conspicuously, the developed countries are not ready to provide a better market access to the developing countries, which have export interest in these products. A comparative study of the tariff level of the four developed countries indicates that the tariff levels of these countries are more biased to safeguard their own cause.

**Table 1**

**Tariffs on Textiles & Clothing and NAP on Canada, USA, EU and Japan, 2005.**

(% of products)

	Canada	USA	EU	Japan
<b>Tariff Peaks<sup>c</sup></b>				
All non-agricultural products	6.8	1.8	0.8	0.6
Textiles and clothing products	30.6	13.0	0.0	0.3
<b>Simple average MFN<sup>a</sup> bound rates<sup>b</sup></b>				
All non-agricultural products	5.3	3.2	3.9	2.3
Textiles and clothing products	12.4	8.9	7.9	6.8

Note: <sup>a</sup> MFN = Most Favoured Nation, <sup>b</sup> An applied tariff rate must not exceed the bound tariff rate, as notified to the World Trade Organisation (WTO); however, a country may bind a tariff at a higher rate than the actual rate in operation at the time, giving it the freedom to raise the tariff as high as the bound rate if it chooses to do so, <sup>c</sup> share of tariff lines with rates above 15%.

**Sources:** "Market access Unfinished Business – Post Uruguay Round Inventory and Issues", WTO; members' tariff profiles in document TN/MA/S/Rev 1 and Corr 1; "Structural Adjustment in Textiles and Clothing in the Post – ATC Trading Environment", Trade policy working paper No.4, OECD.

Table 1 clearly indicates the prevalence of high tariffs in textiles and clothing relative to all industrial products. The bound rates for T & C are in any case double the rates

declared for other non-agricultural products. Similarly about 13 percent of textiles and clothing products in US and 30.6 percent in Canada are subject to tariff peaks. The share

of duty free lines for all non-agricultural products in Canada is 29.4 percent, where as for textiles and clothing, it is just 6.5 percent. Like wise, the share for all non-agricultural products is 38.5 percent for USA, 23.9 percent for EU and 57.1 percent for Japan. Where as for textiles and clothing it is 11.3 percent, 2.1 percent and 2.8 percent respectively. Within textiles and clothing products, clothing has been considered more sensitive to them and has attracted higher tariffs. Hence developing countries in one way or other have been denied a comfortable market access by developed countries in T and C. As India and some other developing countries like Sri Lanka, Turkey, South Korea, Thailand and some least developed countries like Bangladesh enjoy a comparative advantage in textiles and clothing due to more labour

intensive nature of the sector, the cut of high tariff rate by developed countries could create better market access for their products and can help in revitalising the socio-economic development of the country.

### 3.2 Tariff Peak

Another area of concern is tariff peak. The developed countries are using the tariff peak as an instrument against T & C imports from countries like India. A study on different countries also shows a grim picture in textiles and clothing sector with respect to market access. Most of the countries resort to tariff peak in textiles and clothing in comparison to other non-agricultural products (Table – 2). More than 16.8 percent of tariff lines pertaining to T&C are above 15 percent.

**Table 2**  
**Applied Tariff on Industrial Product\*, Tariff Peaks (Percentage of Tariff lines above 15% by country)**

Important Markets	Textiles & Clothing	Chemical & Photographic Supply	Manufactured Articles not else where specified	Non-electric Machinery	Electric Machinery
Canada (2000)	41.9	0.0	1.6	0.0	0.0
United States	16.8	0.0	0.4	0.0	0.0
Brazil	92.8	26.6	65.8	23.2	60.1
Mexico	87.7	23.5	58.6	40.3	56.8
European Union	0.0	0.0	0.0	0.0	0.0
Australia	24.2	0.1	0.0	0.0	0.0
China (1997)	87.4	18.0	52.5	33.7	34.5
Japan (2000)	2.2	0.0	0.0	0.0	0.0
Korean Republic	0.0	0.0	0.0	0.0	0.0
Malaysia	44.2	19.4	20.1	20.9	32.3
Chinese Taipei	11.3	0.2	1.5	2.3	1.2
Thailand	62.6	79.6	85.4	99.9	99.9
India (1997)	99.9	96.2	99.1	98.3	96.5

\* For the year 2001 except where otherwise indicated in parenthesis.  
Source: WTO IDB.

The prevalence of tariff peaks on textiles and clothing except in comparison to other products is quite high. The percentage of products under tariff peaks for T & C is

highest in countries like Canada (41.9%), United States (16.8%), Brazil (92.8%), Mexico (87.7%), China (87.4%) and Malaysia (44.2%) relative to other products. A study on the USA

tariff structure shows that tariffs for some Textiles and Clothing items are as high as 32 percent for some of the products. The tariff peak for men's and boy's cotton knit shirts (338), women's and girl's cotton knit shirts (339) and men's and boy's cotton non-knit shirts (340) is 19.7 percent, in which US has imported \$1364.4 million for these products. The US is imposing tariff peaks on 64.8 percent of her imports of cotton products.

Similarly, for man-made fibre products, the US is imposing 32 percent tariff for men's and boy's man-made fibre, knit shirts (638) and women's and girl's knit shirts (639). About 11.6 percent of the import value of man-made fibre products is subjected to tariff peak in US. Even the most pro-liberalisation and strongest economy in the world is protecting its T & C industry by using tariff peak as an import control device.

**Table 3**  
**US tariff and imports of selected clothing products \*, 2005**

		<b>Tariff (%)</b>	<b>Import (US\$ mn)</b>
	<b>Cotton Products</b>		
338	Men's and boys' cotton knit shirts	19.7	5556
339	Women's and girls' cotton knit shirts	19.7	6825
340	Men's and boys' cotton non-knit shirts	19.7	2665
341	Women's and girls' cotton non-knit shirts	15.4	1513
347	Men's and boys' cotton trousers	16.1	5291
348	Women's and girls' cotton trousers	14.9	6867
352	Cotton underwear	8.5	2598
	<b>Total of above</b>	<b>n/a</b>	<b>31315</b>
	% share of all MFA products <sup>a</sup>		32.7
	<b>Man-Made Fibre Products</b>		
638	Men's and boys' man-made fibre knit shirts	32.0	1543
639	Women's and girls' man-made fibre knit shirts	32.0	2268
640	Women's and girls' man-made fibre trousers	25.9 <sup>b</sup>	617
641	Man-made fibre underwear	26.9	804
647	Men's and boys' man-made fibre non-knit shirts	28.2	1832
648	Women's and girls' man-made fibre non-knit shirts	28.2	1607
652	Men's and boys' man-made fibre trousers	16.0	737
	<b>Total of above</b>	<b>n/a</b>	<b>9408</b>
	% share of all MFA products <sup>a</sup>		9.8
	<b>All MFA Products<sup>a</sup></b>		<b>95736</b>

Note: \* Product coverage: MFA products (those covered by the Multi-Fibre Arrangement, including most textiles and clothing but excluding items made of 100% silk). <sup>b</sup> As well as 29.1 cents/kg.

Sources: US Department of Commerce, Otexa; US Tariff Schedules; ITCB.

### 3.3. Tariff Escalation

Tariff escalation happens with an increasing tariff with the increased level in the value chain i.e. higher tariffs for finished products and lower tariffs for unprocessed

products. As a consequence, imparting country protects its processing industry, while foreign suppliers of unprocessed products and raw materials find moving to higher stages of processing more difficult. It is fact that the developed nations practice

tariff escalation more often in T & C sector than other sectors creating a major impediment to free trade in T&C. Tariff escalation greatly differs across the countries. Tariff in the European Union appears to de-escalate, while Japan & Switzerland's tariff structure escalate between raw material and semi-manufactured product but de-escalate between semi-finished and finished product. The tariff structure in Canada, Australia, New-Zealand, Turkey and Norway are characterized by increase in tariff at each production stage, while in United States, tariff increases significantly between raw materials and semi-manufactured goods.

It appears some countries are using tariff escalation as a measure for perusing their protectionist policy in the post MFA era. The information presented in Table – 4 bring home the point. The tariff structures of the countries mentioned in the table however have a certain number of characteristics in common. First, with the notable exceptions of India and Turkey, all countries apply higher tariffs to clothing than textile products. Some countries such as Poland, Brazil and Mexico apply the same higher tariff to all clothing products, while others impose higher but non-uniform tariffs on clothing products. Second, in most cases, the dispersion of tariffs across 4-digit subgroups in the textiles sector is significant. In absolute terms, inter-group dispersion is highest in Malaysia, Thailand and Turkey.

Among developed<sup>2</sup> countries, it is the highest in Australia, Canada and the United States, where tariff averages range between zero and more than 15 percent.

The pattern of tariff escalation of both Quad\* countries and emerging economies of textile imports, eight of them are leading importers of textile products. For example, the first pair of products is the tariff rate for garneted stock of wool or of fine or coarse animal hair (5104), which is lower than that for yarn of wool or fine animal hair, put up for retail sale (5109). Jute is a product of interest to least developed countries. Natural fibres of jute (5303) are among the very few products with zero applied tariffs in the four Quad countries. However, woven fabrics (5310) of jute are only exempted in some of the Quad countries. Unprocessed synthetic textiles (5404, 5405) have lower tariffs in most countries than tariffs for more processed synthetic textiles such as 5606 and 5609. Synthetic staple fibres, not carded, combed or otherwise processed for spinning (5503) has lower tariffs than woven fabrics of synthetic staple fibres, containing 85 percent or more by weight of synthetic staple fibres (5512) in 14 of the countries listed here, the only exception is Poland.

Further more, this escalation pattern is very clear in the last two examples. Garments (6210), made up of fabrics of heading (5903), applies higher tariffs than textile fabrics impregnated, coated, covered or laminated with plastics (5903).

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\* The name used at the WTO to describe the four major industrialised country markets: the US, Canada, the European Union and Japan

And garments (6113) displays higher protection levels than one of its raw materials, rubberised textile fabrics (5906). The fact that tariffs on clothing are higher

than tariffs on textile products offers sufficient evidence of the presence of tariff escalation.

**Table 4**

**Tariff Escalation on Textile Products: applied tariffs on textiles and clothing products**

<b>Import Markets *</b>	<b>5104</b>	<b>5109</b>	<b>5303</b>	<b>5310</b>	<b>5404</b>	<b>5606</b>	<b>5405</b>	<b>5609</b>	<b>5503</b>	<b>5512</b>	<b>5903</b>	<b>6210</b>	<b>5906</b>	<b>6113</b>
European Union	0.0	5.0	0.0	4.0	4.6	6.6	3.8	5.8	5.1	8.9	9.2	12.6	6.5	10.3
United States		4.5	0.0	0.1	4.7	9.0	6.6	4.0	3.2	14.0	4.8	6.2	3.5	6.1
Japan	0.0	3.5	0.0	14.0	8.0	7.2	4.2	5.2	7.1	8.6	4.2	12.4	5.5	10.6
Canada	0.0	9.5	0.0	4.7	4.8	4.8	9.5	17.5	2.5	9.6	5.9	12.5	8.3	10.2
Mexico	13.0	18.0	13.0	13.0	16.6	17.0	16.0	15.5	12.9	18.0	17.3	35.0	18.8	35.0
China	11.5	20.0	8.0	19.0	23.0	24.0	17.0	27.0	17.4	35.7	22.0	33.5	23.0	35.0
Korea, Rep. Of	1.0	8.0	2.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0	13.0	8.0	13.0
Australia	0.0	5.0	0.0	0.0	5.0	2.5	5.0	10.0	0.0	15.0	12.5	16.5	7.5	13.0
Poland	3.0	9.0	0.0	13.1	6.0	9.0	6.0	9.0	13.1	9.0	9.0	19.7	9.0	19.7
Turkey	0.0	39.8	0.0	4.0	5.1	38.7	38.0	58.0	5.8	9.5	10.0	13.0	44.3	10.5
Thailand	30.0	40.0	30.0	80.0	30.0	40.0	30.0	35.0	30.0		50.0	100.0	40.0	100.0
Brazil	8.5	18.5	10.5	17.8	15.0	20.5	14.5	20.5	13.3	16.5	18.5	22.5	18.5	22.5
Norway	0.0	6.5	0.0	0.0	0.0	7.6	0.0	0.0	0.0	4.8	6.6	13.8	3.8	8.6
Malaysia	0.0	0.0	0.0	0.0	10.0	0.0	10.0	5.0	1.0	15.0	30.0	20.0	0.0	20.0
New Zealand	0.0	7.0	0.0	0.0	0.0	7.5	0.0	7.5	0.0	0.0	5.3	19.0	1.8	19.0
India	25.0	45.0	15.0	45.0	45.0	45.0	45.0	45.0	35.0	45.0	45.0	45.0	45.0	45.0
Chinese Taipei	0.0	7.5	0.0	5.0	3.0	9.7	3.0	11.7	1.3	8.3	8.8	12.5	12.8	12.5

Source: WTO (2001)

Thus, tariff escalations are also used as an instrument for obstructing the export from developing countries on Textiles and Clothing, which needs to be properly addressed in order to augment the overall market access of Indian product.

**4. Modalities for tariff reduction under NAMA**

The Doha declaration has adopted formula approach as the best solution for arriving at a mutual acceptable agreement on tariff cut. Initially there was a debate on the proposed numerous formulas for tariff cut and on the acceptability of a linear or non-linear formula approach. The July framework which brought the Doha development round back into the track had special emphasis on Swiss

and Girard as the two most promising approaches for negotiations on tariff cut. In the Hong Kong ministerial conference, the member countries have agreed in principle for applying a Swiss formula for tariff cut. The final ministerial declaration adopted on 18<sup>th</sup> December, 2006 has categorically mentioned that “we adopt a Swiss formula with coefficients at levels which shall inter-alia, reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs and tariff escalation in particular on products of export interest for developing countries, take fully into account the special needs and interests of developing countries, including through less than full reciprocity in reduction commitments.”

Keeping the importance of the level of co-efficients in mind, the declaration has also tried to put forth the modalities of the co-efficient to be adopted for tariff reduction. The text also highlighted two variations on the table i.e. “(a) a formula with a limited number of negotiated coefficients (b) a formula where the value of each country’s co-efficient would be based essentially on the tariff average of bound rates of that member, resulting in multiple coefficients”, Even though members are debating the different coefficients to be adopted, it appears the formula with limited number of coefficients seems to be more appropriate in comparison to later one. However, it is evident that the formula approach should precisely address the issues which always hinder the export interest of developing countries like tariff peak, tariff escalation, and high tariffs so as to bring harmonisation of tariff across the countries on the one hand and safeguarding the export interest of the developing and less developed countries on the other hand.

During the informal discussions, many countries expressed their views for two co-efficients. In the context of such debates, the coefficients which were mentioned by developed members fall generally within the range of 5 to 10 and for developing countries within the range of 15 to 30. Though the debate on the coefficients is wide and likely to converge to some positive outcome, it needs deeper analysis how different coefficients serve the purpose of bringing uniform tariff cuts along with free flow of trade across the countries.

The developing countries mostly depend on labour intensive sectors like textiles and clothing, leather etc. The sectors like Textiles & Clothing are contributing enormously for the economic development along bringing socio-economic equality in developing countries including India. Hence, there is a need to analyse the impact of tariff cut under Swiss approach on these sectors. In this context, an effort is being made to analyse the impact of tariff cut by using Swiss formula using different coefficients as proposed by different countries in Hong Kong Ministerial context. Apparel sector has been taken into consideration for the purpose of analysis. 57 apparel products at eight digits H.S. line have been taken into consideration. Since the real battle is fought among the developed countries on one hand and developing countries on the other, four developing countries of the SAARC region, India, Pakistan, Bangladesh and Sri Lanka and four developed countries US, EU, Japan and Canada has been taken for analysing the impact of tariff cut.

#### 4.1 Swiss Formula explained

$$t_1 = \left( \frac{c * t_0}{c + t_0} \right) \quad \begin{array}{l} t_0 = \text{initial rate, } t_1 = \text{final rate} \\ c = \text{coefficient that determines} \\ \text{the level of ambition.} \end{array}$$

The above non-linear Swiss formula harmonised the tariffs by cutting higher tariffs by a higher percentage, where the level of ambition is determined by a co-efficient c. The level of ambition in the Swiss approach stipulates the level of tariff cut envisaged and also higher is the co-efficient, the lower is the

tariff cut and vis-a-versa, and provides for reduction of high tariffs, tariff peaks and tariff escalation. The coefficient C is a cap i.e. no new tariff will be higher than maximum tariff

which is equal to the co-efficient. The formula is applicable on applied tariff lines only with a mark up of prices over applied rates for the developing countries.

**Table 5**

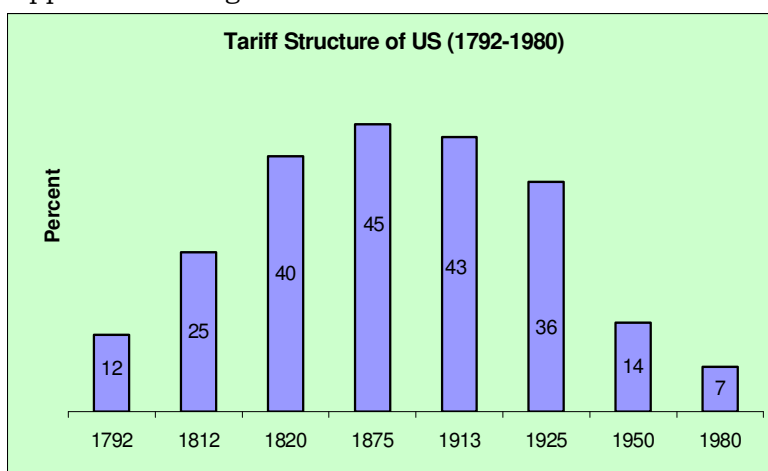
	SAARC					Developed Countries					
	Present Bound Rate (Average)	New Average Tariff				Present Bound Rate (Average)	New Average Tariff				
		C=8	C=10	C=15	C=20		C=8	C=10	C=15	C=20	
India	36.07	6.54 (81.86)	7.83 (78.31)	10.59 (70.65)	12.86 (64.36)	US	18.14	5.34 (70.58)	6.18 (65.92)	7.86 (56.69)	9.11 (49.80)
Pakistan	25.00	6.06 (75.76)	7.14 (71.43)	9.38 (62.50)	11.11 (55.56)	EU	11.91	4.78 (59.86)	5.43 (54.41)	6.63 (44.32)	7.46 (37.38)
Bangladesh	37.50	6.59 (82.42)	7.89 (78.95)	10.71 (71.43)	13.04 (65.22)	Japan	9.23	4.26 (53.89)	4.77 (48.35)	5.68 (38.47)	6.28 (31.95)
Sri Lanka	17.50	5.49 (68.63)	6.36 (63.64)	8.08 (53.85)	9.33 (46.67)	Canada	17.69	5.51 (68.86)	6.39 (63.89)	8.12 (54.12)	9.39 (46.94)

Note: Figure in bracket indicates % reduction. Calculations based on apparel sector.

A comparative analysis is made in Table 5 by the four countries from developing and developed world each to study the impact of tariff cut at four different co efficient. The average bound tariff rate for the product is calculated by using the average bound tariff of fifty seven apparel product at 6 digit H.S. line basis (see Appendix) and accordingly the Swiss approach being applied taking into consideration for different coefficient i.e. 8,10, 15, & 20 as proposed by different countries in the process of negotiation under Doha Development Agenda (DDA). The ministerial declaration though explicitly adopted a non-linear Swiss approach for tariff cut has left the decision on co-efficient on member countries.

Two alternate propositions came up for discussion i.e.

- i) Acceptance of single co-efficient for all member countries across the tariff lines or
- ii) Acceptance of two coefficients, one for developed countries and other for developing countries.



If the former is accepted the developing countries would lose substantially in the apparel sector. As in Table-5, a co-efficient of 8

reduces the bound tariff rate of India from 36.07 to 6.54 or by 81.86 percent. Similarly the other SAARC countries like Pakistan, Bangladesh and Sri Lanka, which have

specific export interest on apparel sector could experience tariff cut from 25 to 6.06 (76.76%) from 37.50 to 6.59 (82.42%) and 17.50 to 5.49 (68.63%) respectively.

On the other hand, the four developed countries EU, Japan, Canada and US can reduce their existing tariff in apparel sector at a low rate in comparison to developing countries. The US has a tariff cut from present average 18.14 to 5.34 (70.58%) for EU, from 11.91 to 4.78 (59.86%), Japan will undergo a tariff cut from present average 9.23 to 4.26 (52.89%) and for Canada, it is about 68.86 percent from 17.69 to 5.5. Thus the tariff cut with a coefficient of eight can act as a tonic for the interests of developed countries on one hand and can de-escalate the process of industrialisation of developing countries on the other, which is not at all desirable in present circumstances, when developing countries are surrounded by the ill effects of poverty, unemployment, under: developments, subsistence economy, over dependence on primary sector etc.

Similarly, if a single coefficient of 10, 15 or 20 is accepted for all member countries, resultant tariffs, instead of removing the imbalances in international trade, will favour haves and that too at the cost of have-nots and hence a single coefficient should be outrightly rejected by the developing countries.

In the circumstances, the scenario having two different coefficients can be taken into consideration for the purpose. Let us assume one co-efficient for the developed countries say, 8 and another say, 20 for the

developing countries including SAARC countries and in such a situation, the tariff cut for India will be 64.36 percent from the present rate of 36.07 to 12.86; for Pakistan it is about 55.56 percent from 25.00 to 11.11, the rate of cut for Bangladesh is 65.22 percent from 37.50 to 13.04 and for Sri Lanka, it is about 46.67 percent from present 17.50 to 9.33.

On the other hand, the reduction in bound tariffs for four developed countries, with coefficient  $C=8$  may be acceptable. The cut in US will be 70.50 percent from 18.14 to 5.34; similarly for EU it is 59.86 percent from 11.91 to 4.78; Japan could experience 53.89 percent cut from present 9.23 to 4.26 and Canada from 17.69 to 5.51 at the rate of 68.86 percent.

Historical evidence suggests that in the process of industrialization, rich countries always resort to restrictive measures in the form of tariff and non-tariff measures for protecting their infant industries. It is notable that through out its industrial development the US was more protectionist than other early industrialised. It was indeed described as "The mother country and bastion of modern protectionism " (Bairoch 1993:30). It was only after the Second World War that the US started to move to sustained trade liberalisation, having successfully established its industrialisation behind protectionist barriers (Figure-1).

Even then the US never practiced free trade to the same degree as Britain did during its free trade period (1860-1932). Evidence shows that there was a strong correlation



between protectionism and economic growth in the US through out the 19<sup>th</sup> century until the Second World War. Other rich countries followed the same principle in their early stage of growth. These aspects merit consideration while deciding the coefficients for both developing and developed countries so that the pace of industrial growth is maintained both in the developing countries and also the developed nations. It is due to the fact that countries at the intermediate stages of development need higher tariffs than both their industrial countries. Hence higher level of ambition should be taken into consideration for developed countries and lower level of ambition for developing countries, so as to provide a level playing field for developing and less developed countries in the present scenario.

However, India is now insisting for a difference of 25 on the co-efficient of developed and developing countries, which may be a solution for creating a level playing field for developing and least developed countries.

#### 4.2 Tariff Binding:

The Swiss formula with certain co-efficient is closely linked to bound tariff rates. The Hong Kong ministerial declaration has adopted full binding as a desirable objective of the NAMA negotiation. In order to sort out the problem of unbound tariff, there now appears to be willingness to move forward on the basis of non-linear mark up approach to establish base rate; provided that such an approach yields an equitable result. A non linear mark up approach envisages addition of a certain number of percentage points to the applied

rate of the unbound tariff line in order to establish the base rate on which the formula is to be applied. There are two variation of such an approach. i.e.

- (i) A constant number of percentage points are added to the applied rate in order to establish the base rate.
- (ii) Different number of percentage points are added to the applied rate depending on the level of the applied rate i.e. the lower the applied rate, higher is the mark up and higher the applied rate, lower is the mark up.

The problem of unbound tariff rate is more related to developing countries as most of the developed countries have already bound all tariff lines. For India about 1/3<sup>rd</sup> of non-agriculture tariff lines are unbound. So far as clothing product is concerned, the binding rate is about 35-40 percent even though most of the applied tariff rate is 12.5 percent. Another major developing country Brazil has bound 35 percent of the total tariff lines. It is quite evident that most of the developing countries have not bound the tariff lines for products, which are sensitive and determinant for industrial growth in the present competitive environment. Since Hong Kong declaration has already adopted for 100 percent binding of tariff lines, the developing countries have no option to fulfil their commitment. Now the question arises what would be its repercussions?

Developing countries enjoy a comparative advantage in labour intensive industries like textiles and clothing, leather etc. whereas developed countries enjoy

comparative advantage in capital-intensive sectors. Thus with binding of tariff rates and subsequent application of formula approach could bring about structural readjustment in the developing world. In the process, developing countries may exit partly or wholly from the technology intensive and potentially high value added sectors, only concentrating on low value added, resource based and labour intensive industries like textiles and clothing. Though the labour intensive sectors could gain momentum in the process, it may not accelerate the pace of economic development of these countries. Hence developing countries have a bigger puzzle before them to take up binding of their tariff rates. Even though, the constant mark up methodology for which most of the member countries have indicated willingness maybe the best solution out of different proposal tabled, still developing countries should analyse rationality and impact of tariff binding before accepting any methodology.

#### 4.3 Flexibility

Another area of controversy is with respect to the paragraph 8 and of the framework agreement, which allows developing countries two options as Flexibilities

- (i) Applying less than formula cuts upto 10 percent of the tariff lines and
- (ii) Keeping as unbound or not applying formula cuts upto 5 percent of tariff lines.

As expected the Hong Kong text has not clarified the aspects of flexibilities for developing members subject to formulas. A

view was expressed that the flexibilities currently provided for are equivalent to 4 – 5 additional points to the coefficient in formula and there was a need to take this aspect into account in the developing countries coefficients. In response, argument has been made by many developing countries that the flexibilities should not be linked to the coefficient. In this context a link between flexibilities and coefficients can adversely affect the developing countries. Hence India should negotiate to mark flexibility a stand alone for the overall benefit of the economy.

#### 4.4 Special & Differential Treatment:

Special and differential (S&D) treatment is considered the backbone of the DDA with the members committing to make it precise, effective and operational. However, even after four years, no significant progress has been made on majority of these issues. As per the HK Ministerial Declaration, ministers agreed to expeditiously complete the review of all the outstanding Agreement specific proposals and report to the General Council, with clear recommendations for a decision, by December 2006. The only five S & D proposals that have been agreed by the Ministerial related to those proposed by LDCs, the most important of which is the provision for duty free quota free market access. Even on this issue, developed countries tried to create a division among the developing countries and LDCs on the one hand and within the LDCs on the other. In the end, the developed countries agreed to provide such facilities to LDCs only on 97 percent of their tariff lines. Remaining 3 percent of tariff lines leaves enough room for

the developed countries to protect their sensitive products such as textiles & clothing, rice, banana and sugar. Other issues such as investment measures, coherence, and waivers, which too have been agreed at HK, would probably help LDCs to some extent.

#### Implication for India

#### 4.5 Tariff Reduction and Revenue Loss on Clothing

A comparative analysis of revenue loss by application of Swiss approach shows that it is higher for developed countries in absolute terms as these countries are maximum importer of clothing item but a revenue loss in this magnitude for developed countries is just like taking a drop of water from ocean. At the same time the developed countries gain a good market access for other commodities produced in the capital-intensive sector. However, the

revenue loss for the developing countries is larger in percentage terms. This may adversely affect the developmental activities and other social security measures for which it is meant. No doubt the tariff cut may enhance the market access to these countries in T&C but it is to be seen how the enhanced market access will compensate the revenue loss by increased exports. The tariff cut, without eliminating tariff escalation, Peak tariff and tariff to the high on T & C in developed countries, does not provide for a better market access to the developing countries. Hence extra protection provided by developed countries in T & C should be eliminated before going for any tariff reduction through formula. Table-6 shows the revenue loss of the different countries with different coefficients being applied to Swiss formula.

**Table 6**  
**Revenue Loss on Swiss Formula With Different Coefficients 2002**

US Mn \$

Country	Import	Present Revenue	C=8		C=10		C=15		C=20	
			New Revenue	% change	New Revenue	% change	New Revenue	% change	New Revenue	% change
EU	84882	10109.45	4057.36	59.87	4609.09	54.41	5627.68	44.33	6332.20	37.36
US	66731	12105.00	3563.44	70.56	4123.98	65.93	5245.06	56.67	6079.19	49.78
Japan	17601	1624.57	749.80	53.85	839.57	48.32	999.74	38.46	1105.34	31.96
Canada	4008	709.02	220.84	68.85	256.11	63.88	325.45	54.10	376.35	46.92
India	22	8.07	1.44	82.18	1.72	78.66	2.33	71.14	2.83	64.96
Pakistan	8	2.00	0.48	75.76	0.57	71.44	0.75	62.48	0.89	55.56

Source: Compendium of International Statistics 2004

#### 4.6 Market Access

A World Bank (2004) study indicates that Liberalisation of both agriculture and manufacturing trade by both developed and developing countries could generate \$290 billion in the world economy of which \$160 billion would go to developing countries and \$132 billion to developed countries. It is said that the developing countries would gain more

from their own reforms than from increased access to markets of developed countries. The finding of a study conducted by ICRIER<sup>1</sup>, New Delhi on the basis of the rationalisation of Indian tariff from 1991 to 1999 holds the similar view. The study undertaken by multiple equations econometric model with multi sector analysis has indicated that the tariff cut has differential effects on the production. Some industries gain while others

lose in terms of production, exports, employment as shown on table 7. The model further predicts marked increase in export value of production and imports for textile and clothing. Interestingly, the study reveals that with increased market access, there would be a rise in exports of readymade garment irrespective of increase in domestic production. A post Uruguay Round liberalisation would lower output and employment in low value added, labour intensive sectors including textiles, weaving apparel and leather products. It means the creation of better market access in developed countries by tariff cut will increase export, output and employment in textiles and clothing sector. But it is difficult to quantify

the gain in terms of market access because with the increased market access, India has to compete with countries like Turkey, China, Bangladesh & Sri Lanka etc. But the countries like Bangladesh and other LDCs enjoy better access to international market due to duty free access to many markets. Further the developed countries like EU are also providing some other models of market access like GSP scheme and Rules of Origin, which favours least developed countries more than India. It is therefore, difficult to predict how much India will leverage her export capability in T & C on account of tariff cut but obviously Compelling the economy to a loss of tariff revenue.

**Table 7**  
**Impact of Tariff Reform By Sub-Sector**

Opportunities	Threats
<p><b>Increase in Exports</b></p> <ul style="list-style-type: none"> <li>• Textiles and textile products except carpets and readymade garments</li> <li>Leather footwear</li> <li>• Paper and paper products</li> <li>• Rubber products</li> <li>• Plastic products</li> <li>• Synthetic fibres and resins</li> <li>• Structural clay products</li> <li>• Non-metallic mineral products</li> <li>• Iron and steel basic metal industries</li> <li>• Miscellaneous metal products</li> <li>• Motor vehicles</li> <li>• Electrical industrial machinery</li> <li>Other electrical machinery</li> </ul> <p><b>Increase in Value of Production</b></p> <ul style="list-style-type: none"> <li>• Textiles and textile products except carpets and readymade garments*</li> <li>• Carpet weaving (organized)*</li> <li>• Leather and leather products</li> <li>• Plastic products</li> <li>• Synthetic fibres and resins</li> <li>• Structural clay products</li> <li>• Non-metallic mineral products</li> <li>Electrical machinery (other than electrical industrial machinery)</li> </ul> <p>* in increased market access scenario</p>	<p><b>Increase in Imports</b></p> <ul style="list-style-type: none"> <li>• Food products</li> <li>• Beverages and liquor</li> <li>• Textiles and textile products except carpets and readymade garments</li> <li>• Carpet weaving</li> <li>• Leather footwear</li> <li>• Wooden furniture and fixtures</li> <li>• Plastic products</li> <li>• Paints, varnishes and lacquers</li> <li>• Soaps, cosmetics and glycerine</li> <li>• Cement</li> <li>• Non-ferrous basic metals</li> <li>• Ships and boats</li> <li>• Rail equipment</li> <li>• Motor vehicles</li> <li>• Tractors and agricultural implements</li> <li>• Office, computing machinery</li> <li>Miscellaneous manufacturing industries</li> </ul> <p><b>Fall in the Value of Production</b></p> <ul style="list-style-type: none"> <li>Beverages and liquor</li> <li>• Wood and wood products</li> <li>• Wooden furniture and fixtures (organized sector component)</li> <li>• Office and computing machinery</li> <li>• Ships and boats</li> <li>• Motorcycles, scooters, bicycles</li> <li>• Watches and clocks</li> <li>Miscellaneous manufacturing industries</li> </ul>

Source: ICRIER, New Delhi

#### 4.7 Sectoral Negotiations

NAMA framework and Hong Kong Ministerial Delegation recognized a sectoral component aimed at reduction or elimination of tariffs, in particular on products of export interests to developing countries. The negotiating group was asked to review the proposals of members pursuing sectoral initiatives and identify those, which could garner sufficient participation. The participation is to be on a non-mandatory basis. These initiatives aim to reduce, harmonize or as appropriate eliminate tariffs including the reduction or elimination of tariff peaks, high tariffs and tariff escalation, over and above those which would be achieved by of formula modality, in particular on products of export interests to developing countries.

Some of the developing countries feel that Textiles and Clothing Sector was subjected to many controls and with great difficulty quotas have been phased out and now this sector is governed as per rules and regulations applicable to all industrial goods. They feel that sectoral initiative in Textiles and Clothing will be a backward step. However, some other members have already submitted specific proposals in Textiles and Clothing sector. Authors of this paper feel that as and when the trade negotiations are resumed, it may be in India's interest to intensify the negotiations under textiles and clothing sector. Being an item of export interest to developing countries, in these negotiations we should strive for the elimination of tariffs. Such a stand would be in consonance to the NAMA framework. Turkey has already submitted a proposal for tariff harmonization and has also

proposed mandatory participation. However, much will depend upon the stand taken by the developed countries who are the importers in this sector.

#### **5. Non-Tariff Measures**

While market access would improve on account of reduction of import duties, it may be thwarted due to the application of non-tariff measures<sup>13</sup>. Any restriction imposed on the free flow of trade is a trade barrier. Trade barriers can either be tariff barriers, that is levy of ordinary customs duties within the binding commitments undertaken by the concerned country in accordance with Article II of GATT or non tariff barriers, that is any trade barriers other than the tariff barriers. Non-tariff barriers can take various forms. Some of these measures include import quotas, licensing, exchange and other financial controls, prohibitions, discriminatory bilateral agreements, variable levies, advance deposit requirements, antidumping duties, subsidies and other aids, government procurement policies, government industrial policy and regional development measures, competition policies, immigration policies, customs procedures and administrative practices, technical barriers to trade, and sanitary and phytosanitary measures. Broadly these can be categorised as (i) Import Policy Barriers, (ii) Standards, Testing, Labeling and Certification requirements, (iii) Anti-dumping & Countervailing Measures, (iv) Export Subsidies and Domestic Support, and (v) Government procurement.

## 5.1 Import Policy Barriers

One of the most commonly known non-tariff barriers is the prohibition or restrictions on imports maintained through the import licensing requirements. Article XI of the GATT Agreement requires members not to impose any prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures. Any form of import licensing (other than an automatic license) is, therefore, to be considered as an import restriction. Certain restrictions on imports, however, can be imposed in accordance with various provisions of the GATT. Article XX of the GATT Agreement provides for certain general exceptions on grounds of protection of (i) Public morals, (ii) Human, animal or plant life or health, and (iii) National treasures of artistic, historic or archaeological value etc.

These are however subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade. Similarly Article XXI of the GATT Agreement provides for certain security exceptions. All the countries are maintaining import restrictions on some items on grounds of safety and security, and perhaps these cannot be considered as non-tariff barriers looking to the purpose for which the restrictions are imposed. Article XVIII (B) of the GATT allows import restrictions to be maintained on grounds of 'Balance of Payment' (BOP) problems. Besides import licensing, import charges other than the

customs tariffs and quantitative restrictions are the other forms in which import restrictions can be imposed through import policy. MFA quotas are one such example. Some of the textiles and clothing products are also facing these barriers.

## 5.2 Standards, Testing, Labelling & Certification Requirements

Prima-facie Standards, Testing, Labelling and Certification requirements are insisted upon for ensuring quality of goods seeking an access to some of the markets, but many countries use them as protectionist measures. The impact of these requirements is felt more by the purpose and the way in which these are used to regulate trade. Two of the covered agreements under the WTO namely the Agreement on the application of Sanitary & Phytosanitary Measures (SPM) and the agreement on Technical Barriers to Trade (TBT), specifically deal with the trade related measures necessary to protect human, animal or plant life or health, to protect environment and to ensure quality of goods. The SPM Agreement gives a right to take sanitary and phytosanitary measures necessary for the protection of human, animal or plant life or health, provided (i) such measures are not inconsistent with the provisions of the Agreement, (ii) They are applied only to the extent necessary, (iii) They are based on scientific principles and are not maintained without sufficient scientific evidence, (iv) They do not arbitrarily or unjustifiably discriminate between Members where identical or similar conditions prevail including between their own territory and that of other Members, and (5)

they are not applied in a manner which would constitute a restriction on international trade.

In regard to the determination of appropriate level of sanitary or phytosanitary protection, the agreement requires the objective of minimising negative trade effects to be taken into account. Further, it permits introduction or maintenance of sanitary and phytosanitary measures resulting in higher level of sanitary and phytosanitary protection that would be achieved by measures based on the relevant international standards, guidelines or recommendations only if there is a scientific justification. However, where no such international standards, guidelines or recommendations exist or the content of a proposed sanitary or phytosanitary regulation is not substantially the same as the content of an international standard, guideline or recommendation and if the regulation is likely to have a significant effect on trade of other Members a notice needs to be published at an early stage and a notification is required to be made of the products to be covered with an indication of the objective and rationale of the proposed regulation.

The TBT Agreement also contains similar provisions with regard to preparation, adoption and application of technical regulations for human, animal or plant safety, protection of environment and to ensure quality of goods. Both these agreements also envisage special and differential treatment to the developing country members taking into account their special needs. However, the trade of developing country Members has often faced more restrictive treatment in the developed countries that have often raised

barriers against developing countries on one pretext or the other. Some of the non-tariff barriers falling in this category are ban on import of goods (textiles and leather) treated with azo-dyes and pentachlorophenol, ban on use of all hormones, natural and synthetic in livestock production for export of meat and meat products, stipulation regarding pesticides and chemicals residues in tea, rice and wheat etc., and requirement of on-board cold treatment for fruits and vegetables exports.

### 5.3. Anti-dumping & Countervailing Measures

(i) Anti-dumping and countervailing measures are permitted to be taken under the WTO Agreements in specified situations to protect the domestic industry from serious injury arising from dumped or subsidised imports. The way these measures are used may, however, have a great impact on the exports from the targeted countries. If used as protectionist measures, they may act as some of the most effective non-tariff barriers. The number of anti-dumping investigations in the recent past has increased manifolds. Not every investigation results in the finding of dumping and/or injury to the domestic industry. But the period for which the investigations are on, and this period may be upto 18 months; the exports from the country investigated suffer severely. Anti dumping and countervailing duties being product specific and source specific, the importers will prefer switching over to other sources of supply. In some cases the authorities apply innovative methods to prolong the investigation. A recent practice

adopted by the European Commission is a case in example. The European Commission has terminated anti-dumping investigation following withdrawal of the complaint in two cases namely unbleached cotton fabrics from India and others (20<sup>th</sup> February 1996) and bed-linen from India and others (9th July, 1996), after nearly two years without concluding the investigation, and started fresh investigations immediately after the termination of the two investigations on 21st February, 1996 and 16th September 1996 respectively. It may be a matter of debate whether the European Commission was within their rights to do so but the impact of these decisions is grave on exports of these items from the concerned countries. Another aspect concerns the quantum of duty levied. The WTO Agreements on Anti-dumping and Countervailing duties permit the importing countries to impose full margin of dumping and subsidisation as anti-dumping duty or countervailing duties but recommends levy of lesser amount as duty if such lesser amount is

adequate to remove the injury to the domestic industry. In other words, the Agreements recommend that the amount of duty imposed should be such it is adequate to remove the injury to the domestic industry as any amount in excess of that would only provide an undue protection to the domestic industry.

(ii) Anti-dumping cases against exports of textiles and clothing from India:

The list of anti-dumping cases against exports of textiles and clothing from India, name of the investigating country, product and date of initiation has been given in the table-8. The table indicates that EU has initiated large number of anti-dumping cases against T & C products of India. It means the developed countries are not only protecting their T & C market by tariff barriers but also through different non-tariff measures. Thus, a tariff reduction under the modalities of NAMA negotiation will not serve the purpose until and unless the problem of NTB is properly addressed.



**Table 8**  
**List of Anti-Dumping Cases against Exports from India**

Sr. No.	Name of the Investigating Country	Fibres/Yarns	Initiated
1	EU	PTY	21.9.2001
2	EU	Cotton Type Bed Linen	13.2.2002 Duty removed on 20.12.2003
3	EU	Polyester Textured Filament Yarn	23.8.1998
4	EU	Polyester Staple Fibre	N.A
5	EU	Synthetic Fibre Ropes	4.4.1996
6	EU	Synthetic Fibre Ropes-II	01.7.1997 Suo Moto under Article 5(6)
7	EU	Synthetic Fibres of Polyester	1.11.1990
8	EU	Unbleached Cotton Fabric	21.2.1996
9	EU	Unbleached Cotton Fabric-II	11.7.1997
10	Republic of Trinidad & Tobago	Polypropylene Ropes	18.5.1999
11	South Africa	Blankets	8.4.1998
12	South Africa	Blankets ( Sunset Review)	N.A
13	South Africa	Printed and Dyed Bed Linen	Art. 5.5 notice dated 7.4.1999
14	Turkey	Polyester Texturised Yarn (PTY)	4.3.1999
15	Turkey	PSF	22.2.2006
16	Venezuela	Readymade Garments	N.A

(Source: Directorate General of Anti-Dumping and Allied Duties Annual Report 2002-03)

#### 5.4. Export Subsidies & Domestic Support

Both export subsidies and domestic support have a great bearing on the trade of other countries. While export subsidies tend to displace exports from other countries into the third country markets, the domestic support acts as a direct barrier against access to the domestic market. Generally the developing countries hardly find resources to grant subsidies or domestic support. But developed countries like the European Union, US and Japan have been heavily subsidising their agricultural sector through schemes like export refunds, production support system and other intervention measures.

Under the Common Agricultural Policy, the EU subsidises European farmers upto \$4bn every year, which end up mostly into the pockets of rich landlords who really do not

need it. In 1992, Ray MacSharry, EU's agriculture commissioner calculated that 80% of the subsidies went to the richest 20% of farmers. For example, Queen Elizabeth receives annually \$352,000 for her Sandringham estate, and her daughter Anne receives \$128,000 annually for her Gatcombe Park farm. Even Arab princes owning estates in UK are receiving these doles. Saudi Prince Khalid Abdullah al Saud claimed \$192,000 for his country estate in Kent. (Asian Wall Street Journal, 11 December 1996).

The US Government provides farm subsidies of over \$20 bn. to its farmers. Some 23% of this subsidy is provided to cotton farmers. In other words, a subsidy of \$4.6 bn. is provided on a production of 23.9 mn. bales which amounts to a subsidy of \$192 on each bale of cotton produced. On the average sale price in New

York per bale being \$288, the provision of such a subsidy is clearly irrational. Besides, the direct subsidy to the cotton farmers, the US is also providing export related subsidies that are known as Stage-2 subsidies. With the US exporting 17.6 mn. bales out of its production of 23.9 mn. bales, this subsidy leads to artificial lowering of price across the world. China with its production of 26.2 mn. bales and consumption of 46.5 mn. bales, imports 20.3 mn. bales and is an indirect beneficiary of cotton subsidies being provided by the US government. China being a direct competitor of India, any undue benefit in the procurement of raw material indirectly affects Indian exports.

#### **World Cotton Production**

(Millions of 480-lb. Bales)

<b>Country</b>	<b>2004-05</b>	<b>2005-06</b>
China	29.0	26.2
United States	23.3	23.9
India	19.0	19.2
Pakistan	11.1	9.9
Brazil	5.9	4.7
Uzbekistan	5.2	5.6
African Franc Zone	5.0	4.2
Turkey	4.2	3.6
Australia	3.0	2.8
EU—25	2.3	2.5
Syria	1.6	1.5
Egypt	1.3	0.9
Turkmenistan	0.9	1.0
Tajikistan	0.8	0.6
Kazakhstan	0.7	0.7
Others	7.0	7.0
<b>World Total</b>	<b>120.3</b>	<b>114.1</b>

#### **World Cotton Consumption**

(Millions of 480-lb. Bales)

<b>Country</b>	<b>2004-05</b>	<b>2005-06</b>
China	38.5	46.5
United States	6.7	5.9
India	14.8	16.5
Pakistan	10.8	11.8
Brazil	4.2	4.1
Uzbekistan	0.9	0.8
Indonesia	2.2	2.2
Thailand	2.1	2.1
Bangladesh	1.9	2.2
EU—25	3.4	2.7
Mexico	2.1	2.0
Russia	1.4	1.5
Taiwan	1.2	1.2
South Korea	1.4	1.1
Uzbekistan	0.9	0.8
Others	10.3	10.0
<b>World Total</b>	<b>108.8</b>	<b>117.4</b>

5.5 Preferential Trade & Free trade Agreement and NAMA:

During 90s, free trade agreements and autonomous preferential arrangements have increasingly come into force in the international trade. Under these agreements the member countries provides special tariff reductions or duty-free treatments to imported products agreed upon. These special treatments provide T&C exporter countries with a significant competitive advantage. The empirical evidence of textile & clothing imports from countries benefiting from the USA's free trade agreements and preferential access shows that the schemes accounted for 30 percent of all imports in 2004; compared with only 14 percent in 1990. The countries like Mexico and some African countries has increased their export of T&C following the signing of NAFTA and AGOA by many times taking the advantage of preferential agreements. Mexico's share of US textile &

clothing imports soared almost six fold between 1990 & 2000 from 2.4 percent to 13.5 percent before declining to 9.4 percent in 2004. Similarly, the share of countries benefiting from the African Growth and Opportunity Act (AGOA) rose more than threefold from 0.7 percent in 1990 to 2.27 percent in 2004.

By contract, the country that does not enjoy preferential trade arrangement with US has suffered during the period. Indonesia's share has increased only 0.7 percentage points, from 2.5% to 3.2% between 1990 and 2004 and India's share increased from 2.8% to 4% only during that period due to lack of preferential trade agreement. Even the share of imports under preferential deals in international trade on 2004 ranged from 96 percent from Mexico to 37 percent for Nicaragua.

The study of EU market is also shown the same picture. The share of countries like Morocco, Romania, Tunisia & Turkey has increased from 16.7 percent in 1990 to 27.5 percent in 2003 to EU due to preferential trade agreements (PTA). The present trend in the international trade has indicated that the developed countries like US, EU are increasingly resorting to the PTA & FTA so as to secure their own interest. If this trend continues in future it could have a far-reaching consequences on the WTO negotiations on NAMA. The present negotiations for tariff reduction under WTO framework may not able to effectively safeguard the export interest of developing countries including India. The tariff rate for the countries having FTA & PTA agreements

would be less than the countries without these agreements. In this circumstances the uniformity in tariff rate as expected under NAMA negotiations could not be restored; the ultimate losers will be developing countries as the developed countries could use FTA & PTA for their own advantage by undermining the NAMA negotiation.

Preferential schemes such as CBI, AGOA, GSP Plus etc promote the export of various textiles and clothing items from countries such as Sri Lanka who are able to export these items at zero percent import duty into the European Union and USA. Such schemes promote exports of eligible countries at the cost of others who are also in the category of developing countries or least developed countries. These schemes have adverse impact on the exports of such countries and in a way they are made to pay for the benefits, which are conferred on beneficiary countries.

## **6 Conclusion:**

According to the traditional theory while opening up to trade is mutually beneficial, the distribution of its benefits among trading partners is indeterminate and susceptible to influence. Being labour intensive, Textiles and Clothing Sector has historically been a subject of all kinds of controls and regulations. This sector has always received a treatment, which is different from other industrial manufactured goods. Till 1994, developed countries used to employ quotas to restrict imports from developing countries and these quotas were phased out under the Multi Fibre Agreement. Now the free flow of trade is being restricted

through the mechanism of tariff and non-tariff barriers. The developed countries had made two important commitments under Doha Round of Negotiations, i.e., labeling it as a development round and agreeing to less than full reciprocity from developing countries. Developing countries were attracted by this commitment that this round will place due emphasis on their development. The original estimates had indicated that the gains from liberalization in various areas will be to the tune of US \$ 510 bn. a year. These estimates have been lowered progressively as the round has progressed. Certainly there is considerable power play in current negotiations in the WTO. But if these negotiations are to live up to the expectation of most of the member countries, industrial tariff cuts should be so designed as to provide maximum benefits to have-nots than haves. The developed countries, therefore, should not use tariffs on industrial products of export interest to developing countries in labour-intensive sectors as bargaining chips. Historically, all countries including USA have employed higher tariffs during the periods of their development. The average tariffs in USA during 1850-1910 were much higher than the prevalent tariffs in the UK. In fact at the same stage of development tariffs in USA were four times higher than China. However, the developed countries seem to be denying their right to the developing countries. As part of unfinished business,

such tariffs should be cut to the maximum degree and as rapidly as possible irrespective of the commitments to be undertaken by developing countries. UNCTAD (1999: 137044) estimated that rolling back of protectionism in this area could create additional export earnings of up to \$ 700 billion for developing countries, to be realizable over a 10-year period. This is less than 5 per cent of the combined GDP of industrial countries, but could absorb an important part of unemployed labour in the south and generate a vent for surplus. The negotiations which seemed to be on track till the Hong Kong Ministerial Conference of December 2005, were derailed when the US and EU failed to show any flexibilities in their stand particularly in respect of agricultural subsidies. This suspension of trade talks has been detrimental to the growth in exports of textiles and clothing items from developing countries. Another fall out of this suspension has been shifting of emphasis from multilateral trade talks to regional and country-to-country trade agreements. Being the weaker partners, developing countries stand to lose in such agreements with the developed countries. However, authors are hopeful that WTO negotiations will continue in some form or the other. It is also expected that whenever these negotiations are resumed, the progress made in the last five years will be built upon.

## Notes

- 1** July framework was accepted by the WTO member countries on July, 2004 for bringing the Doha round of negotiation back into track.
- 2** Linear formula stipulate, tariffs cut by a certain rate regardless of their levels.
- 3** Non Linear formula: Cuts higher tariffs at higher rates, there by bringing harmonisation both across countries and tariff lines
- 4** Trade Related Investment Measures
- 5** Trade Related Aspects of intellectual Property Rights included as a part of WTO negotiation or more than 3 times the national average tariff.
- 6** Peak Tariff: Tariff rate more than 15 percent as stipulated under WTO negotiations.
- 7** Tariff Escalation: Tariff rates is high for finished products and low for raw materials and intermediate products
- 8** Tariff rate for starting negotiations under WTO framework is termed as Base Rate.
- 9** Formula Approach: WTO Member countries have proposed different formula for tariff cut on NAP i.e. Swiss & Girard formula.
- 10** Non-Linear Approach: Reduces higher tariff by greater rate than lower tariff rate.
- 11** In the Uruguay Round of Trade Negotiation, held on the auspices of GAAT – the predecessor of the WTO – members made commitments to reduce or cut their customs duty rates over several years and to notify those cuts to the WTO. The focus was also on reducing the amount of products with particular high duty on tariff peaks. The agreed reduction was listed as commitments.
- 12** WTO notification stipulated that “An applied tariff rate” must not exceed the bound tariff rate. However, a country may bind a tariff at a higher rate than the actual rate in operation at the time, giving it the freedom to raise the tariff as high as the bound rate if it chooses to do so.
- 13** Swiss harmonised formula has been proposed by Switzerland for tariff reduction in NAP under WTO framework.
- 14** Girard formula has been proposed by NAMA chairman Pierre Louis Girard.
- 15** Coefficient (C): A Unique value to be decided by member countries of WTO.
- 16** SAARC: South Asian Association of Regional Co-operation includes India, Pakistan, Bangladesh, Sri-Lanka, Maldives, Nepal and Bhutan.
- 17** Draft Ministerial text was prepared and released by WTO on 26<sup>th</sup> November 2005 for the sixth ministerial conference at Hong Kong.
- 18** NTB: Any restrictions imposed on the free flow of trade other than tariff barriers

## References:

- Akyuz, Yilmaz (ed) (2003): *Developing Countries and World Trade: Performance and Prospects*, Zed Books, London
- Akyuz Yilmaz, Richard Kozul-Wright and Joerg Mayer (2004) 'Trade and Industrial Upgrading: Catching Up and Dalling Behind' in Will Milberg (ed), *Labour and the Globalisation of Production: Causes and Consequences of Industrial Upgrading*, Palgrave Macmillan, New York.
- Akyuz, Yilmaz (2005): *WTO Negotiations on Industrial Tariffs (Special Article) Economic and Political Weekly*, November 2005
- Anderson, Kym (2004): 'Subsidies and Trade Barriers', *Copenhagen Consensus Challenge Paper*, Centre for International Economic Studies, University of Adelaide.
- Arvind Virmani, Bishwanath Goldar, Choorikkad Veeramani and Vipul Bhatt (2004): 'Impact of Tariff Reforms on Indian Industry: Assessment based on a Multi-sector Econometric Model', working paper no.135, ICRIER, New Delhi.
- Address by Mr. Kamal Nath, Minister of Commerce and Industry at the UNCTAD stakeholder's consultations on NAMA. New Delhi, June 28, 2005.
- Brown, Drusilla, Alan Deardorff and Robert Stern (2001): 'CGE Modelling and Analysis of Multilateral and Regional Negotiating Options'. University of Michigan, School of Public Policy Research Seminar in International Economics, Discussion Paper, 468.
- Cline, William R (1983): 'Reciprocity: A New Approach to World Trade Policy' in W R Cline (ed), *Trade Policy in the 1980s*, Institute for International Economics, Washington DC.
- Das, Bhagirath L (1998): *An Introduction to the WTO Agreements*, TWN, Penang, Malaysia.
- Draft Ministerial text for 6<sup>th</sup> Ministerial Conference at Hong Kong released on 26<sup>th</sup> Nov, 2005. WTO.
- Hildegunn Kyvik Nordas (2004): 'The Global Textile and Clothing Industry Post The Agreement on Textiles and Clothing', discussion paper no.5, WTO, Geneva.
- Khor, Martin and Goh Chien Yen (2004): 'The WTO Negotiations on Non-Agricultural Market Access: A Development Perspective', TWN, Geneva.
- Laird, S, S F Fernandez de Cordoba and D. Vanzetti (2003) : 'Market Access Proposals for Non- Agricultural Products', UNCTAD Geneva.
- Mehta, R (2001): 'WTO, Liberalisation and Industrial Sector: The Case of Market Access', RIS occasional paper No.63.
- Mehta R and S.K.Mohanty (2001): *WTO and Industrial Tariff: An Empirical Analysis for India*, Reprint RIS.
- Mohammed Saqib and Nisha Taneja (2005): 'Non Tariff Barriers and India's Exports: The Case of ASEAN and Sri Lanka', working paper no.165, ICRIER, New Delhi.
- Munir Ahmad (2005): 'Market Access in Textiles and Clothing: Linkages Between Trade and Trade Policy', *Textile Outlook International* May-June.
- Speech by WTO Director General Supachi Panitchpadi, at the conference on the future of the textiles and clothing after 2005. Brussels, 5 may 2003.
- Saved by the Uruguay round, Swaminathan S Anklesari Aiyar, *The Hindu*
- UNCTAD (Various issues), *Trade and Development Report*, United Nations, Geneva
- Wade, Robert (2003): *Governing the Market*, Princeton University Press.

WTO (2003): 'Draft Elements of Modalities for Negotiations on Non-Agricultural Products', TN/MA/W/35 and TN/MA/W/35/rev 1, WTO, Geneva

WTO (2001), US Trade Policy Review, Geneva

(2002): 'Closed Jaguar, Open Dragon: Comparing Tariffs in Latin America and Asia Before Second World War', NBER Working Paper, 9401.

(2004a): 'Coherence in Global Economic Policy-making and Co-operation between the WTO, the IMF and the World Bank', WT/TF/COH/S/7, WTO, Geneva.

(2004b): 'Doha Work Programme', Draft Work Programme', Draft General Council Decision of July 31, 2004, WT/GC/W/535, WTO, Geneva.

(2005): 'NAMA Negotiations in the WTO: Binding of Tariff and Tariff Reduction Process' TWN, Geneva.

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## Tariff Cut Using Swiss Formula With Different Coefficients : INDIA

HS line	Bound Rate 2005	Statutory Rate 2002	C=8		C=10		C=15		C=20	
			New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
610461	n/a									
610462	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
610463	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
610510	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
610520	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
610590	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
610610	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
610620	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
610690	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
610910	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
610990	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
610990	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
611010	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
611020	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
611030	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620111	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620112	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620113	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
620191	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620192	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620193	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620193	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620211	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620212	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620213	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620291	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620292	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620293	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620293	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620341	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620342	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620343	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620349	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67



## APPENDIX - 1

## Tariff Cut Using Swiss Formula With Different Coefficients : INDIA

HS line	Bound Rate 2005	Statutory Rate 2002	C=8		C=10		C=15		C=20	
			New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
620431	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
620432	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620433	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
620439	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
620441	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620442	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620443	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620444	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620451	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620452	n/a	30								
620453	n/a	30								
620459	n/a	30								
620461	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
620462	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620463	n/a	30								
620469	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620510	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
620520	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
620530	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
620620	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
620630	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
620640	40	30	6.67	83.33	8.00	80.00	10.91	72.73	13.33	66.67
621210	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
630231	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
630231	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
630232	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
630232	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
630260	35	30	6.51	81.40	7.78	77.78	10.50	70.00	12.73	63.64
<b>Ave %</b>		<b>36.07</b>	<b>6.54</b>	<b>81.86</b>	<b>7.83</b>	<b>78.31</b>	<b>10.59</b>	<b>70.65</b>	<b>12.86</b>	<b>64.36</b>
511111	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
511211	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
520812	n/a	30								
520942	30	30	6.32	78.95	7.50	75.00	10.00	66.67	12.00	60.00
521031	n/a									
521041	30	30	6.32	78.95	7.50	75.00	10.00	66.67	12.00	60.00

## Tariff Cut Using Swiss Formula With Different Coefficients : INDIA

HS line	Bound Rate 2005	Statutory Rate 2002	C=8		C=10		C=15		C=20	
			New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
521051	30	30	6.32	78.95	7.50	75.00	10.00	66.67	12.00	60.00
540761	30	25	6.32	78.95	7.50	75.00	10.00	66.67	12.00	60.00
551311	n/a									
551614	30		6.32	78.95	7.50	75.00	10.00	66.67	12.00	60.00
551622	25		6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
551624	30		6.32	78.95	7.50	75.00	10.00	66.67	12.00	60.00
510610	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
510710	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
520511	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
520512	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
520513	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
520522	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
540210	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
540220	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
540232	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
540241	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
550911	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
550921	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
550931	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
550932	20	20	5.71	71.43	6.67	66.67	8.57	57.14	10.00	50.00
Average reduction (%)	32.34			79.55		75.73		67.64		61.14

APPENDIX - 2

Tariff Cut Using Swiss Formula With Different Coefficients : Pakistan

HS line	Bound Rate 2002	Statutory Rate 2001	C=8		C=10		C=15		C=20	
			New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
610461	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610462	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610463	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610510	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610520	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610590	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610610	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610620	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610690	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610910	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610990	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
610990	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
611010	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
611020	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
611030	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620111	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620112	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620113	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620191	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620192	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620193	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620193	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620211	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620212	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620213	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620291	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620292	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620293	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620293	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620341	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620342	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620343	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620349	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620431	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620432	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56

## APPENDIX - 2

## Tariff Cut Using Swiss Formula With Different Coefficients : Pakistan

HS line	Bound Rate 2002	Statutory Rate 2001	C=8		C=10		C=15		C=20	
			New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
620433	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620439	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620441	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620442	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620443	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620444	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620451	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620452	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620453	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620459	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620461	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620462	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620463	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620469	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620510	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620520	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620530	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620620	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620630	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
620640	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
621210	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
630231	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
630231	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
630232	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
630232	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
630260	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
<b>Ave %</b>	<b>25.00</b>		<b>6.06</b>	<b>75.76</b>	<b>7.14</b>	<b>71.43</b>	<b>9.38</b>	<b>62.50</b>	<b>11.11</b>	<b>55.56</b>
511111	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
511211	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
520812	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
520942	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
521031	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
521041	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
521051	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
540761	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
551311	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
551614	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
551622	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56

## APPENDIX - 2

## Tariff Cut Using Swiss Formula With Different Coefficients : Pakistan

HS line	Bound Rate 2002	Statutory Rate 2001	C=8		C=10		C=15		C=20	
			New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
551624	25	30	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
510610	5	10	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
510710	5	10	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520511	5	10	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520512	5	10	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520513	5	10	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520522	5	10	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
540210	15	20	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
540220	25	20	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
540232	15	20	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
540241	15	20	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
550911	15	20	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
550921	15	20	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
550931	15	20	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
550932	15	20	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
Average reduction (%)				72.38		67.92		58.95		52.12

## Tariff Cut Using Swiss Formula With Different Coefficients : Sri Lanka

HS line	Bound Rate 2000	Statutory Rate 2001	C=8		C=10		C=15		C=20	
			New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
610461	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610462	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610463	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610510	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610520	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610590	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610610	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610620	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610690	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610910	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610990	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
610990	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
611010	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
611020	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
611030	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620111	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620112	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620113	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620191	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620192	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620193	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620193	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620211	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620212	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620213	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620291	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620292	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620293	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620293	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620341	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620342	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620343	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620349	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620431	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620432	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620433	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67

## Tariff Cut Using Swiss Formula With Different Coefficients : Sri Lanka

HS line	Bound Rate 2000	Statutory Rate 2001	C=8		C=10		C=15		C=20	
			New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
620439	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620441	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620442	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620443	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620444	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620451	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620452	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620453	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620459	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620461	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620462	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620463	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620469	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620510	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620520	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620530	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620620	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620630	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620640	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
621210	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
630231	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
630231	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
630232	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
630232	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
630260	17.5	10	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
<b>Ave %</b>	<b>17.50</b>		<b>5.49</b>	<b>68.63</b>	<b>6.36</b>	<b>63.64</b>	<b>8.08</b>	<b>53.85</b>	<b>9.33</b>	<b>46.67</b>
511111	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
511211	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
520812	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
520942	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
521031	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
521041	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
521051	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
540761	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
551311	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
551614	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
551622	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33

**APPENDIX - 3**

**Tariff Cut Using Swiss Formula With Different Coefficients : Sri Lanka**

HS line	Bound Rate 2000	Statutory Rate 2001	C=8		C=10		C=15		C=20	
			New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
551624	10	0	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
510610	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
510710	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520511	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520512	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520513	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520522	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
540210	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
540220	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
540232	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
540241	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
550911	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
550921	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
550931	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
550932	5	0	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
<b>Average reduction (%)</b>			<b>62.05</b>		<b>56.96</b>		<b>47.37</b>		<b>40.61</b>	



**APPENDIX - 4**

**Tariff Cut Using Swiss Formula With Different Coefficients : Bangladesh**

HS line	Applied Rate 1999	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
610461	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610462	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610463	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610510	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610520	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610590	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610610	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610620	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610690	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610910	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610990	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
610990	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
611010	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
611020	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
611030	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620111	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620112	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620113	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620191	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620192	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620193	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620193	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620211	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620212	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620213	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620291	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620292	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620293	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620293	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620341									
620342	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620343	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620349	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620431	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620432	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620433	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22

APPENDIX - 4

Tariff Cut Using Swiss Formula With Different Coefficients : Bangladesh

HS line	Applied Rate 1999	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
620439	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620441	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620442	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620443	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620444	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620451	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620452	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620453	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620459	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620461	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620462	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620463	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620469	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620510	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620520	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620530	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620620	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620630	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
620640	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
621210	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
630231	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
630231	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
630232	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
630232	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
630260	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
<b>Ave %</b>	<b>37.50</b>	<b>6.59</b>	<b>82.42</b>	<b>7.89</b>	<b>78.95</b>	<b>10.71</b>	<b>71.43</b>	<b>13.04</b>	<b>65.22</b>
511111	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
511211	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
520812	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
520942	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
521031	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
521041	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
521051	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
540761	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
551311	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
551614	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22

**APPENDIX - 4**

**Tariff Cut Using Swiss Formula With Different Coefficients : Bangladesh**

HS line	Applied Rate 1999	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
551622	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
551624	37.5	6.59	82.42	7.89	78.95	10.71	71.43	13.04	65.22
510610	5	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
510710	5	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520511	5	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520512	5	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520513	5	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
520522	5	3.08	38.46	3.33	33.33	3.75	25.00	4.00	20.00
540210	15	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
540220	15	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
540232	15	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
540241	15	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
550911	15	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
550921	15	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
550931	15	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
550932	15	5.22	65.22	6.00	60.00	7.50	50.00	8.57	42.86
<b>Average reduction (%)</b>		<b>77.86</b>		<b>74.11</b>		<b>66.31</b>		<b>60.10</b>	

**APPENDIX - 5**

**Tariff Cut Using Swiss Formula With Different Coefficients : US**

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
610461	14.9	5.21	65.07	5.98	59.84	7.47	49.83	8.54	42.69
610462	14.9	5.21	65.07	5.98	59.84	7.47	49.83	8.54	42.69
610463	28.2	6.23	77.90	7.38	73.82	9.79	65.28	11.70	58.51
610510	19.7	5.69	71.12	6.63	66.33	8.52	56.77	9.92	49.62
610520	32	6.40	80.00	7.62	76.19	10.21	68.09	12.31	61.54
610590	14.9	5.21	65.07	5.98	59.84	7.47	49.83	8.54	42.69
610610	19.7	5.69	71.12	6.63	66.33	8.52	56.77	9.92	49.62
610620	32	6.40	80.00	7.62	76.19	10.21	68.09	12.31	61.54
610690	13.6	5.04	62.96	5.76	57.63	7.13	47.55	8.10	40.48
610910	16.5	5.39	67.35	6.23	62.26	7.86	52.38	9.04	45.21
610990	32	6.40	80.00	7.62	76.19	10.21	68.09	12.31	61.54
610990	5.6	3.29	41.18	3.59	35.90	4.08	27.18	4.38	21.88
611010	16	5.33	66.67	6.15	61.54	7.74	51.61	8.89	44.44
611020	16.5	5.39	67.35	6.23	62.26	7.86	52.38	9.04	45.21
611030	32	6.40	80.00	7.62	76.19	10.21	68.09	12.31	61.54
620111	16.3	5.37	67.08	6.20	61.98	7.81	52.08	8.98	44.90
620112	9.4	4.32	54.02	4.85	48.45	5.78	38.52	6.39	31.97
620113	27.7	6.21	77.59	7.35	73.47	9.73	64.87	11.61	58.07
620191	19.7	5.69	71.12	6.63	66.33	8.52	56.77	9.92	49.62
620192	9.4	4.32	54.02	4.85	48.45	5.78	38.52	6.39	31.97
620193	7.1	3.76	47.02	4.15	41.52	4.82	32.13	5.24	26.20
620193	27.7	6.21	77.59	7.35	73.47	9.73	64.87	11.61	58.07
620211	16.3	5.37	67.08	6.20	61.98	7.81	52.08	8.98	44.90
620212	8.9	4.21	52.66	4.71	47.09	5.59	37.24	6.16	30.80
620213	27.7	6.21	77.59	7.35	73.47	9.73	64.87	11.61	58.07
620291	16.3	5.37	67.08	6.20	61.98	7.81	52.08	8.98	44.90
620292	8.9	4.21	52.66	4.71	47.09	5.59	37.24	6.16	30.80
620293	7.1	3.76	47.02	4.15	41.52	4.82	32.13	5.24	26.20
620293	27.7	6.21	77.59	7.35	73.47	9.73	64.87	11.61	58.07
620341	16.3	5.37	67.08	6.20	61.98	7.81	52.08	8.98	44.90
620342	16.6	5.40	67.48	6.24	62.41	7.88	52.53	9.07	45.36
620343	27.9	6.22	77.72	7.36	73.61	9.76	65.03	11.65	58.25
620349	27.9	6.22	77.72	7.36	73.61	9.76	65.03	11.65	58.25
620431	17.5	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67

APPENDIX - 5

Tariff Cut Using Swiss Formula With Different Coefficients : US

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
620432	9.4	4.32	54.02	4.85	48.45	5.78	38.52	6.39	31.97
620433	27.3	6.19	77.34	7.32	73.19	9.68	64.54	11.54	57.72
620439	27.3	6.19	77.34	7.32	73.19	9.68	64.54	11.54	57.72
620441	13.6	5.04	62.96	5.76	57.63	7.13	47.55	8.10	40.48
620442	8.4	4.10	51.22	4.57	45.65	5.38	35.90	5.92	29.58
620443	16	5.33	66.67	6.15	61.54	7.74	51.61	8.89	44.44
620444	16	5.33	66.67	6.15	61.54	7.74	51.61	8.89	44.44
620451	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18
620452	8.2	4.05	50.62	4.51	45.05	5.30	35.34	5.82	29.08
620453	16	5.33	66.67	6.15	61.54	7.74	51.61	8.89	44.44
620459	16	5.33	66.67	6.15	61.54	7.74	51.61	8.89	44.44
620461	13.6	5.04	62.96	5.76	57.63	7.13	47.55	8.10	40.48
620462	16.6	5.40	67.48	6.24	62.41	7.88	52.53	9.07	45.36
620463	28.6	6.25	78.14	7.41	74.09	9.84	65.60	11.77	58.85
620469	28.6	6.25	78.14	7.41	74.09	9.84	65.60	11.77	58.85
620510	17.5	5.49	68.63	6.36	63.64	8.08	53.85	9.33	46.67
620520	19.7	5.69	71.12	6.63	66.33	8.52	56.77	9.92	49.62
620530	25.9	6.11	76.40	7.21	72.14	9.50	63.33	11.29	56.43
620620	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620630	15.4	5.26	65.81	6.06	60.63	7.60	50.66	8.70	43.50
620640	26.9	6.17	77.08	7.29	72.90	9.63	64.20	11.47	57.36
621210	16.9	5.43	67.87	6.28	62.83	7.95	52.98	9.16	45.80
630231	20.9	5.79	72.32	6.76	67.64	8.73	58.22	10.22	51.10
630231	6.7	3.65	45.58	4.01	40.12	4.63	30.88	5.02	25.09
630232	14.9	5.21	65.07	5.98	59.84	7.47	49.83	8.54	42.69
630232	11.4	4.70	58.76	5.33	53.27	6.48	43.18	7.26	36.31
630260	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
<b>Ave %</b>	<b>18.14</b>	<b>5.34</b>	<b>70.58</b>	<b>6.18</b>	<b>65.92</b>	<b>7.86</b>	<b>56.69</b>	<b>9.11</b>	<b>49.80</b>
511111	25	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
511211	25	6.06	75.76	7.14	71.43	9.38	62.50	11.11	55.56
520812	10.5	4.54	56.76	5.12	51.22	6.18	41.18	6.89	34.43
520942	8.4	4.10	51.22	4.57	45.65	5.38	35.90	5.92	29.58
521031	15.5	5.28	65.96	6.08	60.78	7.62	50.82	8.73	43.66
521041	15.5	5.28	65.96	6.08	60.78	7.62	50.82	8.73	43.66
521051	15.5	5.28	65.96	6.08	60.78	7.62	50.82	8.73	43.66
540761	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37

**APPENDIX - 5**

**Tariff Cut Using Swiss Formula With Different Coefficients : US**

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
551311	14.9	5.21	65.07	5.98	59.84	7.47	49.83	8.54	42.69
551614	10	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
551622	14.9	5.21	65.07	5.98	59.84	7.47	49.83	8.54	42.69
551624	14.9	5.21	65.07	5.98	59.84	7.47	49.83	8.54	42.69
510610	6	3.43	42.86	3.75	37.50	4.29	28.57	4.62	23.08
510710	6	3.43	42.86	3.75	37.50	4.29	28.57	4.62	23.08
520511	3.7	2.53	31.62	2.70	27.01	2.97	19.79	3.12	15.61
520512	5.2	3.15	39.39	3.42	34.21	3.86	25.74	4.13	20.63
520513	6.5	3.59	44.83	3.94	39.39	4.53	30.23	4.91	24.53
520522	7.3	3.82	47.71	4.22	42.20	4.91	32.74	5.35	26.74
540210	8.8	4.19	52.38	4.68	46.81	5.55	36.97	6.11	30.56
540220	8.8	4.19	52.38	4.68	46.81	5.55	36.97	6.11	30.56
540232	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
540241	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
550911	9.4	4.32	54.02	4.85	48.45	5.78	38.52	6.39	31.97
550921	9.7	4.38	54.80	4.92	49.24	5.89	39.27	6.53	32.66
550931	9	4.24	52.94	4.74	47.37	5.63	37.50	6.21	31.03
550932	10	4.44	55.56	5.00	50.00	6.00	40.00	6.67	33.33
<b>Average reduction (%)</b>		<b>63.51</b>		<b>58.51</b>		<b>49.04</b>		<b>42.31</b>	

## APPENDIX - 6

## Tariff Cut Using Swiss Formula With Different Coefficients : EU

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
		610461	12	4.80	60.00	5.45	54.55	6.67	44.44
610462	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610463	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610510	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610520	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610590	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610610	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610620	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610690	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610910	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610990	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
610990	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
611010	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
611020	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
611030	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620111	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620112	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620113	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620191	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620192	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620193	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620193	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620211	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620212	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620213	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620291	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620292	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620293	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620293	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620341	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620342	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620343	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620349	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620431	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50

## APPENDIX - 6

## Tariff Cut Using Swiss Formula With Different Coefficients : EU

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
620432	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620433	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620439	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620441	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620442	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620443	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620444	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620451	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620452	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620453	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620459	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620461	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620462	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620463	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620469	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620510	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620520	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620530	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620620	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620630	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
620640	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
621210	6.5	3.59	44.83	3.94	39.39	4.53	30.23	4.91	24.53
630231	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
630231	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
630232	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
630232	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
630260	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
<b>Ave %</b>	<b>11.91</b>	<b>4.78</b>	<b>59.86</b>	<b>5.43</b>	<b>54.41</b>	<b>6.63</b>	<b>44.32</b>	<b>7.46</b>	<b>37.38</b>
511111	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
511211	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
520812	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
520942	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
521031	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
521041	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
521051	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
540761	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
551311	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57



**APPENDIX - 6**

**Tariff Cut Using Swiss Formula With Different Coefficients : EU**

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
551614	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
551622	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
551624	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
510610	3.8	2.58	32.20	2.75	27.54	3.03	20.21	3.19	15.97
510710	3.8	2.58	32.20	2.75	27.54	3.03	20.21	3.19	15.97
520511	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
520512	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
520513	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
520522	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
540210	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
540220	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
540232	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
540241	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
550911	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
550921	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
550931	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
550932	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
<b>Average reduction (%)</b>		<b>54.19</b>		<b>48.84</b>		<b>39.22</b>		<b>32.80</b>	

**APPENDIX - 7**

**Tariff Cut Using Swiss Formula With Different Coefficients : Japan**

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
610461	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610462	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610463	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610510	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610520	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610590	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610610	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610620	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610690	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610910	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610990	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
610990	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
611010	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
611020	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
611030	10.9	4.61	57.67	5.22	52.15	6.31	42.08	7.06	35.28
620111	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620112	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620113	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620191	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620192	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620193	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620193	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620211	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620212	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620213	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620291	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620292	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620293	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620293	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620341	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620342	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620343	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620349	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27

**APPENDIX - 7**

**Tariff Cut Using Swiss Formula With Different Coefficients : Japan**

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
620431	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620432	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620433	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620439	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620441	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620442	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620443	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620444	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620451	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620452	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620453	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620459	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620461	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620462	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620463	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620469	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620510	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620520	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620530	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620620	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620630	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
620640	9.1	4.26	53.22	4.76	47.64	5.66	37.76	6.25	31.27
621210	8.4	4.10	51.22	4.57	45.65	5.38	35.90	5.92	29.58
630231	4.5	2.88	36.00	3.10	31.03	3.46	23.08	3.67	18.37
630231	4.5	2.88	36.00	3.10	31.03	3.46	23.08	3.67	18.37
630232	5.3	3.19	39.85	3.46	34.64	3.92	26.11	4.19	20.95
630232	5.3	3.19	39.85	3.46	34.64	3.92	26.11	4.19	20.95
630260	7.4	3.84	48.05	4.25	42.53	4.96	33.04	5.40	27.01
<b>Ave %</b>	<b>9.23</b>	<b>4.26</b>	<b>53.89</b>	<b>4.77</b>	<b>48.35</b>	<b>5.68</b>	<b>38.47</b>	<b>6.28</b>	<b>31.95</b>
511111	5.3	3.19	39.85	3.46	34.64	3.92	26.11	4.19	20.95
511211	5.3	3.19	39.85	3.46	34.64	3.92	26.11	4.19	20.95
520812	3.7	2.53	31.62	2.70	27.01	2.97	19.79	3.12	15.61
520942	3.7	2.53	31.62	2.70	27.01	2.97	19.79	3.12	15.61
521031	3.7	2.53	31.62	2.70	27.01	2.97	19.79	3.12	15.61
521041	3.7	2.53	31.62	2.70	27.01	2.97	19.79	3.12	15.61
521051	3.7	2.53	31.62	2.70	27.01	2.97	19.79	3.12	15.61

**APPENDIX - 7**

**Tariff Cut Using Swiss Formula With Different Coefficients : Japan**

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
		540761	5.7	3.33	41.61	3.63	36.31	4.13	27.54
551311	7.1	3.76	47.02	4.15	41.52	4.82	32.13	5.24	26.20
551614	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
551622	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
551624	4	2.67	33.33	2.86	28.57	3.16	21.05	3.33	16.67
510610	2.7	2.02	25.23	2.13	21.26	2.29	15.25	2.38	11.89
510710	2.7	2.02	25.23	2.13	21.26	2.29	15.25	2.38	11.89
520511	5.6	3.29	41.18	3.59	35.90	4.08	27.18	4.38	21.88
520512	5.6	3.29	41.18	3.59	35.90	4.08	27.18	4.38	21.88
520513	5.6	3.29	41.18	3.59	35.90	4.08	27.18	4.38	21.88
520522	5.6	3.29	41.18	3.59	35.90	4.08	27.18	4.38	21.88
540210	6.6	3.62	45.21	3.98	39.76	4.58	30.56	4.96	24.81
540220	6.6	3.62	45.21	3.98	39.76	4.58	30.56	4.96	24.81
540232	6.6	3.62	45.21	3.98	39.76	4.58	30.56	4.96	24.81
540241	5.3	3.19	39.85	3.46	34.64	3.92	26.11	4.19	20.95
550911	6.6	3.62	45.21	3.98	39.76	4.58	30.56	4.96	24.81
550921	6.6	3.62	45.21	3.98	39.76	4.58	30.56	4.96	24.81
550931	6.6	3.62	45.21	3.98	39.76	4.58	30.56	4.96	24.81
550932	6.6	3.62	45.21	3.98	39.76	4.58	30.56	4.96	24.81
<b>Average reduction (%)</b>			<b>48.82</b>		<b>43.44</b>		<b>34.10</b>		<b>28.08</b>

**APPENDIX - 8**

**Tariff Cut Using Swiss Formula With Different Coefficients : Canada**

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
		610461	18	5.54	69.23	6.43	64.29	8.18	54.55
610462	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610463	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610510	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610520	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610590	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610610	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610620	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610690	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610910	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610990	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
610990	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
611010	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
611020	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
611030	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620111	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620112	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620113	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620191	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620192	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620193	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620193	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620211	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620212	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620213	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620291	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620292	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620293	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620293	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620341	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620342	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620343	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620349	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37

**APPENDIX - 8**

**Tariff Cut Using Swiss Formula With Different Coefficients : Canada**

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
		620431	18	5.54	69.23	6.43	64.29	8.18	54.55
620432	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620433	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620439	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620441	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620442	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620443	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620444	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620451	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620452	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620453	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620459	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620461	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620462	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620463	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620469	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620510	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620520	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620530	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620620	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
620630	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
620640	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
621210	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
630231	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
630231	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
630232	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
630232	18	5.54	69.23	6.43	64.29	8.18	54.55	9.47	47.37
630260	17	5.44	68.00	6.30	62.96	7.97	53.13	9.19	45.95
<b>Ave %</b>	<b>17.69</b>	<b>5.51</b>	<b>68.86</b>	<b>6.39</b>	<b>63.89</b>	<b>8.12</b>	<b>54.12</b>	<b>9.39</b>	<b>46.94</b>
511111	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18
511211	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18
520812	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
520942	12	4.80	60.00	5.45	54.55	6.67	44.44	7.50	37.50
521031	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18
521041	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18
521051	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18

**APPENDIX - 8**

**Tariff Cut Using Swiss Formula With Different Coefficients : Canada**

HS line	Bound Rate 2004	C=8		C=10		C=15		C=20	
		New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change	New Tariff Rate	% change
		540761	14	5.09	63.64	5.83	58.33	7.24	48.28
551311	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18
551614	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18
551622	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18
551624	14	5.09	63.64	5.83	58.33	7.24	48.28	8.24	41.18
510610	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
510710	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
520511	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
520512	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
520513	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
520522	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
540210	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
540220	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
540232	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
540241	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
550911	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
550921	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
550931	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
550932	8	4.00	50.00	4.44	44.44	5.22	34.78	5.71	28.57
<b>Average reduction (%)</b>		<b>65.06</b>		<b>59.94</b>		<b>50.15</b>		<b>43.14</b>	