

Chapter 2

Agricultural Trade Between India and Pakistan: Status and Potential

Ramesh Chand and Raka Saxena

1 Backdrop

Trade among neighbouring nations has remained an important economic activity and has played a significant role in the economic development of trading partners. The literature on trade suggests that proximity is one of the major determinants of trade. Geographic proximity is also used as an important explanation for regional trade groupings or blocs. Often, regional economic relations are marred by historical hostility between neighbours, because of which neighbouring countries trade less with each other than with more distant countries. Trade between India and Pakistan is a classic case in this regard. Because of the historical hostility between the two countries, not much progress has been achieved in increasing regional trade in South Asia despite efforts to promote preferential trade (Chand 2006). The renowned proponent of free, multilateral trade and an opponent of regional groupings, Jagdish Bhagwati, cites the example of poor trade between India and Pakistan to refute the role of geographic proximity in trade (Bhagwati 1993). However, history shows that neighbourhood hostility can check neighbourhood trade for a long time, but not for ever. Eventually, trade liberalization prevails, even among hostile neighbours. One would expect trade to take place based on inherent comparative and competitive advantages, but often, in case of sectors like agriculture, trade occurs to meet the objectives of food security and achieving price stability.

At the time of partition, India accounted for about 70 % of Pakistan's official trade (Raihan and De 2013). Ever since, political relations between the two countries have led to frequent disruptions in trade. India granted the most favoured nation status to Pakistan after the establishment of World Trade Organization in 1996. Pakistan is still in the process of granting MFN status to India. The two

R. Chand (✉) · R. Saxena

National Institute of Agricultural Economics and Policy Research, New Delhi, India
e-mail: rcncap@gmail.com

countries have been trying to strengthen their bilateral economic and trade relation despite these disruptions.

South Asia's total trade has increased at a faster rate than the growth in world trade after 2005, however, trade within the South Asian bloc has increased at a lower rate than trade with the rest of the world (Chand 2012). Studies suggest that deeper economic relations between India and Pakistan would benefit not just the two countries but also the entire South Asian region, leading, potentially, to a rise in economic growth and trade competitiveness in the region. The study examines the trend and composition of agricultural trade between India and Pakistan focusing on 7 years before and after the implementation of SAFTA. It discusses the effect of SAFTA in promoting agricultural trade between the two countries. The study also analyzes the comparative advantage and trade complementarities in agricultural trade between the two countries. Additionally, the paper compares the level of subsidies given in agriculture in India and Pakistan in terms of their effect on fair trade. The results of the study have been used to identify opportunities for agricultural trade between the two countries.

2 Data and Methodology

The paper uses time series data on agricultural exports to Pakistan and agricultural imports from Pakistan, which is taken from Export-Import Databank, Ministry of Commerce, Government of India. The data on Pakistan's exports and imports to the World is taken from International Trade Centre website. Information on tariff and non-tariff barriers was taken from WTO, the respective Government websites and the MacMap website. Information related to SAFTA was obtained from the SAARC Website. Other relevant data was obtained from official, country specific sources. Theoretically, the value of export from country A to B should be same as the value of import of country B from A. However, there is often a mismatch between the two due to various reasons. In order to maintain consistency in trade data, the imports from Pakistan to India are considered to be the same as Pakistan's exports to India.

The study uses time series data on trade for 17 years from 1996–1997 to 2012–2013 (Annexure 2 and 3). The choice of the year 1996–1997 was based on the consideration that this was the first year after the constitution of the WTO, which marked a new beginning in agricultural trade liberalization in many developing countries. A major development related to trade in South Asia took place with the formulation of South Asia Free Trade Agreement (SAFTA) which came into effect in 2006. The study compares trade trends by dividing the relevant time period in two phases, i.e. before the formulation of SAFTA and after the formulation of SAFTA to assess its influence on the trade flows between the two countries. Thus, 2006–2007 was taken as the benchmark year for analyzing the trade trends between

India and Pakistan during 2006–2007 to 2012–2013. This comparison was used to reveal the effect of the regional trade agreement on bilateral agricultural trade. As the trade between the two countries fluctuates from year to year, the trade data is presented as an average of triennium ending (TE).

The revealed comparative advantage (RCA), most commonly calculated by using the Balassa Index (1965) indicates the relative advantage or disadvantage in major exportable commodities of both the countries. The index is estimated as follows:

$$RCA_{ij} = (X_{ij}/X_i) / (X_{wj}/X_w)$$

where

RCA_{ij} Revealed comparative advantage of i th country for j th commodity

X_{ij} i th country's export of commodity j to world

X_i i th country's total exports to world

X_{wj} World exports of commodity j

X_w Total world exports.

The revealed comparative advantage explains the position of a country with respect to global trade levels and indicates how other competing countries are integrating themselves with global trade.

The trade complementarity index was computed to assess the congruence in trade between two nations. The index is given by the sum of the absolute difference between the import share and the export share of the same commodity/category for one nation (exporting nation) and the other (importing nation) for the considered commodity/category, divided by two. It measures the degree to which the export pattern of one country (exporting country) matches the import pattern of the other country (importing country). The index, converted in percentage form, ranges from 0 to 100 and changes in the index over time indicate how compatibility between the supply in partner country and the demand in the destination country changes over time. An index value of 0 indicates no match, while a value of 100 indicates a perfect match in import demand and export supply.

The trade complementarity index (TCI) for trade between India and Pakistan is estimated as

$$\left\{ 1 - \left[\frac{\sum_i \left(\frac{\sum_d m_{id} \sum_s x_{is}}{\sum_d M_d \sum_s X_s} \right)}{2} \right] \right\} * 100$$

where d is the importing country of interest, s is the exporting country of interest, i is the set of commodities, x is the commodity export flow, X is the total export flow, m the commodity import flow and M the total import flow.

3 Total Trade and Agricultural Trade Between Pakistan and India

The broad picture of total trade and total agricultural trade between India and Pakistan during 1996–1997 to 2012–2013, is presented in Table 1, while a list of selected items under the agriculture category is provided in Annexure 1. The trend in trade during the relevant period before and after the implementation of the SAFTA is explained in these tables. Since there were yearly fluctuations in trade trends of the two countries, trade data is presented as triennium averages. The total trade between India and Pakistan was US\$234 million during the late 1990s. It increased to US\$ 610 million by TE 2005–2006. There was a growth of almost 30 % over the next 7 years in bilateral trade, which has now reached US\$ 2.3 billion. Trade flows between the two countries show that India's export to Pakistan remained far above Pakistan's export to India. During the 7 years before SAFTA, Pakistan's export to India shows a marginal increase. In the seven years following SAFTA, Pakistan's export to India rose by almost four times. India's export to Pakistan after the implementation of SAFTA showed slightly lower growth than its imports from Pakistan during the same period. However, due to the large difference in the base in TE 2005–2006, India's net trade with Pakistan increased from US\$ 388 million to US\$ 1458 million.

Until the late 1990s, India and Pakistan traded a few non-agricultural commodities and 69.8 % of the total trade was in agricultural products. This dominance of agriculture vanished during the next 7 years, largely because of a sharp rise in non-agricultural exports from India to Pakistan and partly because of a decline in agricultural exports from Pakistan to India. Agriculture trade recovered some ground after 2005–2006. Its share in total trade increased from 36.4 to 43.6 %. In volume, the trade between the two countries in this sector increased from US\$ 221 million in 2005–2006 to US\$ 842 million in TE 2012–2013. Around 85 % of this increase in agricultural trade was because of an increase in India's export to Pakistan and 15 % due to the increase in Pakistan's exports to India. The sluggish

Table 1 Total and agricultural trade between India and Pakistan before and after SAFTA implementation (US\$ million)

Trade	TE 1998/99	TE 2005/06	TE 2012/13
Total exports from India to Pakistan	135.5	499.1	1882.0
Total exports from Pakistan to India	98.4	110.7	424.0
Total trade	233.8	609.8	2306.0
Net trade	37.1	388.3	1458.0
Agricultural exports (India to Pakistan)	69.4	133.2	842.7
Agricultural exports (Pakistan to India)	93.7	88.6	162.7
Total agricultural trade	163.1	221.8	1005.4
Net agricultural trade	−24.3	44.6	680.0
Share of agricultural trade in total trade	69.8	36.4	43.6

Source EXIM databank, Ministry of Commerce, Government of India

growth in Pakistan's exports of agricultural products to India needs to be analysed by looking at supply side constraints in Pakistan's agricultural sector.

The series of annual trade data of the two countries reveal some interesting patterns (Fig. 1). Between 1996–1997 and 2003–2004, Indo–Pak trade did not increase much. However, in 2004–2005, the year when SAFTA was formulated, both India's exports to Pakistan and Pakistan's exports to India increased significantly. In the next year, trade between the two countries doubled. There was a further increase in bilateral trade in the year 2006–2007, but the momentum in trade seen during 2002–2003 to 2006–2007 could not be sustained in the subsequent years and SAFTA proved to be in the nature of a one-time gain.

From the data, it can be seen that India's export to Pakistan has risen faster than India's imports from Pakistan for 2 years after the formulation of SAFTA. This resulted in the net trade favouring India to the tune of US\$ 1.66 billion in year 2007–2008, which declined in subsequent years except in 2010–2011. It is also interesting to note that ever since the implementation of SAFTA, Pakistan's export to India increased from US\$ 323 to US\$ 542 million during 2006–2007 to 2012–2013, recording an increase of 67.8 % over six years, while India's exports to Pakistan in the same period increased by 56.4 %, from US\$ 1350 million to US\$ 2064 million.

4 Trend and Composition of Indian Agricultural Exports to Pakistan

SAFTA's effect on India–Pakistan trade is much sharper on trade of agricultural goods as compared to its effect on total trade (Fig. 2 and Annexure 1). India's export of agricultural products remained small till the year 2004–2005 and followed

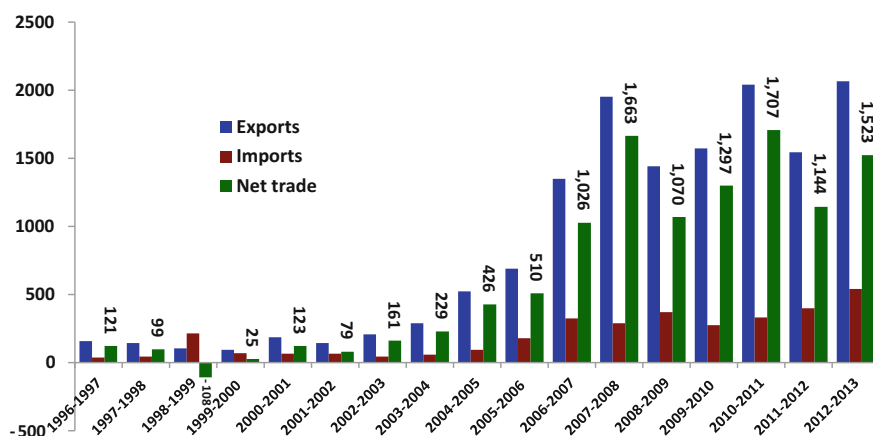


Fig. 1 India's trade (all commodities) with Pakistan (US\$ million). *Source* EXIM databank, Ministry of Commerce, Government of India

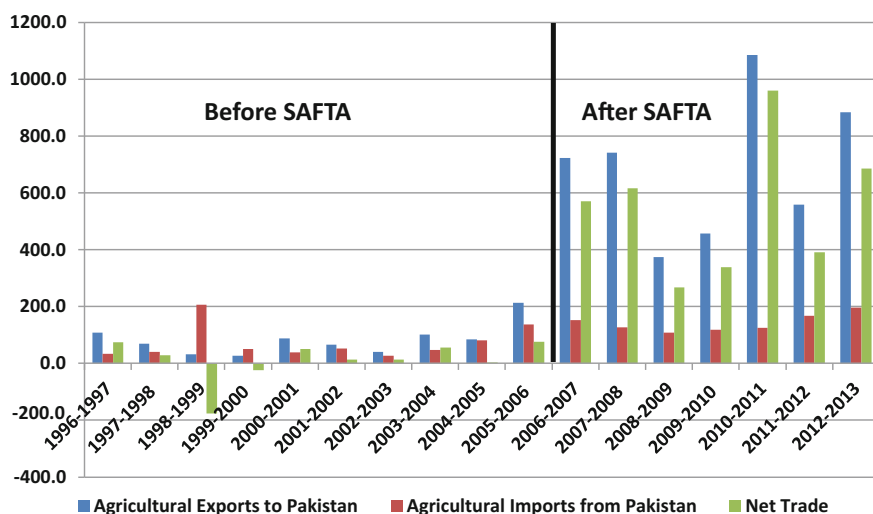


Fig. 2 India's agricultural trade with Pakistan (US\$ million). *Source* EXIM databank, Ministry of Commerce, Government of India

a U-shaped trend during 1996–1997 to 2004–2005. Exports declined from US\$ 108 million to US\$ 26 million between 1996–1997 and 1999–2000 and then rose to US\$ 101 million in year 2003–2004. In this period, Pakistan's total exports to India hovered around US\$ 40 million, except in the year 1998–1999, when its exports reached US\$ 207 million—a record, which remained till the year 2012–2013. Moreover, 1998–1999 was the only year when Pakistan's exports to India exceeded its imports from India by a big margin.

India's agricultural exports to Pakistan started picking up in the year 2005–2006 and have increased substantially ever since. Exports increased three-and-a-half times to US\$ 722 million in the year 2006–2007. However, there was a break in this trend for 3 years, after which, exports of agricultural products from India to Pakistan increased again and crossed the US\$ 1 billion mark. Thus, India's exports to Pakistan have been characterized by a cyclical pattern with an upward trend. Exports have increased to much higher levels since the implementation of SAFTA.

India's annual imports of agricultural products from Pakistan (alternatively, Pakistan's annual agricultural exports to India) have ranged between US\$ 100–200 million since the year 2005–2006, the period beginning with a decline in exports followed by an increase.

The sharp rise in India's exports to Pakistan resulted in exports exceeding imports by more than US\$ 500 million in year 2006–2007. The gap declined to less than half in subsequent years and again rose to another peak level of US\$ 969 million in 2010–2011. The net trade pattern has been determined by the pattern of India's agricultural exports to Pakistan because Pakistan's exports to India played a limited role in influencing it.

Agricultural trade trends between the two countries reveal a clear but one-time increase in year 2006–2007, the year in which the SAFTA agreement was implemented. After 2006–2007, agricultural exports from India to Pakistan remained higher than those from Pakistan to India in all years but show a lot of variability. Agricultural imports from Pakistan, though small, did not fluctuate as much as exports to Pakistan. It appears that a large part of India's export to Pakistan catered to stabilization of domestic supply in Pakistan. Such trade is usually not based on strong comparative advantage but on climatic factors causing production fluctuations in the destination country.

The composition of India's agricultural exports to Pakistan during TE 1998–1999 to TE 2005–2006 and during TE 2005–2006 to TE 2012–2013 can be found in Table 3. The commodity composition of export has undergone significant changes overtime, as there has been export diversification. During TE 1998–1999, sugar and confectionery accounted for more than half of the total agricultural exports from India and close to one-fifth of exports consisted of coffee, tea, mate and spices. These two groups accounted for almost 80 % of Pakistan's agricultural imports from India. Rubber and its article was the third important item of import with a 7.7 % share in India's imports to Pakistan. Oilseeds accounted for 4 % while vegetables, roots and tubers accounted for 2 % share in the export basket.

In the next seven years, sugar and sugar confectionery was relegated to the fifth position and its share declined to less than 10 %. The volume of sugar and sugar confectionery imported by Pakistan from India declined from US\$ 40 million to US\$ 11.8 million between TE 1998–1999 and TE 2005–2006. Cotton emerged as a significant item of export from India to Pakistan since the year 2003–2004. During TE 2005–2006, cotton, mainly lint, constituted 31 % of India's agricultural exports to Pakistan with an annual volume of US\$ 42 million. Rubber and its articles ranked second, accounting for more than one-fifth of the total. Like sugar, the share of coffee, tea, mate and spices also declined sharply. Vegetables emerged as an important item of export to Pakistan, with an annual value of US\$ 12.6 million. Oilseeds like soybean, groundnut and soy meal, vegetables seeds, and *isabgul* husk accounted for 7.9 % of agricultural exports from India to Pakistan. Pakistan also started importing cereals like maize and rice from India in the mid-2000s. Livestock products like meat and dairy produce also figured as important Indian exports to Pakistan. Trade data, for the three-year period ending 2012–2013, reveals that cotton is now the dominant export item from India to Pakistan. Cotton alone accounted for 38.8 % of total exports of agricultural products to Pakistan. Year-wise data show that cotton export dropped significantly in some years but the 3-year average has remained quite high.

The volume of agriculture exports increased by more than six times during the seven-year period after 2005–2006. Out of the total exports of US\$ 843 million during TE 2012–2013, export of cotton accounted for close to 40 %. It seems these imports are feeding into woven fabrics and textile exports from Pakistan. This presents as an excellent example of a trade-led agriculture industry link between India and Pakistan. Sugar is the second most important item with a 14 % share and volume of US\$ 118 million. Export of edible vegetables, including pulses, has

increased since 2004–2005; this includes export of tomatoes, onions and pulses. In the year 2012–2013, exports of these items crossed US\$ 144 million. Coffee, tea and spices, which are traditional export items, accounted for 10 % of the total export while rubber and its articles accounted for 6.5 % of export. Disaggregated data show that the growth in the export of vegetable seeds, *isabgul* husk and groundnut has been robust and smooth. Other important items figuring in export in recent years are milk and coconut (Table 2).

The growth rate in export of major items (measured in US dollars) during 1996–2004 is presented in Table 3. During the eight-year period before SAFTA, the export of more than half the products on this list either declined or registered zero

Table 2 Composition of Indian agricultural exports to Pakistan (%)

HS code (2-digit)		TE 1998/99	TE 2005/06	TE 2012/13
	Total agricultural exports (US\$ million)	69.47	133.29	842.73
01	Live animals	0.00	0.03	0.00
02	Meat and meat products	0.04	2.20	0.59
03	Fish and crustaceans	0.09	0.04	0.12
04	Dairy products and bird eggs	0.01	2.30	1.21
05	Products of animal origin	0.01	0.00	0.09
06	Live trees and other plants	0.02	0.00	0.01
07	Edible vegetables	2.13	9.35	14.42
08	Fruits	0.89	0.40	2.30
09	Tea and beverages	19.09	8.77	10.22
10	Cereals	0.19	1.93	2.56
12	Oilseeds	4.01	7.94	5.91
13	Lac, gums, etc.	1.58	1.36	1.27
14	Vegetable planting material	4.03	1.64	0.31
15	Animal or vegetable fat	0.19	0.33	0.06
17	Sugar	58.81	8.65	14.07
19	Cereal preparations	0.02	0.69	0.63
20	Vegetable and fruit preparations	0.00	0.01	0.09
21	Misc. edible preparations	0.36	0.19	0.05
22	Beverages	0.00	0.06	0.01
24	Tobacco	0.14	0.31	0.27
40	Rubber and articles	7.67	21.79	6.46
41	Raw hides and skins	0.01	0.13	0.06
51	Wool	0.01	0.45	0.07
52	Cotton	0.37	31.33	38.84
53	Other vegetable fibres	0.26	0.04	0.26
	Others items (11, 44, 47, 50)	0.08	0.06	0.12

Source EXIM databank, Ministry of Commerce, Government of India

Table 3 Growth trends in major exportable commodities to Pakistan

HS code (4-digit)	Commodity	Compound annual growth rates (%)		Change in growth
		1996– 2004	2004– 2012	
0402	Milk and cream	0.00	23.38	↑
0407	Bird eggs	0.00	18.23	↑
0713	Dried leguminous vegetables	–10.12	28.81	↑
0702	Tomatoes	13.08	96.63	↑
0703	Onion and other vegetables	–14.85	28.66	↑
0801	Coconut and other nuts	–25.27	99.42	↑
0902	Tea and beverages	37.09	29.26	↓
0904	Pepper	–31.07	85.09	↑
0908	Nutmeg and spices	–1.28	28.70	↑
1006	Rice	46.38	24.54	↓
1007	Grain sorghum	–29.82	87.98	↑
1008	Buckwheat and other cereals	–26.44	115.22	↑
1211	Plants and parts of plants	5.34	26.08	↑
1209	Seeds and planting material	2.37	24.75	↑
1202	Groundnuts	–14.83	77.08	↑
1701	Cane/beet sugar	–21.85	–5.29	↑
4011	Rubber tyres	46.51	3.37	↓
4013	Rubber tubes	7.08	1.45	↓
5201	Cotton	59.84	31.79	↓
5205	Cotton yarn	45.91	34.99	↓
5209	Woven fabrics	14.13	28.46	↑

Source Computed by authors

growth. These include milk, egg, pulses, vegetables, coconut, spices, coarse cereals, groundnut and sugar. The remaining items like tomato, rice, plants and parts of plants, vegetable seeds, rubber and cotton registered positive growth. Between 2004–2005 and 2012–2013, all 21 products included in the table except sugar showed a positive trend. Further, except rubber tyres and tubes, the annual growth rate was more than 18 % for all the items.

Due to very high year-to-year fluctuation in the export of some items, the growth rates do not reveal the true picture of exports, particularly in the case when exports cater to ensuring stability in domestic supply. For Instance, India's export of sugar to Pakistan has been significant in some years like 2006–2007 and 2010–2011, when the export volume exceeded US\$ 335 million. As very little was exported in

other years, this trend growth rate is misleading. Therefore, we do not place much weight on trend growth rate statistics for such items.

5 Major Suppliers of Agricultural Products to Pakistan

In order to assess India's position in meeting import demand from Pakistan, this paper identifies major overseas suppliers of agricultural products to Pakistan. Table 4 presents data on agricultural import of major items by Pakistan from the world during TE 2004–2005 and TE 2012–2013 along with the share of top 5 exporting countries. Cotton has been the major item of import by Pakistan and its volume has increased from US\$ 455 million during TE 2004–2005 to US\$ 716 million in TE 2012/2013. India is the largest supplier of raw cotton (carded or combed) as well as cotton yarn. Tea and beverages are the second most important items imported by Pakistan. Kenya meets 61 % and India meets one-tenth of the import demand for tea in Pakistan. In case of dried leguminous vegetables, i.e. pulses, India meets one-tenth of Pakistan's imports. In the case of fresh vegetables like tomatoes and onions, India is the major overseas supplier for Pakistan. Similarly, for plant and parts of plants, close to 80 % of the total import demand is met from India. Pakistan's import of milk and cream has increased sharply, touching US\$ 88 million during TE 2012–2013. This demand is met by imports from the USA and Europe and India does not figure among the top five suppliers to Pakistan. Surprisingly, India also does not figure among the top five suppliers of sugar, although it exports sugar to many countries. Pakistan's sugar import is quite sizable with half of import supply coming from Malaysia. This is one area where India can push its exports. Pakistan imports small quantities of coarse cereal, which is met almost entirely by India. India also meets half of Pakistan's groundnut import demand. The trends in Pakistan's imports indicate that India has not been able to take advantage of the growth in imports of many items such as milk, cream, sugar, pulses, and tea and beverages. The commodities, whose imports from India show a large increase, are tomatoes, onions, and other vegetables, pepper, seeds, and planting material and cotton.

6 Trends and Composition of Indian Agricultural Imports from Pakistan

India imported agricultural items from Pakistan worth US\$ 94 million in the late 1990s (Table 5). In the next seven years, the volume of India's import from Pakistan dropped to US\$ 88.6 million but recovered after the implementation of the SAFTA agreement in the year 2006. Pakistan's agricultural exports to India were dominated by a few commodities. In the late 1990s, sugar and confectionery

Table 4 Pakistan's imports of major agricultural commodities and major suppliers to Pakistan, US\$ 000

HS code (4-digit)		TE 2004/05	TE 2012/13	Top suppliers to Pakistan and their share (%) (2012)
0402	Milk and cream	13,391	88,381	USA (34.5), New Zealand (16.7), Germany (12.7), Lithuania (10.6), France (6.2)
0407	Bird eggs	374	2759	USA (17.1), Germany (10.9), France (8.5), Jordan (6.5), United Kingdom (1.5)
0702	Tomatoes	45	77,728	India (97.9), Afghanistan (1.9), Iran (Islamic Republic of) (0.2)
0703	Onion and other vegetables	22,107	72,115	India (56.2), China (30.5), Afghanistan (12.9), Iran (Islamic Republic of) (0.1), Iceland (0.1)
0713	Dried leguminous vegetables	105,810	390,160	Australia (31), Myanmar (11.1), India (10.8), Ethiopia (8.8), Canada (7.4)
0801	Coconut and other nuts	7529	9032	Sri Lanka (64.5), Malaysia (10), Vietnam (7.8), India (7.1), Thailand (7)
0902	Tea and beverages	207,398	338,359	Kenya (61.2), India (9.9), Rwanda (6), Sri Lanka (4.3), Viet Nam (4.2)
0904	Pepper	7199	22,657	India (49.4), Viet Nam (29.2), Sri Lanka (9.7), Brazil (5.8), Indonesia (2.5)
0908	Nutmeg and spices	7935	9961	Guatemala (71.6), India (19.2), Indonesia (5.5), Sri Lanka (3.1), China (0.4)
1006	Rice	1455	35,052	China (66.1), USA (29.6), Sri Lanka (2), Philippines (1.6), India (0.4)
1007	Grain sorghum	115	2282	India (100)
1008	Buckwheat and other cereals	157	3918	India (72.7), Ukraine (22.9), Canada (2.1), Australia (1.5), China (0.6)
1202	Groundnuts	1746	6836	India (50.4), China (44.1), United Republic of Tanzania (3.8), Madagascar (0.9), Kenya (0.3)
1209	Seeds and planting material	20,298	57,418	India (36.6), Egypt (26.9), USA (9.2), China (6.5), Thailand (4.7)
1211	Plants and parts of plants	3251	6016	India (79.6), Afghanistan (5.8), Ethiopia (3), Iran (2.9), Syrian Arab Republic (1.9)
1701	Cane/beet sugar	153,163	302,262	Malaysia (54.3), United Arab Emirates (17.8), Saudi Arabia (11.2), Germany (5.9), United Kingdom (3.1)
4011	Rubber tyres	111,252	196,561	China (62.6), India (10.4), Thailand (9.3), Japan (7.2), Indonesia (2.6)
4013	Rubber tubes	3199	3421	China (62.4), India (22.2), Thailand (2.9), Indonesia (2.7), Korea (2.6)

(continued)

Table 4 (continued)

HS code (4-digit)		TE 2004/05	TE 2012/13	Top suppliers to Pakistan and their share (%) (2012)
5201	Cotton	455,467	716,636	India (28.6), USA (21.1), Brazil (19.1), Afghanistan (12.1), Egypt (6.4)
5205	Cotton yarn	8178	26,611	India (71.2), China (12.9), Egypt (8.8), Turkmenistan (4.4), Bangladesh (0.7)
5209	Woven fabrics	3556	9501	China (61.2), Hong Kong (7.2), India (5.6), Turkey (4.8), Bahrain (4.4)

Source www.intracen.org

accounted for 69 % of India's agricultural imports from Pakistan. The share of sugar dropped to 14.6 % in the mid-2000s and has been shrinking ever since, with Pakistan remaining a large net importer of sugar. Edible fruits and nuts emerged as India's largest import item from Pakistan, accounting for 48.4 % of total agricultural imports. This mainly consists of dates. The second most important item in recent years has been cotton fabric and textiles having a 30 % share in total agricultural imports. Annual import data shows that India imported fruits worth US\$ 92.5 million and cotton fabric and textiles worth US\$ 60 million in the year 2012–2013 (Annexure 2). The import of raw hides and skins has been over US\$ 11 million for a couple of years. Annual import data also shows a consistent increase 2008–2009 onward, which increased the value of India's imports from Pakistan from US\$ 107 million to US\$ 196 million in 2012–2013.

Changes in India's major agricultural imports between TE 2004–2005 and TE 2012–2013 and the share of major overseas suppliers in these imports are presented in Table 6. Pakistan figures among the top five suppliers of agricultural products to India in some commodities, but it figures at the bottom in most cases with a very low share. However, Pakistan meets almost one fourth of India's import demand of dates and other fruits. Pakistan also has a significant presence in India's import of raw hides and skin and cotton products with a share close to 14 %. Even in case of dates, Iraq exports a much higher quantity to India than Pakistan.

The trend growth rates of India's import of major agricultural commodities during 1996–1997 to 2004–2005 and during 2004–2005 to 2012–2013 are presented in Table 7. Dates and other fruits, which are the major items of India's import from Pakistan, showed an annual decline of 6 % for the eight-year period ending in 2004–2005. Thereafter, these imports increased at 16.7 % every year. A similar pattern is observed in the import of grapes. The import of pulses, although small, showed a sharp rise before 2004–2005 followed by a sharp decline thereafter. The import of raw hide and skin and cotton products (fabric and textile) registered a high rate of growth in both periods.

Table 5 Composition of Indian agricultural imports from Pakistan (%)

HS code (2-digit)		TE 1998/99	TE 2005/06	TE 2012/13
Total agricultural imports from Pakistan (US \$ million)		93.73	88.64	162.7
03	Fish and crustaceans	0.00	0.26	0.70
05	Products of animal origin	0.00	0.01	0.06
07	Edible vegetables	0.52	36.98	2.16
08	Fruits	24.58	23.02	48.40
09	Tea and beverages	0.51	1.30	1.05
12	Oilseeds	1.24	1.42	2.55
13	Lac, gums, etc.	1.07	1.32	0.84
14	Vegetable planting material	0.01	0.02	0.01
15	Animal or vegetable fat	0.00	0.00	0.34
17	Sugar	69.22	14.59	1.38
19	Cereal preparations	0.00	0.00	0.01
20	Vegetable and fruit preparations	0.00	0.00	0.38
21	Misc edible preparations	0.00	0.01	0.04
41	Raw hides and skins	1.02	1.31	7.43
51	Wool	1.44	2.12	5.22
52	Cotton	0.37	17.63	29.35
53	Other vegetable fibres	0.00	0.00	0.06

Source Computed by authors

7 Share of Bilateral Agricultural Trade in Total Agricultural Trade

Although agricultural trade between the two countries has been increasing, the share of bilateral trade in the total trade with the world remained quite low for both the countries. However, Indo–Pak trade increased much faster than each country's trade with the rest of the world during 2003–2006. After 2006, Indo–Pak trade could not keep pace with their trade with the rest of the world (Fig. 3). India's agricultural trade with Pakistan constituted 0.59 % of its total agricultural trade with all countries in 2003. The share steadily increased to 3.09 % by 2006. These gains were lost in the subsequent periods and the share of India's trade with Pakistan declined to 1.40 % in 2009 and 1.00 % of its total agricultural trade by the year 2012. Pakistan's trade with India presented a somewhat better picture. Trade in agricultural commodities between India and Pakistan constituted 1.61 % of Pakistan's total agricultural trade in 2003. This share increased to 7.52 % by 2006. However, neither the pace nor the level could be sustained after 2007, except 2010

Table 6 India's imports of major agricultural commodities and major suppliers in Indian market, US\$ 000

HS code (4-digit)		TE 2005/06	TE 2012/13	Top 5 suppliers to India and their share (%) vis a vis share of Pakistan, 2012
0713	Dried vegetables, shelled	544,698	1,996,198	Myanmar (26.2), Canada (22.9), Australia (14.5), Russian Federation (8.7), China (4.4), Pakistan (0.1)
0802	Nuts	149,273	467,644	United States of America (59.4), Bangladesh (11.5), Australia (9.9), Iran (Islamic Republic of) (7.9), China (2.4), Pakistan (close to 0)
0804	Dates, figs, pineapples, mangoes, avocados, guavas	48,895	156,099	Iraq (40.1), Pakistan (24.4), Afghanistan (10.5), Iran (Islamic Republic of) (7.6), United Arab Emirates (5.6)
0806	Grapes, fresh or dried	10,942	20,441	Afghanistan (51), United States of America (24.2), Peru (5.9), China (5.3), Chile (4), Pakistan (0.9)
1207	Oil seeds	12,555	58,367	Turkey (41.8), Ghana (11.9), Benin (7.6), Somalia (7.2), Sudan (5.4), Pakistan (5.1)
1211	Medicinal plants	14,636	40,481	Australia (12.3), Netherlands (11.8), Congo (10.1), Vietnam (8.9), Sri Lanka (5.5), Pakistan (2.7)
1511	Palm oil and its fraction	1,560,483	6,376,759	Indonesia (65.8), Malaysia (31.8), China (0.6), Argentina (0.2), Brazil (0.1)
1512	Safflower, sunflower/cottonseed oil and fractions	40,191	953,878	Ukraine (88.6), China (4.2), Argentina (3.3), Russian Federation (1.5), Bahrain (0.7)
1701	Cane or beet sugar	126,184	476,255	Brazil (99.5), Pakistan (0.2), United States of America (0.1), Germany (0.1), United Arab Emirates (0.1)
4101	Raw hides and skins of bovine/equine animals	28,306	50,480	Italy (14.8), Germany (5.5), France (5.3), Iraq (5.1), China (4.3), Pakistan (2.1)
4104	Leather of bovine/equine animal	117,443	228,743	Italy (13.9), Argentina (11.8), China (7.1), Thailand (6.3), Indonesia (5.2), Pakistan (1.5)
4107	Leather of other animals	19,711	69,394	Italy (42.8), Thailand (7.7), China (5.9), Germany (4.2), Pakistan (4.1)

(continued)

Table 6 (continued)

HS code (4-digit)		TE 2005/06	TE 2012/13	Top 5 suppliers to India and their share (%) vis a vis share of Pakistan, 2012
5201	Cotton, not carded or combed	245,126	272,000	United States of America (22.6), Pakistan (13.9), Egypt (9.8), United Republic of Tanzania (9), Côte d'Ivoire (6.1)
5208	Woven cotton fabrics	111,386	164,111	China (72.7), Bangladesh (6.4), Hong Kong, China (4.8), Italy (2.7), Pakistan (2.3)
5209	Woven cotton fabrics	49,099	59,785	China (31.6), Turkey (18.9), Pakistan (13.8), Italy (8.8), Hong Kong, China (3.7)

Source www.intracen.org

Table 7 Growth trends in major exportable commodities of Pakistan

HS code (4-digit)	Commodity	Compound annual growth rates		Direction of growth
		1996– 2004	2004– 2012	
0713	Dried leguminous vegetables	77.98	–20.12	↓
0804	Dates and other fruits	–5.93	16.68	↑
0806	Grapes	–7.48	12.59	↑
0802	Nuts	–26.44	–2.88	↑
1207	Oilseeds	5.04	5.67	↑
1211	Plants and parts of plants	–0.92	7.18	↑
1701	Cane/beet sugar	–26.76	13.86	↑
4107	Leather	–6.28	57.23	↑
4104	Tanned/crust hides and skins	–11.47	32.84	↑
4101	Raw hides and skins	13.46	29.74	↑
5201	Cotton	9.09	45.15	↑
5209	Woven fabrics	26.47	2.96	↓
5208	Woven fabrics	73.15	–7.96	↓

Source Computed by authors

when India's agricultural exports to Pakistan jumped from US\$ 457 million to US\$ 1085 and Pakistan's trade ratio increased to 9.27 %, while India's trade ratio increased to 2.9 %. The latest data show that Pakistan's trade in agriculture with India is 4.55 % of its agricultural trade with all countries.

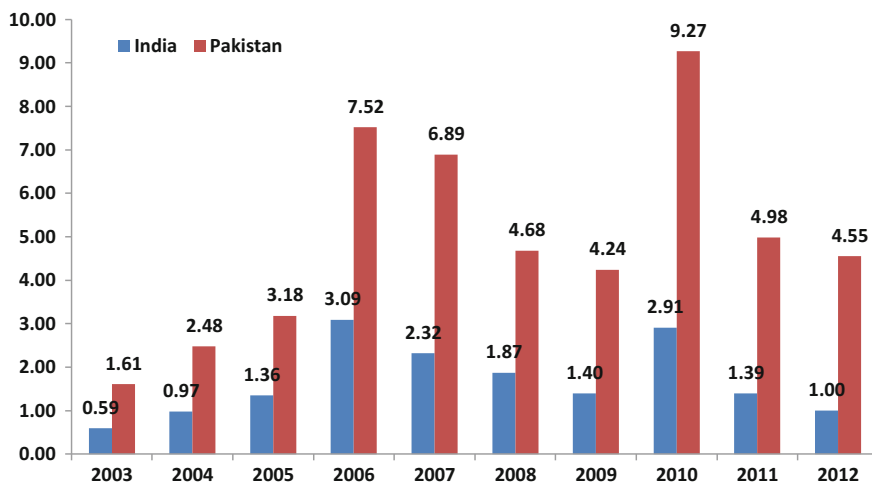


Fig. 3 India and Pakistan's bilateral agricultural trade: share in total world agricultural trade of two countries. *Source* Computed by authors

8 Agricultural Trade Complementarity Between India and Pakistan

The trend in trade complementarity index explains why India's exports to Pakistan have seen higher growth than Pakistan's exports to India. The agricultural trade complementarity between Indian exports and Pakistan imports increased from close to 46 % in 2003 to around 60 % in 2008. Thereafter, the index decreased to 44 % in 2012 (Fig. 4). India's export pattern matches significantly with the import pattern of Pakistan in case of cereals and oilseeds. Since India is self-sufficient in most agricultural commodities and major Indian agricultural imports from Pakistan are limited to only a few items, the complementarity is low in case of Pakistani exports and Indian imports. The trade complementarity index between Pakistan exports and Indian imports remained close to 20 % over the last ten years except in 2008. Pakistan's import demand largely matches the export supply of India whereas India's import demand does not match too much with Pakistan's export supply.

9 Revealed Comparative Advantage

The pattern of RCA was examined at the HS 4-digit level for the last 10–12 years to understand its temporal movement. An RCA index value of greater than one indicates a revealed comparative advantage in that product. Table 8 provides the estimates of RCA for major Indian commodities being exported to Pakistan. Tea has been a traditional Indian item of export, but analysis of its RCA, indicates

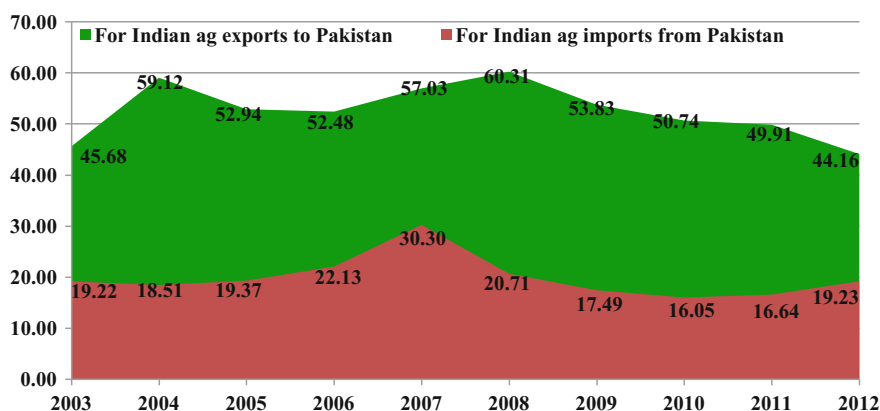


Fig. 4 Trade complementarity index for agricultural trade between India and Pakistan. *Source* Computed by authors

Table 8 RCA for major exportable commodities of India to Pakistan

Year	Tea (0902)	Cotton (5201)	Dried leguminous vegetables (0713)	Tomato (0702)	Cane/beet sugar (1701)
2001	8.35	0.10	1.61	0.01	1.94
2002	7.34	0.07	1.56	0.04	1.77
2003	6.77	0.29	1.66	0.02	2.49
2004	7.02	1.07	2.04	0.02	0.3
2005	6.27	1.97	3.92	0.01	0.16
2006	5.55	4.92	2.68	0.08	1.86
2007	5.12	7.65	1.44	0.16	2.99
2008	5.19	7.31	0.72	0.24	3.89
2009	5.84	6.87	0.62	0.25	0.09
2010	5.01	9.17	1.15	0.14	1.34
2011	4.88	6.39	1.05	0.40	2.09
2012	3.51	5.92	0.7	0.22	1.94

Source Computed by authors

declining comparative advantage over time even though its value remains greater than unity. In case of raw cotton, there was a significant increase in RCA after the adoption of Bt cotton technology in India. Trade in other commodities like pulses and tomatoes seems to have risen due to neighbourhood factors and domestic stability concerns.

Table 9 provides the RCA for major commodities being exported by Pakistan to India. Due to the climatic factors, Pakistan has an inherent and sustained comparative advantage in case of dates. The greatest comparative advantage lies in the exports of cotton textiles and woven fabrics. Both countries have integrated themselves in creating a value chain, in which India is exporting raw staple cotton

Table 9 RCA for major exportable commodities of Pakistan to India

Year	Dates, etc. (0804)	Cotton (5201)	Woven fabrics (5209)	Woven fabrics (5208)	Leather (4107)	Leather of bovine (4104)	Cane or beet sugar (1701)
2003	3.15	1.02	1.01	11.02	0.02	3.7	0.43
2004	3.18	1.42	1.67	8.65	0.12	3.78	0.32
2005	2.54	1.24	1.6	9.25	0.01	3.84	0.28
2006	2.34	0.85	4.06	8.93	0.19	3.15	0.14
2007	2.7	0.76	7.41	9.34	0.54	3.38	0.01
2008	2.29	1.79	10.22	9.55	1.41	1.08	0.84
2009	3.08	3.65	13.46	8.5	1.68	0.87	0.02
2010	2.49	2.4	14.81	7.87	2.45	0.52	0.01
2011	2.66	2.71	16.18	7.78	2.45	0.13	0.01
2012	3.15	3.01	19.98	7.97	2.72	0.26	0.82

Source Computed by authors

to Pakistan and buying value added textiles and fabrics from it. Similar customer taste and preferences for the fabrics/textiles and designs in the neighbouring states of Punjab and Kashmir have further enhanced the cotton trade between the two countries.

10 Identifying Growth Opportunities

There are two types of opportunities to expand agricultural trade between the two countries—one, by replacing existing trade with a third country and second through trade creation. The neighbourhood factor, as in the case of India and Pakistan, favours both. The opportunities to expand bilateral trade by efficiently replacing third country trade can be identified by looking at the export volume of country “A” to the world, import volume of country “B” from the world and from country “A” and vice versa. Table 10 presents opportunities for export from India to Pakistan and Table 11 presents opportunities for export from Pakistan to India.

It can be observed from Table 10 that there is no scope for expanding exports of a few items from India to Pakistan, although these are items of large export from India. For instance, India exports meat and meat products worth US\$ 2720 million and Pakistan’s total import of this item is US\$ 5.0 million. Since Pakistan’s entire import demand for this product is already met by India, this implies no further scope for expanding exports by substituting third-country exports. In contrast to this, dairy products and eggs present with a significant export potential to Pakistan. Pakistan’s import demand for dairy products and eggs is US\$ 114 million and it meets less than one-tenth of it from India, despite the fact that India’s export volume is 2.5 times the import demand in Pakistan. Similarly, an opportunity exists for promoting oilseeds exports from India to Pakistan; the latter imports oilseeds

Table 10 India's agricultural exports and Pakistan's imports (TE 2012–2013, US\$ million)

Product	India's exports to the world	Pakistan's imports from India	Pakistan's imports from world
Live animals	11.9	0.0	15.7
Meat and meat products	2720.4	4.2	4.9
Fish and crustaceans	2976.7	1.0	4.0
Dairy products and eggs	289.1	11.5	114.1
Products of animal origin	134.5	0.7	2.6
Live trees and plants of parts	73.0	0.0	1.4
Vegetables, roots and tubers	981.1	121.7	554.8
Fruits and nuts	1355.4	19.4	125.4
Tea and spices	2662.4	86.2	433.5
Cereals	6424.8	21.6	87.1
Oilseeds	1660.3	49.9	644.9
Lac gums, etc.	2951.5	10.7	10.7
Vegetable planting material and prod	62.4	2.6	18.8
Animal or vegetable fats	937.6	0.5	2251.5
Sugar and sugar confectionery	1698.0	118.7	323.6
Cereal preparations	357.6	5.3	79.3
Vegetable, fruits and nuts prep	345.7	0.8	28.6
Misc edible preparations	437.7	0.4	48.4
Tobacco and tobacco products	877.6	2.3	16.4
Raw hides and skins	990.0	0.5	92.1
Wool and other products	184.1	0.6	15.5
Cotton	8261.6	327.6	808.1
Other vegetable textile fibres	364.4	2.2	67.8

Source Computed by Authors

worth US\$ 645 million, which is less than 40 % of India's exports of oilseeds. Like dairy products and eggs, Pakistan meets less than one-tenth of its oilseeds imports from India. Additionally, there is a much stronger case for promoting cotton export from India to Pakistan. It emerges from Table 10 that, except meat and meat products, there is a vast scope for India to promote agricultural exports to Pakistan by taking advantage of the neighbourhood factor, which gives it an edge over rest of the world.

Table 11 Pakistan's agricultural exports and India's imports, TE 2012–2013, US\$ million

Item	Pakistan's exports to world	India's imports from Pakistan	India's imports from world
Live animals	23.0	0.0	10.0
Meat and meat products	166.7	0.0	1.6
Fish and crustaceans	261.4	1.1	83.1
Dairy products and eggs	71.4	0.0	157.0
Products of animal origin	48.0	0.1	39.7
Live trees and plants of parts	1.1	0.0	19.9
Vegetables, roots and tubers	189.0	3.5	2030.7
Fruits and nuts	304.3	78.7	1882.4
Tea and spices	57.8	1.7	432.8
Cereals	2382.6	0.0	32.8
Oilseeds	57.7	4.2	202.3
Lac gums, etc.	97.8	1.4	135.5
Vegetable planting material and products	6.4	0.0	10.1
Animal or vegetable fats	166.4	0.6	9219.4
Sugar and sugar confectionery	136.0	2.3	486.5
Cereal preparations	40.6	0.0	40.7
Vegetable, fruits and nuts preparations	50.6	0.6	72.4
Misc edible preparations	19.6	0.1	108.1
Tobacco and tobacco products	25.2	0.0	36.8
Raw hides and skins	447.0	12.1	515.8
Wool and other products	11.7	8.5	399.1
Cotton	4778.7	47.8	572.0
Other vegetable textile fibres	4.8	0.2	251.9

Source Computed by authors

Opportunities for Pakistan to promote its export to India are captured in the information presented in Table 11. India imported raw hides and skins worth US\$ 515 million during TE 2012–2013; only 2.5 % of this import was from Pakistan, although Pakistan's exports of raw hides and skins were large enough to meet 87 % of the demand in India.

Unlike India, Pakistan has limited opportunities to promote agricultural exports to India because its export surplus matches India's import needs only for a few commodities. Pakistan's major agricultural export is cereals and India itself is a large exporter of cereals. Where, India is in deficit, Pakistan is not in surplus.

Therefore, the scope for Pakistan to replace third-country export to India is limited. However, Pakistan can take advantage of rapid diversification of demand for several products in India, for instance, the expanding demand for different varieties of fruits and vegetables. This will, of course, require addressing supply side factors in Pakistan.

The paper also looks at opportunities for trade in farm inputs like fertilizer, farm machinery, diesel oil and seed, which are tradable inputs for the agriculture sector. India imported fertilizers worth US\$ 7.5 billion in TE 2012–2013. Pakistan also imported fertilizers worth US\$ 0.8 billion in TE 2012–2013. Fertilizer imports in both countries increased until 2011, but declined thereafter. Further, both the countries import farm machinery, especially tractors, and diesel oil. Thus, there are hardly any prospects of trade in these farm inputs between the two countries.

However, there are opportunities in seed trade although these have not been properly harnessed due to a variety of protection related issues and other non-tariff measures.

11 Tariff and Non-tariff Measures for India and Pakistan

The previous section identified a number of opportunities for trade between India and Pakistan. However, trade policies between the two countries restrict and create hindrance in the movement of goods across borders. To address this, the two countries have agreed to simplify their trade procedures and facilitate the flow of goods between them.

SAFTA was signed in 2004 to enhance and facilitate trade among South Asian countries and reduce customs duties on all traded goods to zero by the year 2016. The agreement came into force on 1 January, 2006, and requires India, Pakistan and Sri Lanka (the developing countries) in South Asia to bring their duties down in the form of annual cuts, until they are reduced to zero. Besides the reduced tariff limits under South Asian Free Trade Area (SAFTA), efforts are also being made to reduce non-tariff barriers.

The tariff structures for Pakistan and India were examined at the disaggregated product level and are given in Tables 12 and 13. The tariff structure for commodity groups at the HS 2-digit level is given in Annexure 4 and 5. SAFTA provisions indicated that the tariffs would be reduced to 5 % with effect from 1 January, 2013, for all products other than those on the sensitive list. An analysis of changes in the protection level for agricultural commodities traded between India and Pakistan reveals that the applied tariff rates were significantly high for most of the traded agricultural commodities until 2011. But after the implementation of SAFTA, tariffs have been reduced and brought to the desired level of 5 %. Pakistan has reduced tariffs to 5 % for most exports from India. However, tariffs still remain high for dried vegetables, dates, oilseeds and sugar in India.

Although countries have tried to relax their tariff structures, a number of non-tariff measures are applied supposedly for protection of human life, animal life,

Table 12 Pakistan's tariff structure for products identified as exportable from India to Pakistan

HS code (4-digit)	Description	Tariff (%) (w.e.f. 31st December, 2008)	Tariff (%) (w.e.f. 31st December, 2012)
0402	Milk and cream	17	5
0407	Birds' eggs	5	5
0703	Onion and other vegetables	7.4	5
0713	Dried leguminous vegetables	5	5
0801	Coconut and other nuts	7.4	5
0902	Tea and beverages	5	5
0904	Pepper	5	5
0908	Nutmeg and spices	5	5
1006	Rice	7.4	5
1007	Grain sorghum	5	5
1008	Buckwheat and other cereals	5	5
1202	Groundnuts	7.4	5
1209	Seeds and planting material	5	5
1211	Plants and parts of plants	5	5
1701	Cane/beet sugar	7.4	5
4011	Rubber tyres	5	5
5201	Cotton	5	5
5205	Cotton yarn	5	5
5209	Woven fabrics	17	5

Source Government of Pakistan (2008 and 2012)

health and safety. The details are attached in Annexure 5, 6 and 7. A few commodities are kept on the sensitive list to protect the health of humans, animals and domestic industries. There are currently 614 items on India's sensitive list applicable to Pakistan, whereas Pakistan's sensitive list applicable to India includes 936 items. Out of these, there are 47 agricultural items in India's sensitive list and 246 in Pakistan's sensitive list. The items on the sensitive list have to pass through certain testing, labelling, packaging and certification requirements to check any harm to any living organism.

Pakistan has considerably reduced the items on its sensitive list in various groups except in dairy and animal products and fruits and nuts like apples, grapes and apricots (Table 14). Being an essential commodity, raw and refined sugar has also been kept on the sensitive list. India has also restricted some fruits, vegetables and nuts and put these on the sensitive list. Meat and fish products along with animal products are also part of India's sensitive list for Pakistan.

Table 13 India's tariff structure for products identified as exportable from Pakistan to India

HS code (4-digit)	Description	Tariff (%) (w.e.f. 1st Jan 2011)	Tariff (%) (w.e.f. 1st Jan 2013)
0713	Dried vegetables, shelled	11	8
0802	Nuts	Rs. 28 and 52/kg	Rs. 28 and 52/kg
0804	Dates, figs, pineapples, mangoes, avocados, guavas	11	8
0806	Grapes, fresh or dried	11	5
1207	Oil seeds	11	8
1211	Medicinal plants	7.8	5
1701	Cane or beet sugar	NA	8
1703	Molasses from the extraction/refining of sugar	6.2	5
4101	Raw hides and skins of bovine/equine animals	7	5
4104	Leather of bovine/equine animal	7	5
4107	Leather of other animals	7	5
5201	Cotton, not carded or combed	6.2	5
5208	Woven cotton fabrics	7	5
5209	Woven cotton fabrics	7	5

Source Government of India (2011 and 2013)

12 Agricultural Subsidies in India and Pakistan

Agricultural subsidies have been a matter of intense debate in various WTO rounds. Initially, developing countries took on developed countries for offering high level of subsidies and support to their agricultural sector, and thus creating an uneven playing field. Of late, the discussion on subsidies has also extended to developing countries with some developing countries expressing concern about the subsidies in other developing countries affecting their agriculture. It is reported that agricultural subsidies by relatively advanced developing countries like India impact farmers in smaller and least developed economies (Pasha and Pasha USAID Report).

Between India and Pakistan, India provides food subsidy and also subsidies on major agricultural inputs for meeting the goals of food security and protection of small and marginal farmers. Major agricultural inputs namely fertilizers, irrigation and electricity are supplied to farmers at prices that are below the cost of production. Similarly, Pakistan also provides input subsidies to its farmers. Table 15 compares the agricultural subsidies between India and Pakistan for the year 2010–2011, the latest year for which comparable information is available for both countries.

During the year 2010–2011, India's level of agricultural subsidies was US\$ 31.9 billion while Pakistan subsidized its agriculture by US\$ 2.6 billion. As there is a huge difference in the size of the sector in the two countries, the comparison makes better sense in terms of ratio or share. The level of input subsidies per hectare

Table 14 Sensitive list of India and Pakistan for agricultural commodities under SAFTA

HS code (2-digit)	Description	Sensitive list of Pakistan for India		Sensitive list of India for Pakistan
		2008	2012	
01	Live animals	31	0	0
02	Meat and edible meat offal	54	0	8
03	Fish and crustaceans, molluscs and other aquatic invertebrates	106	0	8
04	Dairy produce; birds' eggs; natural honey; edible prod. of animal origin, not elsewhere spec. or included	11	10	10
05	Products of animal origin, not elsewhere specified or included	22	0	1
06	Live trees and other plants; bulbs; roots and the like; cut flowers and ornamental foliage	18	0	0
07	Edible vegetables and certain roots and tubers	58	1	48
08	Edible fruit and nuts; peel or citrus fruit or melons	40	4	33
09	Coffee, tea, mate and spices	30	5	25
10	Cereals	13	3	11
12	Oil seeds and olea, fruits; misc. grains, seeds and fruit; industrial or medicinal plants; straw and fodder	44	0	32
13	Lac, gums, resins and other vegetable saps and extracts	13	0	2
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	9	1	0
15	Animal or vegetable fats and oils and their cleavage products; edible fats; animal or vegetable waxes	22	13	32
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	28	0	2
17	Sugars and sugar confectionery	18	2	4
19	Preparations of cereals, flour, starch or milk; and other products	25	0	1
20	Preparations of vegetables, fruit, nuts or other parts of plants	41	4	8
21	Miscellaneous edible preparations	25	0	0
24	Tobacco and manufactured tobacco substitutes	3	2	9
41	Raw hides and skins (other than fur skins) and leather	43	0	0
51	Wool, fine or coarse animal hair, horsehair yarn and woven fabric	38	0	0

(continued)

Table 14 (continued)

HS code (2-digit)	Description	Sensitive list of Pakistan for India		Sensitive list of India for Pakistan
		2008	2012	
52	Cotton	128	0	12
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	25	2	0

Source Government of India and Pakistan

Table 15 Subsidies on agricultural inputs in India and Pakistan, 2010–2011

Particular	Unit	India ^a	Pakistan ^b
Subsidies	Million US\$	31,941	2676
Agriculture value added	Million US\$	286,754	43,088
GNP (at current prices) ^c	Million US\$	1,576,487	219,732
Net cropped area	Million hectares	141.6	15.9
Subsidies as % of value added	Per cent	11.1	6.2
Subsidies as % of GNP	Per cent	2.0	1.2
Subsidy per hectare	US\$	225.6	168.1
Subsidies as % of value of production of agriculture	Per cent	8.8	4.9

^aEstimated by the authors using data from National Accounts Statistics 2012, CSO, GOI

^bSource Pasha and Pasha, USAID Report

^cRefers to GNI for India

of net sown area was US\$ 225.6 in India and US\$ 168.1 in Pakistan. India subsidized its agriculture by 8.8 % of the value of agriculture production as compared to 4.9 % in Pakistan. These comparisons show that Indian farmers have a benefit of 4 % over Pakistani farmers in terms of subsidies and this can be factored into the trade policy. Therefore, higher level of subsidies in Indian agriculture compared to Pakistan should not be a major issue against trade promotion between the two countries.

13 Conclusions and Policy Implications

Despite strong neighbourhood and proximity advantage, India and Pakistan did not trade much until the late 1990s. Bilateral trade started expanding in the new century and it picked up momentum after SAFTA came into effect in 2006. In case of the agricultural sector, trade picked up after 2005–2006. Since then, agricultural exports from India to Pakistan have grown at a faster rate than export of

non-agricultural products. However, agricultural exports from Pakistan to India increased at a slow rate, seemingly due to supply side constraints in Pakistan's agricultural sector. Average trade showed a big jump after SAFTA came into effect, but it proved to be a one-time gain, as the trend remained sluggish after the increase in 2006–2007. On the whole, India's agricultural exports to Pakistan show a much better performance than agricultural exports from Pakistan to India.

Trade in most commodities shows very large year-on-year variation and most of the agriculture trade was taking place for stabilizing the fluctuations in domestic production. The trade pattern of the past 15 years indicates that the Indo–Pak agriculture trade can be classified in three categories namely (a) trade for domestic stabilization; (b) trade based on comparative advantage of more or less permanent nature, and (c) trade in specialized products. Some of India's major exports, like sugar, onion and even cotton, are meant largely for regulating the fluctuating domestic supply (due to production shocks) in Pakistan. Experience shows that there is considerable delay in arranging import on both sides to address domestic shortages. Suitable mechanisms need to be developed for liberalized trade in such commodities to address price shocks that hurt consumers and also adversely affect the economy. Bilateral trade is a cost effective and efficient instrument to address price and market volatility in the two countries.

Both countries have comparative advantage in the export of some commodities to each other. These include tomato, cane sugar, onion, fresh vegetables, cotton (carded and combed), groundnut, coarse cereals as feed and dairy products for exports from India to Pakistan. Similarly, Pakistan has comparative advantage in exporting dates, leather, hides and skins and woven fabrics to India. There is considerable scope for promoting export of specialized items as trade is stable and growing in this case. These include products with unique attributes like herbs, medicinal and aromatic plants and some cereals. Buckwheat (*kuttu*) and Psyllium (*Isabgol*) can be cited as specific examples here.

Despite implementation of SAFTA, some strong tariff and non-tariff barriers continue to restrict agricultural trade between the two countries. This requires action in the following areas:

- Trade facilitation
- Further lowering of tariffs
- Pruning the negative list
- Removal of non-tariff trade barriers

Of these, trade facilitation in the form of simplification of custom and other border formalities, transport linkages, transparency in regulatory provisions, improved logistics for rail, road, air and maritime transport, a better information network, etc. are among the most important measures to increase bilateral trade. Chand (2012) also reported that a major factor for low volume and low share of intra-regional trade in South Asia seems to be the poor facilitation for intra-regional trade, like efficiency of custom, other border procedures, quality of transport and IT infrastructure, etc. Other studies also reported that trade facilitation is a major factor

in the growth of intra-regional and total trade from South Asia (ADB 2009; Jain and Singh 2009; Wilson and Otsuki 2007). Improved trade facilitation and logistics will reduce the transaction cost of trade, which is more significant than tariff. India and Pakistan must promptly take up measures individually and as a group to achieve higher trade facilitation.

Differences in the level of agricultural subsidies between India and Pakistan are cited as an important reason for not liberalizing India's agricultural export to Pakistan. As there is a huge difference in the size of the sector in the two countries, comparisons of subsidies make better sense in terms of the ratio or share. The level of input subsidies per hectare of net sown area was US\$ 225.6 in India and US\$ 168.1 in Pakistan. India subsidized its agriculture by 8.8 % of the value of agriculture production as compared to 4.9 % in Pakistan. These comparisons show that Indian farmers have a benefit of 4 % over Pakistani farmers in terms of subsidies and this can be factored into the trade policy. Therefore, higher levels of subsidy in Indian agriculture compared to Pakistan should not be a major issue in terms of promoting trade between the two countries.

Another hitherto neglected area related to agriculture trade is the trade in technology. Agriculture in both countries faces some serious challenges while there are tremendous opportunities for science-led agricultural growth. Modern research also requires large amounts of capital and a high level of skill and knowledge. India and Pakistan can benefit immensely through trade in technology.

Acknowledgments This paper has been written as part of research studies conducted under the project "Strengthening Research and Promoting Multi-level Dialogue for Trade Normalization between India and Pakistan" led by Dr. Nisha Taneja. The authors are thankful to reviewers for their comments.

Annexure 1: List of Groups Covered in Agriculture

HS code (2-digit)	Description
01	Live animals
02	Meat and meat products
03	Fish and crustaceans
04	Dairy products and bird eggs
05	Products of animal origin
06	Live trees and other plants
07	Edible vegetables
08	Edible fruits
09	Tea and beverages
10	Cereals
11	Products of milling industry
12	Oilseeds

(continued)

(continued)

HS code (2-digit)	Description
13	Lack gums, etc.
14	Vegetable planting materials
15	Animal or vegetable fat
17	Sugar
19	Cereals preparations
20	Vegetables and fruit preparations
21	Misc edible preparations
22	Beverages
24	Tobacco
40	Rubber and the articles thereof
41	Raw hides and skin
44	Wood
47	Pulp of wood
50	Silk
51	Wool
52	Cotton
53	Other vegetable fibres

Source List finalized by the authors

Annexure 2: India's Major Agricultural Exports to Pakistan (US\$ Million)

HS code (2-digit)	Commodity	1996- 1997	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
01	Live animals	0	0	0	0	0	0	0	0	0.01	0.06	0.29	0.21	0	0	0	0	0
02	Meat and meat products	0	0	0.03	0	0	0	0	0	0.07	5.84	29.81	15.25	3.94	4.12	4.87	5.92	4.16
03	Fish and crustaceans	0	0.12	0	0	0	0.08	0.13	0.04	0.08	0.06	0.02	0.22	0	0	0	1.01	0
04	Dairy products and bird eggs	0	0.01	0	0	0	0.01	0.1	0.07	1.17	8.03	4	6.13	2.7	2.66	11.61	4.79	14.29
05	Products of animal origin	0	0.01	0	0	0	0	0	0.01	0	0.01	0.01	0	0	0.14	0.56	0.88	0.83
06	Live tress and other plants	0.01	0.04	0	0	0	0.01	0.02	0	0	0.01	0.01	0.03	0.04	0.08	0.02	0.01	0.11
07	Edible vegetables	0.29	0.7	3.45	0.75	1.02	1.73	0.99	0.87	6.44	30.46	35.71	68.02	91.16	59.85	74.07	146.39	144.51
08	Edible fruits	0.68	0.33	0.84	1.44	0.25	0.29	0.34	0.62	0.1	0.88	0.63	0.84	0.4	1.86	10.96	22.2	25.03
09	Tea and beverages	11.37	15.68	12.76	10.09	14.61	6.06	7.37	8.59	14.82	12.01	21.46	30.32	56.66	36.9	71.26	103.74	83.71
10	Cereals	0.04	0.03	0.33	0	0.42	0	2	1.79	4.29	1.71	1.24	7.22	31.66	10.94	18.87	31.47	14.47
11	Products of milling industry	0.03	0	0.03	0.01	0	0	0	0.05	0.02	0.02	0	0.07	0.05	0.06	0.12	0.1	0.64
12	Oilseeds	2.42	2.50	3.44	3.32	2.65	2.25	3.44	13.85	4.59	13.63	16.46	19.85	18.76	35.51	48.89	48.31	52.37
13	Lack gums, etc.	1.5	1.13	0.66	0.68	1.31	0.48	0.67	1.43	1.75	2.31	4.46	3.49	3.89	4.22	7.44	12.48	12.24

(continued)

(continued)

HS code (2-digit)	Commodity	1996- 1997	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
14	Vegetable planting materials	3.99	2.35	2.06	2.47	2.03	2.04	1.94	2.03	2.56	2.04	3.2	3.79	2.05	2.68	2.12	2.76	2.84
15	Animal or vegetable fat	0.13	0.11	0.15	0.16	0.16	0.1	0.7	0.34	0.35	0.65	0.98	0.64	0.6	0.57	0.63	0.61	0.38
17	Sugar	86.82	35.7	0.14	0.02	56.65	43.21	6.38	3.9	0.55	30.48	352.82	70.94	10.89	1.07	336.85	18.64	0.5
19	Cereals	0	0.01	0.03	0.01	0.11	0	0.05	0.04	0.03	2.73	0.26	0.34	8.91	7.37	3.11	6.85	6.02
20	Vegetables and fruit preparations	0	0	0	0.01	0	0	0	0.01	0	0.04	0.11	0.11	0	0.29	0	0.63	1.63
21	Misc edible preparations	0.2	0.33	0.22	0.13	0.02	0.01	0.47	0.01	0.56	0.19	0.38	0.07	0.23	0.19	0.11	0.25	0.83
22	Beverages	0	0	0	0	0	0.02	0.02	0	0.08	0	0.03	0	0.11	0.22	0.11	0	0.01
24	Tobacco	0	0.14	0.16	0.04		0.02	0.09	0	0	0.42	0.01	0.04	0.88	0	6.27	0	0.53
40	Rubber and the articles thereof	0.35	9.05	6.59	6.86	8.54	8.94	14.77	15.69	29.69	42.61	39.77	51.51	42.49	41.65	56.03	62.25	45.08
41	Raw hides and skin	0	0.01	0.01	0	0	0.01	0.09	0.29	0.04	0.19	0.07	0.14	0.89	0.16	0.5	0.49	0.51
44	Wood	0.02	0.02	0	0.03	0	0.03	0.03	0.06	0.04	0.03	0.01	0.25	0.41	0.36	0.41	0.2	1.58
47	Pulp of wood	0	0	0	0	0	0	0	0	0.02	0	0	0.11	0	0	0.01	0.01	0
50	Silk	0.04	0.01	0.02	0	0	0	0.02	0.01	0.01	0	0	0.02	0.22	0.07	0.04	0.01	0.02
51	Wool	0.01	0.01	0	0	0	0	0.12	0.47	0.68	0.67	0.43	1.24	0.37	0.64	0.62	1.13	0.09

(continued)

(continued)

HS code (2-digit)	Commodity	1996- 1997	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
52	Cotton	0.13	0.27	0.37	0.7	0.07	0.84	1.18	51.73	16.69	58.09	210.06	461.72	97.25	242.77	423.69	87.12	471.93
53	Other vegetable fibres	0.13	0.23	0.18	0.27	0.27	0.09	0.1	0.06	0.05	0.04	0.01	0.15	0.01	3.02	6.29	0.17	0.01

Source EXIM Databank, Government of India

Annexure 3: India's Major Agricultural Imports from Pakistan (US\$ Million)

HS code (2-digit)	Commodity	1996- 1997	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
02	Meat and meat products	0	0	0	0	0	0	0	0	0	0	0	0.04	0.01	0	0	0	0
03	Fish and crustaceans	0	0	0	0	0	0.11	0	0	0.04	0.65	0.21	0.89	0.74	0.89	0.61	1.35	1.48
04	Dairy produce; birds' eggs	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0
05	Products of animal origin	0	0	0	0	0	0	0	0	0.01	0.02	0.04	0.04	0	0	0.14	0.16	0
07	Edible vegetables	0	0	1.47	0.03	3.91	7.02	12.34	25.56	4.83	67.94	1.38	1.35	0.05	5.55	7.31	0.28	2.97
08	Edible fruit	26.51	22.22	20.38	20.75	25.89	27.18	9.04	12	23.07	26.14	88.76	42.4	36.68	46.41	62.98	80.68	92.55
09	Tea and beverages	0.55	0.59	0.3	0.68	0.51	2.35	0.91	0.58	1.96	0.93	0.82	1.82	1.01	2.76	1.61	2.91	0.61
10	Cereals	0	0	0	6.07	0.08	0	0	0	0	0	0	12.36	0	0	0	0	0
12	Oil seeds	1.25	0.79	1.46	2.31	1.05	1.59	0.23	0.61	1.44	1.73	1.6	3.02	5.39	8.29	3.63	2.96	5.87
13	Lac; gums,	0.93	1.26	0.83	1.75	2.71	3.66	2.1	1.53	1.13	0.86	1.28	0.62	1.27	1.25	1.03	1.44	1.63
14	Vegetable plaiting materials	0.01	0.02	0.01	0.03	0.02	0.06	0	0	0.01	0.03	0.02	0.03	0.02	0.03	0.05	0.01	
15	Animal or vegetable fats	0	0	0	0.07	0	0	0	0	0	0	0.02	0	0	0	1.65	0	0
16	Preparations of meat	0	0	0	0	0	0	0	0	0	0	0.02	0.03	0	0	0	0.01	0.01
17	Sugars	0	13.49	181.16	16.37	2.42	6.77	0	0	31.35	7.45	0	0	0	0	0	0	6.75
19	Preparations of cereals	0	0	0	0	0	0	0	0	0	0.01	0.01	0.01	0.02	0	0.02	0.01	0
20	Vegetables and fruit preparations	0	0	0	0	0	0	0	0	0.01	0	1.31	0.48	1.41	1.64	0	0	1.87
21	Miscellaneous edible preparations	0	0	0	0	0	0	0	0	0.01	0.01	0	0.03	0.02	0	0.03	0.18	0
24	Tobacco and manufactured tobacco substitutes	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0
41	Raw hides and skins	0.97	1.35	0.56	0.48	0.37	0.44	0.15	0.66	1.12	1.71	3.94	12.54	12.17	8.28	13.4	11.22	11.62
51	Wool	2.57	1.23	0.24	0.2	0.02	0.52	0.85	2.29	1.2	2.15	3.77	5.19	3.52	3.98	9.32	5.74	10.4
52	Cotton	0.39	0.03	0.62	1.82	1.05	3.03	1.51	3.64	15.13	28.11	48.88	45.29	44.76	39.1	22.45	60.43	60.38
53	Other vegetable textile fibres	0	0	0	0	0.01	0.01	0	0	0	0	0.02	0	0.22	0.13	0.05	0	0.26

Source EXIM Databank, Government of India

Annexure 4: Pakistan's Tariff Structure at HS 2 Digit Level

HS code (2-digit)	Description	Tariff (%) (w.e.f. 31st Dec 2008)	Tariff (%) (w.e.f. 31st Dec 2012)
01	Live animals	5	5
02	Meat and edible meat offal	17 and 5	5
03	Fish and crustaceans, molluscs and other aquatic invertebrates	7.4 and 5	5
04	Dairy produce; birds' eggs; natural honey; edible prod. Of animal origin, not elsewhere spec. Or included	17, 10.6 and 5	5
05	Products of animal origin, not elsewhere specified or included	17 and 5	5
06	Live trees and other plants; bulbs; roots and the like; cut flowers and ornamental foliage	17, 10.6 and 5	5
07	Edible vegetables and certain roots and tubers	10.6, 7.4 and 5	5
	0710.1000 potatoes	10.6	5
	0709.5100 mushrooms of the genus <i>Agaricus</i>	7.4	5
	0705.1100 cabbage and carrots	5	5
08	Edible fruit and nuts; peel or citrus fruit or melons	17, 7.4 and 5	5
09	Coffee, tea, mate and spices	10.6, 7.4 and 5	5
	0904.1200 Pepper seeds for sowing, crushed or ground	10.6	5
	0903.0000 mate	7.4	5
	0909.6100 seeds of anise or badian	5	5
10	Cereals	7.4 and 5	5
12	Oil seeds and olea. Fruits; misc. Grains, seeds and fruit; industrial or medicinal plants; straw and fodder	17, 7.4 and 5	5
13	Lac; gums, resins and other vegetable saps and extracts	17 and 10.6	5
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	17, 10.6, 7.4 and 5	5
15	Animal or vegetable fats and oils and their cleavage products; pre. Edible fats; animal or vegetable waxes	17, 7.4, 5, Rs. 9500/MT, Rs. 9500/MT and Rs. 10,200/MT and 10,800/MT	5 and Rs. 9500/ MT Rs. 9500/MT, Rs. 10,200/MT and 10,800/MT
	1503.0010 lard stearin, lard oil	17	5
	1503.0090 other	7.4	5
	1509.1000 virgin	Rs. 9050/MT	Rs. 9050/MT
	1509.9000 other	Rs. 10,200/MT	Rs. 10,200/MT
	1513.1100 crude oil	Rs. 9500/MT	Rs. 9500/MT
	1513.1900 other	Rs. 10,800/MT	Rs. 10,800/MT

(continued)

(continued)

HS code (2-digit)	Description	Tariff (%) (w.e.f. 31st Dec 2008)	Tariff (%) (w.e.f. 31st Dec 2012)
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	17	5
17	Sugars and sugar confectionery	17, 10.6, 7.4 and 5	5
	1702.3000 glucose and glucose syrup	17	5
	1702.5000 chemically pure fructose	10.6	5
	1701.1200 beet sugar	7.4	5
	1703.1000 cane molasses	5	5
19	Preparations of cereals, flour, starch or milk; pastry cooks products	17 and 10.6	5
20	Preparations of vegetables, fruit, nuts or other parts of plants	17 and 10.6	5
21	Miscellaneous edible preparations	17, 10.6 and 7.4	5
24	Tobacco and manufactured tobacco substitutes	5	5
41	Raw hides and skins (other than fur skins) and leather	17, 7.4 and 5	5
51	Wool, fine or coarse animal hair, horsehair yarn and woven fabric	9.96, 7.4, 5.48 and 5	5
52	Cotton	17, 9.96, 7.4 and 5	5
	5204.1100 cotton, carded or combed containing 85 % or more by weight of cotton	17	5
	5210.1100 plain weave and fabrics	9.96	5
	5202.1000 yarn waste (including thread waste)	7.4	5
	5201.0030 American or Egyptian cotton	5	5
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	17, 9.96, 7.4 and 5	5

Source Government of Pakistan (2008 and 2012)

Annexure 5: India's Tariff Structure at HS 2 Digit Level

HS code (2-digit)	Description	Tariff (%) (1st Jan 2011)	Tariff (%) (1st Jan 2013)
01	Live animals	11	5
02	Meat and edible meat offal	11	5
03	Fish and crustaceans, molluscs and other aquatic invertebrates	11	5
04	Dairy produce; birds' eggs; natural honey; edible prod. Of animal origin, not elsewhere spec. Or included	11	5
05	Products of animal origin, not elsewhere specified or included	11	5
06	Live trees and other plants; bulbs; roots and the like; cut flowers and ornamental foliage	11	5
07	Edible vegetables and certain roots and tubers	11	5 and 8
08	Edible fruit and nuts; peel or citrus fruit or melons	Rs. 28/kg, Rs. 52/kg, 7.8, 11	Rs. 28/kg, Rs. 52/kg, 5 and 8
	0813 20 00 cashew nuts fresh/dried shelled	11	5
	0810 60 00 durians	7.8	5
	0802 11 00 almonds fresh or dried in shell	Rs. 28/kg	Rs. 28/kg
	0802 12 00 shelled almonds fresh or dried	Rs. 52/kg	Rs. 52/kg
09	Coffee, tea, mate and spices	11	5 and 8
10	Cereals		5 and 8
12	Oil seeds and olea. Fruits; misc. Grains, seeds and fruit; industrial or medicinal plants; straw and fodder	7.8 and 11	5 and 8
	12 all goods	11	5 and 8
	1211 30 coca leaf fresh/dried w/n cut crushed/powdered	7.8	5
13	Lac; gums, resins and other vegetable saps and extracts	7.8	5 and 8
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	11	5
15	Animal or vegetable fats and oils and their cleavage products; pre. Edible fats; animal or vegetable waxes	7.8 and 11	5 and 8
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	11	5 and 8
17	Sugars and sugar confectionery	6.2 and 11	5 and 8
	1702 chemically pure lactose, maltose, glucose and fructose	11	5

(continued)

(continued)

HS code (2-digit)	Description	Tariff (%) (1st Jan 2011)	Tariff (%) (1st Jan 2013)
	1703 molasses resulted from the extracting/refining of sugar	6.2	5
19	Preparations of cereals, flour, starch or milk; and other products	11	5
20	Preparations of vegetables, fruit, nuts or other parts of plants	11	5
21	Miscellaneous edible preparations	11	5
24	Tobacco and manufactured tobacco substitutes		5
41	Raw hides and skins (other than fur skins) and leather	7	5
51	Wool, fine or coarse animal hair, horsehair yarn and woven fabric	7	5
52	Cotton	6.2,7 and 11	5 and 8
	5203 00 00 Cotton, carded or combed	11	5
	52 (except 5203 00 00)	7	5
	5201 cotton, not carded or combed	6.2	5
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	7 and 11	5

Source Government of India (2011 and 2013)

Annexure 6: Non-tariff Measures on Agricultural Commodities: Specific NTBs Faced by Indian Exporters in Pakistan

Product and HS code (4-digit)	NTM	NTM description	NTM objective	Legislation
Bird eggs (0407)	Prohibition for political reasons (embargo)	Goods of Israeli origin or imported from Israel are banned	NA	Ministry of Commerce, Pakistan
	Treatment for elimination of plant and animal pests and disease-causing organisms in the final production	Poultry products are banned from Avian Influenza H5N1 strain affected countries	NA	Ministry of Commerce, Pakistan
Tomato (0702)	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan

(continued)

(continued)

Product and HS code (4-digit)	NTM	NTM description	NTM objective	Legislation
Onion and other vegetables (0703)	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan
Dried leguminous vegetables (0713)	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan
Tea and beverages (0902)	Testing requirement	Mandatory standards set out by PSQCA	NA	Government of Pakistan—Mandatory standards and conformity test by the PSQCA
Pepper (0904)	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Testing requirement	Mandatory standards set out by PSQCA	NA	Government of Pakistan—Mandatory standards and conformity test by the PSQCA
Rice (1006)	Requirement to pass through specified port of customs	If imported from India, import from Wagah is also allowed	NA	Ministry of Commerce, Pakistan
Seeds and planting material (1209)	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Geographical restrictions on eligibility	Opium poppy seeds shall be allowed from those countries only where it is legally produced	NA	Ministry of Commerce, Pakistan
	Testing requirement	Importable subject to drawing sample and testing quality by Dept of Plant Protection and Federal Seed Certification Agency	Protection of animal life and health	Department of Plant Protection, Pakistan

(continued)

(continued)

Product and HS code (4-digit)	NTM	NTM description	NTM objective	Legislation
	Quarantine requirement	Rice seed shall be subject to strict quarantine measures prescribed under the seed act 1976	NA	Department of Plant Protection, Pakistan
Plants and parts of plants (1211)	Prohibition for non-economic reasons	Extract and tinctures of cannabis are banned	NA	Ministry of Commerce, Pakistan
Cane/beet sugar (1701)	Requirement to pass through specified port of customs	If imported from India, import from Wagah is also allowed	NA	Ministry of Commerce, Pakistan
Cotton (5201)	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Additional taxes and charges levied in connection to services provided by the Government	Levy of value addition tax	NA	Federal Board of Revenue website, Government of Pakistan—SROs
	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan
Cotton yarn (5205)	Additional taxes and charges levied in connection to services provided by the Government	Levy of value addition tax	NA	Federal Board of Revenue website, Government of Pakistan—SROs
	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan

(continued)

(continued)

Product and HS code (4-digit)	NTM	NTM description	NTM objective	Legislation
Woven fabrics (5209)	Additional taxes and charges levied in connection to services provided by the Government	Levy of value addition tax	NA	Federal Board of Revenue website, Government of Pakistan—SROs
	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan

Source www.macmap.org

Annexure 7: Non-tariff Barriers on Agricultural Commodities: Specific NTBs Faced by Pakistan's Exporters in India

NTM	NTM description	Legislation	Applicable for
Authorization requirement for TBT reasons	The regulation requires that a license has to be granted/obtained to (a) commence or carry on the business as (i) a manufacturer of, or dealer in, any animal article, or (ii) a taxidermist; or (iii) a dealer in trophy or uncured trophy; or (iv) a dealer in captive animal; or (v) a dealer in meat; or (b) cook or serve meat in any eating house	Wild Life Protection Act, 1972	4101 Raw hides and skins of bovine/equine animals 4107 Leather of other animals

(continued)

(continued)

NTM	NTM description	Legislation	Applicable for
Conformity assessment related to TBT	The regulation requires that no person without proof of ownership shall sell certain animals and animal products without prior approval of the authorized officer	Wild Life Protection Act, 1972	4101 Raw hides and skins of bovine/equine animals 4107 Leather of other animals
Food and feed processing	These regulations mandate that a well-equipped laboratory for testing of food materials shall be in place inside the premises of food business units for physical, microbiological and chemical analysis	Food Safety and Standards(licensing and registration of food businesses) Regulations, 2011	1211 Medicinal plants
Fumigation	The order provides for fumigation requirement when considered necessary based on the authority's discretion, the importer at its own cost is required to comply with the same	Plant Quarantine (regulation of import into India) Order, 2003	802 Nuts 804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried 1207 Oil seeds
Geographical restrictions on eligibility	The regulation prohibits imports of certain plants/planting materials from certain countries based on specific justification provided thereof	Plant Quarantine (regulation of import into India) Order, 2003	802 Nuts 804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried 1207 Oil seeds

(continued)

(continued)

NTM	NTM description	Legislation	Applicable for
Irradiation	These regulations mandate that certain food items such as onions, spices, potatoes, wheat, atta, pulses, etc. dried fruits such as raisins, figs and dried dates, meat and meat products including chicken, etc. will not be subject to a dose of irradiation in excess of the specified quantity in the Regulation. For instance, onions can be subjected to an irradiation of a maximum of 0.09 KGY, spices can be subjected to an irradiation of a maximum of 14 KGY, etc. Further, such irradiation facility should be approved and licensed by the Government, and in accordance with specified procedures	Food Safety and Standards (food products standards and food additives) Regulations, 2011	713 Dried vegetables, shelled 804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried
Licensing for non-economic reasons	Import will be subject to provision of convention of international trade in Endangered species of wild fauna and flora (CITES)	Director General Foreign Trade (DGFT) notification —restricted items for imports	1211 Medicinal plants

(continued)

(continued)

NTM	NTM description	Legislation	Applicable for
Microbiological criteria of the final product	These rules require certain food products to conform to certain microbiological requirements such as the amount of <i>E. coli</i> , staphylococcus, salmonella that can be found in various food items such as milk and milk products, fish and meat products, fruits and vegetables products, etc. For instance, in case of ice creams, the <i>E. Coli</i> count cannot be more than 100/g and there should be no salmonella	Food Safety and Standards (food products standards and food additives) Regulations, 2011	804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried
Non-automatic import licensing procedures	Licensing is required to import	Director General Foreign Trade (DGFT) notification —restricted items for imports	1207 Oil seeds 1211 Medicinal plants
Price control measures	When goods of the description mentioned in the Schedule chargeable with a duty of excise under the Central Excise Act, 1944 (1 of 1944), read with any notification for the time being in force issued by the Central Government in relation to the duty so chargeable (not being a notification providing for any exemption for giving credit with respect to, or reduction of duty of excise under the said act on such goods equal to, any duty of excise under	Central Board of Excise and Customs, Government of India —Additional Duties Of Excise (textiles and textile articles) Act, 1978 (40 of 1978)	5201 Cotton, not carded or combed 5208 Woven cotton fabrics 5209 Woven cotton fabrics

(continued)

(continued)

NTM	NTM description	Legislation	Applicable for
	the said act, or the additional duty under section 3 of the Customs Tariff Act, 1975 (51 of 1975), already paid on the raw material used in the production or manufacture of such goods), are assessed to duty, there shall be levied and collected a duty of excise equal to fifteen per cent of the total amount so chargeable on such goods		
Prohibitions/restrictions of imports for objectives set out in the TBT agreement	The regulation specifies that no person shall carry on the business of selling, exporting or importing seeds at any place except under and in accordance with the terms and conditions of license granted to him under this order	Seed Control Order, 1983	1207 Oil seeds
Quarantine requirement	The order specifies that plant and seed consignments that may pose a threat are to be subjected to post-entry quarantine, as specified in the order, to be implemented by using established quarantine facilities, at the importer's expense	Plant Quarantine (regulation of import into India) Order, 2003	802 Nuts 804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried 1207 Oil seeds

(continued)

(continued)

NTM	NTM description	Legislation	Applicable for
Special authorization requirement for SPS reasons	The regulation specifies grant of permit by notified authorities as a prerequisite to a plant, plant product, seed, etc. being imported	Plant Quarantine (regulation of import into India) Order, 2003	802 Nuts 1207 Oil seeds
TBT regulations on production processes	The regulation requires that no person shall sell or offer or expose for sale or have in his premises for the purpose of sale under any description, fruit which has been artificially ripened by use of acetylene gas, commonly known as carbide gas	The Prevention of Food Adulteration Rules, 1955	804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried

Source www.macmap.org

References

- Asian Development Bank. (2009). *Regional co-operation strategy and programme, South Asia (2006–08)*. Manila: ADB.
- Balassa, B. (1965). Trade liberalisation and revealed comparative advantage. *The Manchester School*, 33(2), 99–123.
- Bhagwati, J. (1993). Regionalism and multilateralism: An overview. In J. de Melo & A. Panagariya (Eds.), *New dimensions in regional integration*. Cambridge: Cambridge University Press.
- Chand, R. (2006). *Free trade area in Asia*. New Delhi: Academic Foundation.
- Chand, R. (2012). International trade, regional Integration and food security in South Asia with special focus on LDCs. *UNCTAD and Common Wealth Secretariat*, October 2012.
- Government of India. (2011 and 2013). *Notifications and order*. India: Ministry of Commerce and Industry, Department of Commerce.
- Government of Pakistan. (2008 and 2012). *Notifications and orders*. Islamabad, Pakistan: Ministry of Commerce.
- International Trade Centre. (2012). Market access map, improving transparency in international trade and market access. <http://www.macmap.org/>. Accessed on April 22, 2014.

- Jain, R., & Singh J. B. (2009). Trade pattern in SAARC countries: Emerging trends and issues. In *Occasional papers* (Vol. 30, No. 3) (Winter 2009). India: Reserve Bank of India.
- Pasha, H. A., & Pasha, A. G. Non-tariff barriers of India and Pakistan and their Impact. *Institute of Public Policy Beaconhouse National University Pakistan, USAID Deliverable 2*.
- Raihan, S., & De, P. (2013). *India–Pakistan economic cooperation: Implications for regional integration in South Asia*, Commonwealth Secretariat.
- Wilson, J. S., & Otsuki, T. (2007). Regional integration in South Asia: What role for trade facilitation? *Policy research working paper*, No. 4423, Development Research Group, the World Bank, December.

India-Pakistan Trade Normalisation
The Unfinished Economic Agenda
Taneja, N.; Dayal, I. (Eds.)
2017, XII, 390 p. 70 illus., Hardcover
ISBN: 978-981-10-2214-2