Mapping and Analysis of Agricultural Trade Liberalization in South Asia

Introduction

- •The SAEs represents 22% of world population but only 1.5 % of world GDP and just over 1% of world trade.
- In 2003 SAEs agricultural trade amounted to US\$ 26 billion (Approximately 4% of world agricultural trade).
- During the 1970s, SAEs had highly protected trade regimes supported with high tariffs, Non-Tariff Barriers (NTBs) and stringent controls on exchange.
- During 1980s, the hitherto inward looking policies of SAE took a marked shift towards outward looking policies.
- During 1980s and 1990s, the tariff structures of these economies were made into simple and the number of tariff bands was reduced.

- During the first ten years (1995-2004) since the establishment of the WTO, the involvement of SAEs in regional trading arrangements has rapidly expanded. (Figure 1)
- The SAEs, similar to other developing countries, had been taxing agricultural activities directly through tax polices and indirectly through economy-wide policies.
- However, the changes in economic polices in 1980s and early 1990s did not totally change the direct protectionist policies and relatively higher tariff rates were applied on agricultural commodities.
- The institutional developments related to trade in the South Asian region have paved way to some liberalization of agricultural trade.

Figure 1: BTAs, RTAs in Force and Potential RTAs in the Asia Pacific Region ASEAN+China+Jap an+Korea ASEAN + South Korea China BA China **SAPTA ASEAN** Laos Bhutan Bangladesh Nepal *India _ Pakistan y Myanmar Cambodia Sri Lank Maldives **⊻**ietnam Brunei Thailand / Malaysia Philippines Indonesia BIMST-EC Singapore 4 Mauritius South Africa Kenya Oman Japan Australia Tanzania Yemen Madagascar ÙS Zealand Mozambique **BTAs IOR-ARC** RTAs in force (Source: Various sources)

Agricultural Trade in South Asia

Current Situation of Agriculture and Trade in South Asia

- The structural changes during 1980s and 1990s placed non-agricultural sectors of the SAEs in the driving seat of economic growth
- Nevertheless, the SAEs have achieved a considerable growth in agriculture during the past few decades as well
 - ✓ Agricultural GDP- 26% of total regional GDP
 - ✓ Agricultural population- 2/3 of total regional population
 - ✓ Agricultural labour force- 3/4 of total labour force
- Though the shares of agriculture in national outputs have been declining, agriculture and agricultural trade still play a very important role in the SAEs (Table 1)

Table 1: Agriculture and South Asian Economies

	BAN	IND	PAK	SL	NEP	MAL	BHU
Population (million)	128	998	135	19	22.9	0.3	8.0
Population density (per sq.km)	981	336	175	294	164	956	48
Rural Population (%)	77	72	64	77	89	75	93
Agric. Labor Force (% of Total)	58	60	54	45	95	03	94
GDP (US\$ billion)	46	4477	58	16	5.0	0.3	0.4
Agric. Share of GDP (%)	25	28	27	21	38	16	18
GDP per capita (US \$)	362	450	508	814	220	1220	490

Note: 1. Data represent 2004-05 for Bangladesh and India, 2002-03 for Pakistan, 2003-04 for Sri Lanka and Nepal. Source: World Bank (2004).

Some Trade Related Indices for South Asia

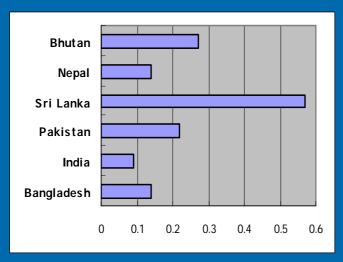


Figure 2: Agricultural Tradability Index (ATI)

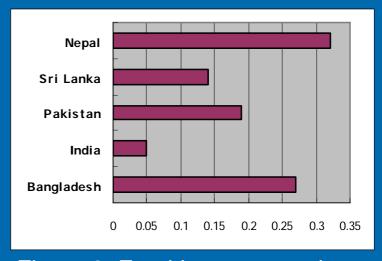


Figure 3: Food Import capacity Index (FICI)

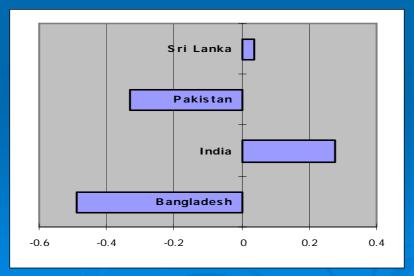


Figure 4: Agricultural Net Export Index (ANEI)

Export Specialization

Table 2: Export Indices of Revealed Comparative Advantage (RCA): Agricultural Products

Product	Bangladesh India			Maldives								
	1995	1998	2001	2004	1995	1998	2001	2004	1995	1998	2001	2004
Live animals	0	0	0	0	0	0	0	0	0	0	0	0
Meat	0	0	0	0	1	1	1	1	0	0	0	0
Fish and Crustaceans	10	7	8	12	3	0	4	3	78	87	74	74
Dairy products	0	0	0	0	0	0	0	0	0	0	0	0
coffee,Tea,Cocoa,Spices	2	1	1	1	5	6	5	3	0	0	0	0
Cut flowers and foliages	0	0	0	1	1	1	1	1	0	0	0	0
Vegetables and fruits	0	0	0	0	2	2	2	2	0	0	0	0
Cereals and cereal preparations	0	0	0	0	4	4	3	0	0	0	0	0
Oil seeds	0	0	0	0	2	1	2	2	0	0	0	0
Tobacco & tobacco manufactured	0	0	0	2	1	1	1	1	0	0	0	0
Sugar, sugar preparation & honey	0	0	0	0	1	0	3	2	0	0	0	0
Beverages	0	0	0	0	0	0	0	0	0	0	0	1
	Nepal		-	Ů	ŭ	Ů	-					
Product		Ne	pal	,	Ç		stan			Sri L	anka	
Product	1995	Ne 1998	pal 2001	2004	1995		stan 2001	2004	1995	Sri L 1998	anka 2001	2004
Product Live animals	1995 2					Paki						2004
		1998	2001	2004	1995	Paki 1998	2001	2004	1995	1998	2001	
Live animals	2	1998	2001	2004	1995 0	Paki 1998 0	2001	2004	1995 0	1998 0	2001	0
Live animals Meat	2	1998 1 0	2001 0 0	2004 2 0	1995 0 0	Paki 1998 0	2001 0 0	2004 0 0	1 995 0	1998 0 0	2001 0 0	0
Live animals Meat Fish and Crustaceans	0 0	1998 1 0	2001 0 0	2004 2 0	1995 0 0	Paki 1998 0 0	2001 0 0 2	2004 0 0	1995 0 0	1998 0 0 2	2001 0 0 3	0 0 3
Live animals Meat Fish and Crustaceans Dairy products	2 0 0	1998 1 0 0	0 0 0 0	2004 2 0 0	1995 0 0 2	Paki 1998 0 0 2	2001 0 0 2 0	2004 0 0 1	1995 0 0 2	1998 0 0 2	2001 0 0 3 0	0 0 3 0
Live animals Meat Fish and Crustaceans Dairy products coffee,Tea,Cocoa,Spices	2 0 0 0	1998 1 0 0 0 2	0 0 0 0 10 2	2004 2 0 0 0 7	1995 0 0 2 0	Paki 1998 0 0 2 0	2001 0 0 2 0	2004 0 0 1 0	1995 0 0 2 0 23	1998 0 0 2 0 24	2001 0 0 3 0 41	0 0 3 0 37
Live animals Meat Fish and Crustaceans Dairy products coffee,Tea,Cocoa,Spices Cut flowers and foliages	2 0 0 0 1	1998 1 0 0 0 2 0	2001 0 0 0 10 2 0	2004 2 0 0 0 7	1995 0 0 2 0 0	Paki 1998 0 0 2 0 0	2001 0 0 2 0 0 1	2004 0 0 1 0 0	1995 0 0 2 0 23 2	1998 0 0 2 0 24 1	2001 0 0 3 0 41 1	0 0 3 0 37 2
Live animals Meat Fish and Crustaceans Dairy products coffee,Tea,Cocoa,Spices Cut flowers and foliages Vegetables and fruits	2 0 0 0 1 0	1998 1 0 0 0 2 0 3	2001 0 0 0 10 2 0 2	2004 2 0 0 0 7 0 3	1995 0 0 2 0 0 0	Paki 1998 0 0 2 0 0 1	2001 0 0 2 0 0 1 1	2004 0 0 1 0 0 0 1	1995 0 0 2 0 23 2 2	1998 0 0 2 0 24 1 2	2001 0 0 3 0 41 1	0 0 3 0 37 2
Live animals Meat Fish and Crustaceans Dairy products coffee,Tea,Cocoa,Spices Cut flowers and foliages Vegetables and fruits Cereals and cereal preparations	2 0 0 0 1 0	1998 1 0 0 0 2 0 3 1	2001 0 0 0 10 2 0 2	2004 2 0 0 0 7 0 3	1995 0 0 2 0 0 0 0 5	Paki 1998 0 0 2 0 0 1 7	2001 0 0 2 0 0 1 1 8	2004 0 0 1 0 0 0 1 7	1995 0 0 2 0 23 2 2	1998 0 0 2 0 24 1 2	2001 0 0 3 0 41 1 1	0 0 3 0 37 2 1
Live animals Meat Fish and Crustaceans Dairy products coffee,Tea,Cocoa,Spices Cut flowers and foliages Vegetables and fruits Cereals and cereal preparations Oil seeds	2 0 0 0 1 0 1 0 7	1998 1 0 0 0 2 0 3 1 2	2001 0 0 0 10 2 0 2 1	2004 2 0 0 0 7 0 3 0	1995 0 0 2 0 0 0 0 5 1	Paki 1998 0 0 2 0 0 1 7 1	2001 0 0 2 0 0 1 1 8 1	2004 0 0 1 0 0 0 1 7 1	1995 0 0 2 0 23 2 2 0 1	1998 0 0 2 0 24 1 2 0 1	2001 0 0 3 0 41 1 0 1	0 0 3 0 37 2 1 0

Note: The value zero indicates no trade or lack of comparative advantage. Source: Estimated using data in COMTRAD E data base

Policies and Reforms Related to Agricultural Trade

Changes in Agricultural Trade Policies

- The Pre-Uruguay round agricultural policies of the SAEs were characterized by direct public sector incentives for production such as research and development, extension services and input subsidies
- The structural adjustments of SAEs which started in 1980s, mainly focused on manufactured exports and trade reforms supporting this policy objective of liberalization
- But the agricultural sector policies of SAEs generally remained highly protected

Table 3: Status of Trade Liberalization Efforts in South Asia

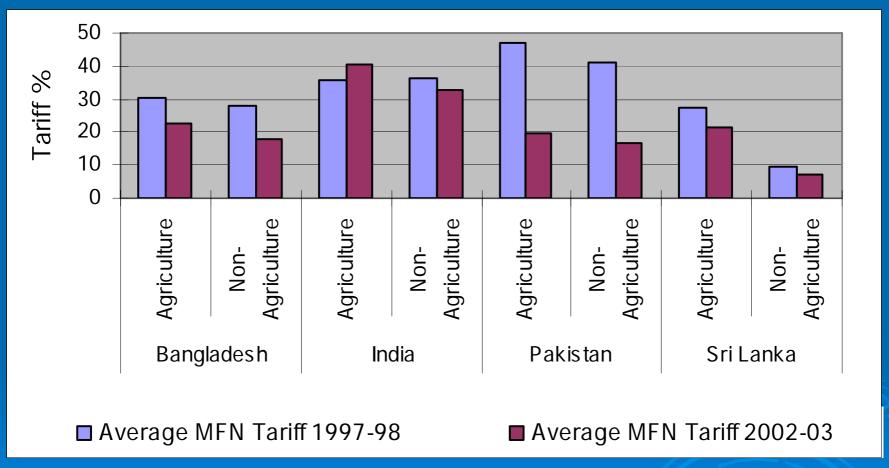
	Bangladesh	India	Maldives	Nepal	Pakistan	Sri Lanka			
General									
Exchange Rate	Unified Free Float	Unified Free Float	Unified Pegged to US \$	Pegged to Indian Rupee	Unified Free Float	Unified Free Float			
Agric. Trade/GDP %	3	2	25	7	3	10			
			Import						
QRs on Imports	Yes	Yes	Yes	Yes(minor)	Yes	Yes(minor)			
Import Restrictions (Trade Reasons) – Import Licensing	Some Restrictions	No	No	No	No	Yes (very few)			
State Import Monopolies	No	Yes	Yes	No	No	No			
Average Custom Duty Rate	16.3	22.2	20.8	13.7	17.3	11.3			
Uses Anti-dumping	No	Yes	No	No	Yes	No			
			Exports	•					
Some Export QRs	Yes	Yes	No	Yes	Yes	No			
Some Export Taxes	No	Yes	Yes	Yes	Yes	No			
Some Dirct Export Subsidies	Yes	Yes	No	No	No	No			
Percent Agric Tariff Lines Bound at WTO	100	100	100	100	89.6	100			
Average Agric Bound Rate	188.3	115.7	30	42.3	101.6	50			

Source: World Bank (2004), World Development Indicators (2001), TPR (2000), TPR-Nepal (2002)

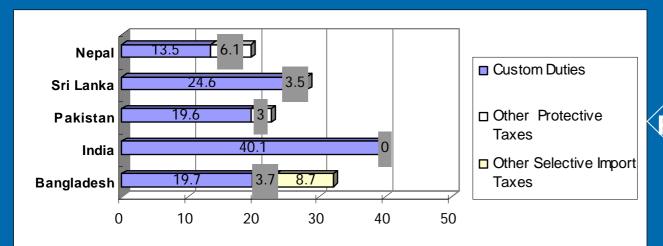
Tariff Structure

- The SAEs bound their agricultural tariffs at prohibitively high levels (100-300 percent) in the WTO agreement on agriculture
- However, the applied tariff rates of these economies are much less than the bound rates
- During the period of 2002-2003, a slight decrease in agricultural tariff rates could be observed in all SAEs, except in India (Figure 5)

Figure 5: A Comparison of Most Favored Tariffs (MFN) in SAEs



Data Source: World Bank 2004



Average Custom
Duties and other
Protective
Import Taxes(%) of
Agricultural
Commodities

Figure 7:

Use of Paratariffs in South Asian Countries

	Country	Para Tariff
	India	Specific Duty (1996 to 1998) Surcharge (1999 to 2000) Special Additional Duty (1998 to 2004) All para-tariffs were abolished in January 2004
	Pakistan	Income Withholding Tax Sales Tax
~	Sri Lanka	Cess to fund the Export Development Board (Since 1981) Surcharge on Custom duties (Since 2001) Ports and Airport Levy (Since 2002)
	Bangladesh	Infrastructure Development Surcharge Supplementary Duty Regulatory Duty VAT Exemption for Specified Domestic Products
	Nepal	Local Development Fee Special Fee Agricultural Development Fee

Domestic Support

- •The domestic support for agricultural production could indirectly influence the agricultural trade in the region.
- •India has sizeable agricultural subsidies compared to other countries in the region (Eg: subsidies on fertilizer, power, irrigation, credit and certified seeds)- 7.5%
- •Sri Lanka's agricultural producers are receiving domestic support in terms of a fertilizer subsidy, irrigation and replanting (for tree crops), but the level of subsidy has been very low (0.2-1.6%).
- •However, regional trade agreements have not included the conditions on domestic support and many SAEs do not use anti-dumping regulations (Table 4).

Table 4: Restrictions/Incentives for Agricultural Exports in South Asian Economies

	India	Pakistan	Bangladesh	Sri Lanka	Nepal
Export Restrictions					
Export NTBs	Fertilizers Agric. Commodities	Yes (a few)	Agricultural Livestock and Fisheries products	No	Wool Carpets only
Export Control by STEs	Maize, Niger seeds and Onion	No	No	Yes (a few)	Oil Crops
Restrictions on Imports for Re-exports	No	No	No (10% value addition charge on re-exports)	Yes (Tea and Spices)	No
Export Subsidies					
Direct Export Subsidies	Yes Wheat and Rice	No	Yes 15% cash subsidy (vegetables, dairy, poultry, fisheries)	No	No
Transport and Marketing subsidy	Yes	Yes 25% Freight	Yes Low air freight on National Carrier	No	No
Indirect Export Subsidies	Yes	Yes Subsidy	Yes Low interest loans	No	No
Indirect export subsidy through polices affecting input policies	Yes Leather products	Yes Leather products	Yes Ban on export of wet blue leather	No	Yes
Production at Industry specific schemes	Yes Agricultural Export Zones	No	Yes Vegetables	No	No

Trade in Agriculture

Agricultural Trade Concentration

- •Historically, SAEs trade similar types of agricultural products and the concentration of exports within limited agricultural products groups is a common phenomenon in many SAEs.
- •The Hirschmann-Herfindahl Index (HHI) indicates that agricultural exports of Bangladesh, Maldives and Sri Lanka are concentrated on few products.
- •The diversity of agricultural imports is high in Maldives and Sri Lanka.
- The most (least) diversified country in terms of agricultural exports (imports) is India. <u>Figure 8</u>

Figure 8: Agricultural Trade Concentration in South Asia: The Hirschmann-Herfindahl Index

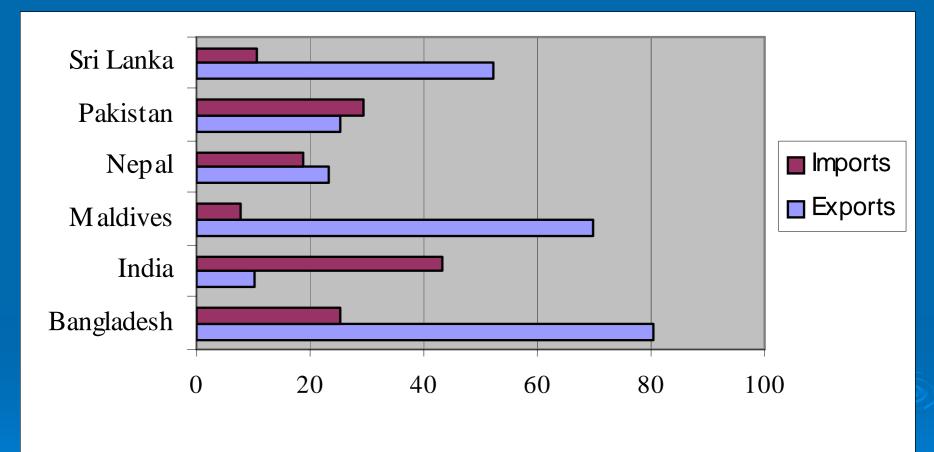


Figure 9: Agricultural Export Concentrations

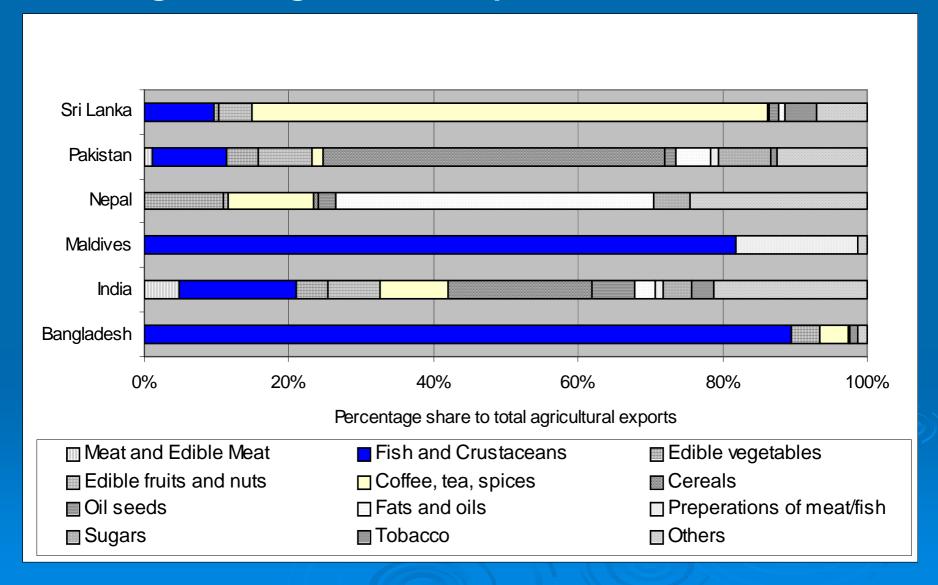
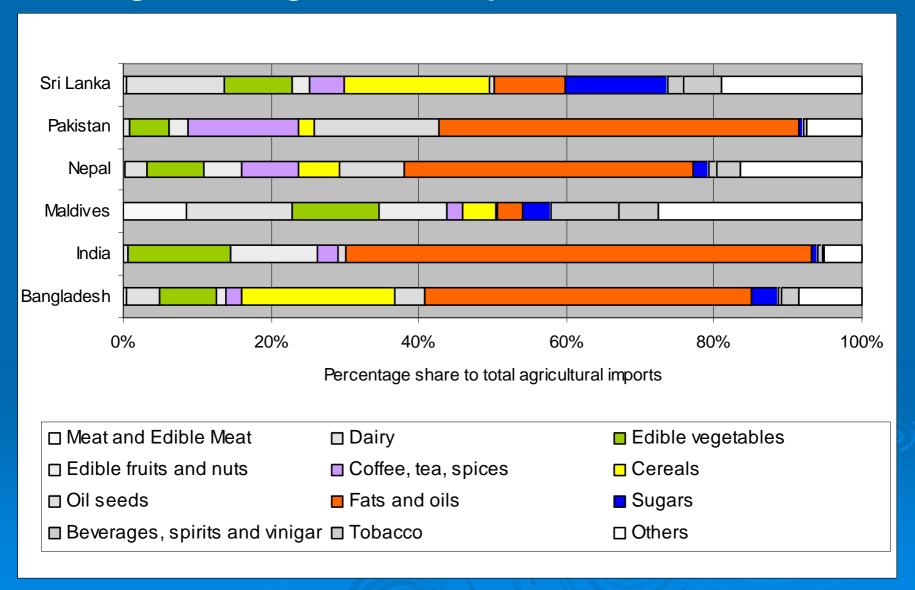


Figure 10: Agricultural Import Concentrations



Comparative Agricultural Tariff Structure

Distribution of MFN Agricultural Tariff lines (Figure 11)

Pakistan maintains less than 20 percent of tariff for more than 90 percent of MFN agricultural tariff lines

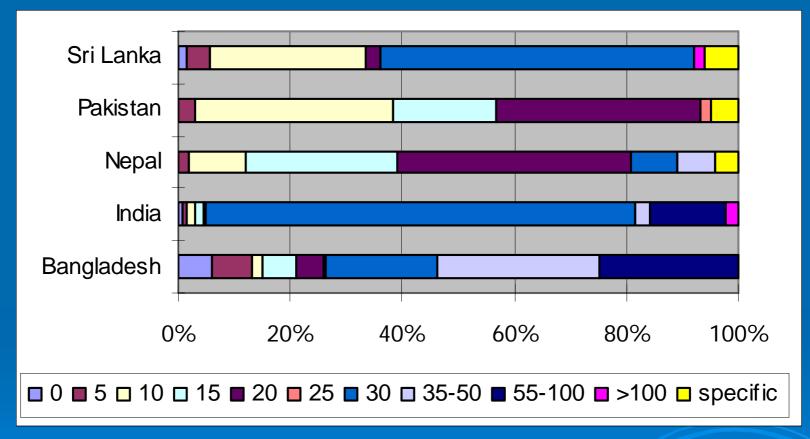
Nepal maintains a higher percentage (80 percent) of tariff lines within less than 20 percent level

India more than two third of Indian agricultural tariffs are placed at 30 percent The dispersion of Indian agricultural tariffs is higher

Sri Lanka More than a half of Sri Lankan tariff lines (56 %) receive 30 percent protection from tariffs

Bangladesh maintains more than 55 percent tariff protection for 25 percent of agricultural tariff lines

Figure 11: MFN Tariff Structure in Agriculture: Frequency Distribution



Source: World Bank 2004

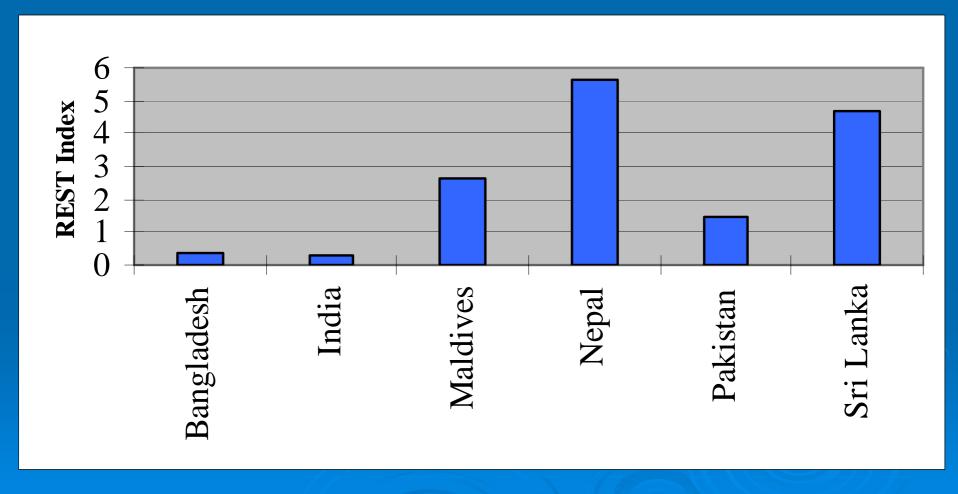
Protection for Agricultural Trade

Table 5: Relative Tariff Ratio Indices for the South Asian Countries

RTR	Bangladesh	India	Maldives	Nepal	Pakistan	Sri Lanka
Bangladesh		0.60	0.03	0.22	0.25	0.12
India	1.66		0.09	0.17	0.37	0.16
Maldives	31.64	10.51		5.60	3.91	1.94
Nepal	4.52	5.71	0.17		1.41	1.28
Pakistan	3.95	2.63	0.25	0.70		0.37
Sri Lanka	8.23	6.17	0.51	0.77	2.69	

Source: Estimated using data in COMTRADE, TRAIN data base (2005)

Figure 12: Tariff Protection in Regional Trade Integration: The Regional Export Sensitive Tariff Index



Preferential Trade Agreements and Agricultural Trade Liberalization

Coverage of Agriculture in Preferential Trade Agreements

- Important features of Asia Pacific RTAs are,
 - depth of tariff cuts offered are limited
 - •number of concessions and actual trade coverage are very low.
 - •most of the agricultural products are in the negative lists of the respective countries..
- •Therefore, Agriculture remains the sector with lowest degree of liberalization.
- •Thus, The SAEs possess conditions, such as presence of higher tariff, other protective taxes and NTBs and geographical closeness that provide potential for agricultural trade liberalization within the region.

Table 6: Coverage of Agricultural Products in Intra- South Asian Regional Trade Arrangements

Agreement (Reference Year)	Approach for Listing Concessions	Agricultural tariff lines eligible for concessions	Preferences as a % of MFN tariff	Rules of Origin	Inclusion of NTBs	Conditions on Domestic Support/Export subsidies	Technical Cooperation	Inclusion of Services
SAPTA (1999)	Bilateral Negotiations (multilaterized to all members)	866 Bangladesh 229, Bhutan 61, India 223, Maldives 30, Nepal 141, Pakistan 107, Sri Lanka 85	5-20 (LDC 5-30)	40-50% of local content	Yes Sensitive List (Pakistan uses positive list for imports from India)	No	Yes	No
Indo-Lanka Free Trade Agreement (2000)	Negative list Approach	India: 53 Sri Lanka 23		25- 35% local content	Yes TRQ and Designated entry points India: Tea	No	Yes	No
Pakistan Sri Lanka Free Trade Agreement (2005)	Negative List Approach	Pakistan 41 Sri Lanka 21	Duty Free subjected to TRQ	25-35% local content	Yes TRQ: Sri Lanka: Rice, Potato. Pakistan:-Tea, Betel leaves	No	Yes	No
India-Nepal (2002)			Duty-free access to Indian Market Nepal: 10-20 % tariff reductions form 10-110% tariff bands	30% minimum content of Nepalese or Indian products	TRQ-Quotas allocate to Indian State Trading Enterprises	No		No
India- Bhutan: (2003)					Provisions for Bhutan to use NTB	No		No
Banglades h- Bhutan (2003)		Bangladesh: 58	23 % MOP (apple and apple juice)		\ (a)	No		No

Intra Regional Trade Flow

Table 7: Intra-regional Agricultural Trade: 1995-2004

Country	Valu	ue of Tra	de (US\$	million)	% Change	Main Market(s) (2004)
	1995	1998	2001	2004	1995- 2004	
Banglades h	6.85 (77.5)	10.36 (23.0)	11.52 (18.4)	21.85 (19.55)	228	Pakistan, India
Bhutan	15.25	15.68	NA	NA		India, Bangladesh
India	486 (28.3)	642 (38.2)	486 (23.7)	872 (21.2)	79	Bangladesh, Sri Lanka,
Maldives	9.8 (87)	11.44 (88)	13.92 (92)	13.97 (77)	43	Sri Lanka
Nepal	14.81 (31)	26.08 (17)	62.4 (19)	34.79 (10)	135	India
Pakistan	87.96 (34)	266.03 (63)	74.99 (20)	87.85 (17)	-0.1	India, Sri Lanka,
Sri Lanka	39.42 (45)	53.44 (42)	43.62 (28)	51.32 (10)	30	India, Pakistan, Maldives

The Impact of Intra Regional Trade (Gravity Model)

- The results of the analysis indicate that SAPTA has a significant agricultural trade creation effects in the South Asian region (The estimated coefficients on the log of product of GDP and distance are 1.15 and 0.32 respectively).
- ILFTA indicates a trade diversion effect to non-members (coefficient -0.15).
- The other regional trade agreements such as BIMSTEC show no significant effect on agricultural trade.

Summary of Major Findings & Conclusion

- •The dependence of higher proportion of population on agriculture, continuous declining of farm income, changes in terms of trade in agriculture and appreciation of RERs have led many SAEs to maintain relatively higher tariff rates for agricultural products than those for non-agricultural products.
- Trade barriers in agriculture are mostly based on ad-valoerm tariffs but specific tariffs and TRQ have been used to protect sensitive (or high trade potential) agricultural commodities.
- The number of agricultural products covered in trade negotiations is very limited and the items negotiated have no significant trade interest to the contracting parties.

- Thus, the South Asia's trade negotiations have yielded fewer preferences for agricultural trade and the SAEs remain the most protective region for agricultural trade.
- •The development of agricultural trade and prevalence of higher tariffs protection indicate the potential for expansion of agricultural trade.
- India dominates the agricultural trade in the region and shows export specialization in a diverse group of agricultural products.
- But agricultural exports of the other SAEs are concentrated in a small basket of goods.
- Involvement of state trading monopolies, domestic supports for agricultural production and exports could highly influence the pattern of trade.

- •Though these institutional developments to trade have included limited concession for agricultural products, SAEs have reported favourable economic growth and intra-regional trade expansion during the past decade.
- It is attributed to multilateral trade liberalization as well as regional and bilateral trade agreements.
- The development of the agricultural trade within the region during the past decade and prevalence of higher tariff protection indicate the potential for expansion of agricultural trade.
- The RTR and REST indices indicates that there is a potential for improving agricultural trade in the region and India and Bangladesh can provide more opportunities to promote agricultural trade in the region.

- The reduction in competitiveness of agricultural production is experienced by Bangladesh and Sri Lanka due to exchange rates appreciations.
- These countries have recourse to alternative methods, such as use high para tariffs, to provide additional protection to the domestic producers.
- •Thus reduction of specific tariffs, removal of TRQs, improving market access for products with considerable export specialization and changing sensitive and negative lists of the SAEs have identified as key issues for regional and multilateral trade negotiations.
- This will help to envisage a substantial trade development in the region.