

Working Paper 363

**Emerging Trends in
India-Pakistan Trade**

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Table of Contents

Acknowledgements	i
Abstract.....	ii
1. Introduction.....	1
2. Trade Trends and Composition.....	3
3. Trade through Different Modes of Transport.....	7
4. New Commodities Traded in Post- liberalization Period.....	8
4.1 <i>New Exports.....</i>	9
4.2 <i>New Exports through Different Modes of Transport.....</i>	9
4.3 <i>New Exports and Informal Trade</i>	10
5. Measures Affecting India’s Exports to Pakistan.....	12
5.1 <i>Cotton Yarn and Cotton Fabric (HS Codes: 5205-5212).....</i>	12
5.2 <i>Cotton not Carded or Combed (HS Code: 5201).....</i>	13
5.3 <i>Soya bean (HS Code: 2304).....</i>	14
6. Impact of GST on India’s Imports from Pakistan.....	15
7. Conclusion and Policy Recommendations	18
References	20
APPENDIX.....	22

List of Tables

Table 1:	India's Trade with Pakistan (US\$ million).....	4
Table 2:	India's Top 10 Exports to Pakistan at HS-2 (All Values in US\$ Million)	5
Table 3:	India's Top 10 Imports from Pakistan at HS-2 (All Values in US\$ Million).....	6
Table 4:	Product Composition of India's Trade with Pakistan (in %).....	6
Table 5:	India's Exports to Pakistan in New Commodities	9
Table 6:	India's Top New Exports to Pakistan (2016-17)	9
Table 7:	Comparison between Informal Export Commodities and New Export Commodities	11
Table 8:	Value of Import of Cotton by Pakistan from India and the World (US\$ million) ...	12
Table 9:	Shares of modes of India's Exports of Cotton yarn and fabric to Pakistan	13
Table 10:	Value of Import of Cotton by Pakistan from India and the World (US\$ million) ...	13
Table 11:	Shares of modes of India's Exports of Cotton to Pakistan	14
Table 12:	Value of Import of Soya bean by Pakistan from India and the World (US\$ million).....	14
Table 13:	Shares of modes of India's Exports of Soya bean to Pakistan.....	14
Table 14:	Pre-GST and Post-GST Duty Rates for India's Top Ten Imports from Pakistan in 2016-17	17

List of Figures

Figure 1:	Impact of Political Relations between India and Pakistan on Trade	3
Figure 2:	India's Trade with Pakistan (US\$ billion)	4
Figure 3:	Mode-wise Export and Import Share of India-Pakistan Trade	8
Figure 4:	Mode-wise India's Total Trade with Pakistan-Old Commodities v/s New Commodities	10

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Abstract

Significant measures were undertaken by India and Pakistan to liberalize trade in 2012. In particular, Pakistan's policy to permit all items to be imported from India except for a few items was expected to bring about a quantum increase in India's exports. Similarly, India's efforts to address Non-Tariff Barriers (NTBs) were expected to lead to an increase in Pakistan's exports to India. This study focuses on understanding whether there has been substantial increase in trade since 2012 and whether there has been a change in commodity composition of traded items. It also examines whether new items have entered India's export basket and assesses whether these items indicate a shift from informal to formal trade. The study identifies key trade policy reform measures undertaken by the two countries which are likely to impact India-Pakistan trade. These measures include regulatory duties imposed by Pakistan and Goods and Service Tax (GST) adopted by India.

The key finding of the study is that there has been a limited impact of trade liberalization on the volume of trade between the two countries. The shift from positive list to negative list has not resulted in any major increase in new exports. The share of new commodities exports in total exports has showed a rise of only 9 percentage points between 2012-13 and 2016-17. However, the trade basket has witnessed a diversification in terms of number of new items traded. The study finds that there is evidence of items shifting from informal to formal channels. The study also finds that the imposition of regulatory duties and compliance of standards has not affected India's exports to Pakistan. The study concludes by making policy recommendations that could enhance and facilitate bilateral trade between India and Pakistan.

Key Words: *India-Pakistan, bilateral trade, trade normalization, informal trade*

JEL Classification: *F10, F13, F50, F53*

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Emerging Trends in India-Pakistan Trade

Nisha Taneja, Samridhi Bimal and Varsha Sivaram

1. Introduction

Until recently, India and Pakistan were trading under a rather restrictive bilateral trade regime. In 1996, India accorded Most Favored Nation (MFN) status to Pakistan thereby offering Pakistan the same trading regime as it offers to any other country in the world. Pakistan, on the other hand, continued to allow imports of a limited number of items from India, collectively known as the positive list; although the number of items on the list has increased gradually. The positive list was even more restrictive for road-based trade, as Pakistan allowed only thirteen items on the positive list to be imported from India by road.

One of the most significant developments in India-Pakistan trade has been that Pakistan made substantial progress in the process of granting Most Favored Nation (MFN) status to India in 2012 by switching from the positive list approach which allowed trade in a limited number of items to a small negative list of items in which trade is not permitted.¹ Similarly the items allowed to be traded by the road route were also increased.² India, on the other hand, also undertook several measures to address non-tariff barriers as part of the trade normalization process. Since then no further trade liberalization has taken place. As the two countries prepared themselves for the 2014 elections in India, neither was interested in undertaking new measures. After the new Government came to power in 2014, several attempts were made to resume the bilateral dialogue but these were cancelled due to increasing political tensions between the two countries. The high-level foreign secretary level talks between India and Pakistan scheduled for August 2014 and the National Security Advisors meet scheduled for August 2015 were cancelled. Political tensions have remained high and the resumption of dialogue in the near future seems unlikely.

While political relations between the two countries have most certainly influenced trade, it is important to note that no measures having direct negative impact on trade were adopted by the two countries unlike instances in the past when political skirmishes led to adopting measures which restricted trade³. The key question here is whether in a somewhat benign environment for a period of six years since the trade liberalization episode in 2012, India and Pakistan have been able to reap its benefits. It was expected that trade liberalization would lead to increased trade and an increase in the number of items being traded as more commodities had been included in the permissible list for exports from India to Pakistan. It was also expected that there would be a substantial shift of trade from informal to formal channels. It was expected that addressing the issues related to non-tariff measures would improve market access for Pakistan's exports to India.

¹ Negative list consists of 1209 items

² Positive list of 137 items

³ For instance, trade by the land route was banned following the attack on Parliament in 2001.

Bilateral trade between India and Pakistan would of course be impacted by the domestic trade policies adopted by the two countries. Some of these could also influence India-Pakistan trade flows. For example, in 2015, the Government of Pakistan unilaterally imposed a 10 percent regulatory duty on all imports of cotton yarn and processed fabric in a bid to protect its domestic industry from dumping of cheap raw material. Since cotton is one of India's top export items to Pakistan, the imposition of this regulatory duty has a direct impact on India's exports of cotton. Similarly on the Indian side, in July 2017, the Government of India introduced the Goods Services Tax (GST). This destination based tax which replaces multiple indirect taxes on trade in goods has implications on India's trade with its partners, including India's trade with Pakistan.

To identify other current issues related to Indo-Pak trade we went through several media reports. The reports indicated that there has been a reduction in India's exports of cotton to Pakistan due to non-compliance of phytosanitary requirements (Dawn 2016, Reuters 2016). Similarly soya bean exports from India dropped to negligible levels on the ground that they did not meet phytosanitary standards.

In the context of recent developments in the post-liberalization phase, the current study focuses on the following key questions on India-Pakistan trade:

1. Has there been a substantial increase in trade since 2011-12? Has the structure of imports and exports changed in terms of items traded and in terms of use-based categories?
2. Has trade through different modes of transport undergone a change in the last few years?
3. Have new commodities entered the export basket since trade liberalization? Do these exports depend on the same mode of transport as old items? Are the new items shifting from informal to formal channels?
4. How have regulatory duties and compliance of standards affected exports to Pakistan?
5. How has the GST impacted imports from Pakistan?

The study uses "mixed methods", based on secondary sources and primary information collected through field surveys. Secondary sources include published papers, data and government policies, agreements, regulations and protocols. Secondary data on India's trade with Pakistan has been collected from the Directorate General of Foreign Trade (DGFT) and Directorate General of Commercial Intelligence and Statistics (DGCIS), Ministry of Commerce, and World Integrated Trade Systems (WITS) Database published by the World Bank. Consultative meetings were held with importers, exporters, manufacturer, and freight forwarders, clearing agents, and government officials at the state and center levels. Field surveys were conducted in New Delhi, Amritsar and Mumbai in 2017.

Section 2 of our report analyses trade trends in terms of value, commodity composition and structure in terms of use based categories. Section 3 examines trends in share of trade through different modes of transport. Section 4 identifies new commodities which have entered the

export basket and the modes of transport through which such trade is taking place. It also maps informally traded goods with new exports to assess whether a shift is taking place from informal to formal channels. In Section 5 we identify export commodities which may have been impacted by regulatory duties and/or faced non-tariff barriers. Section 6 examines the implications of GST for imports from Pakistan. Section 7 suggests policy options for enhancing bilateral trade between the two countries.

A crucial aspect which the study was unable to address was non-tariff barriers being faced by Pakistan.

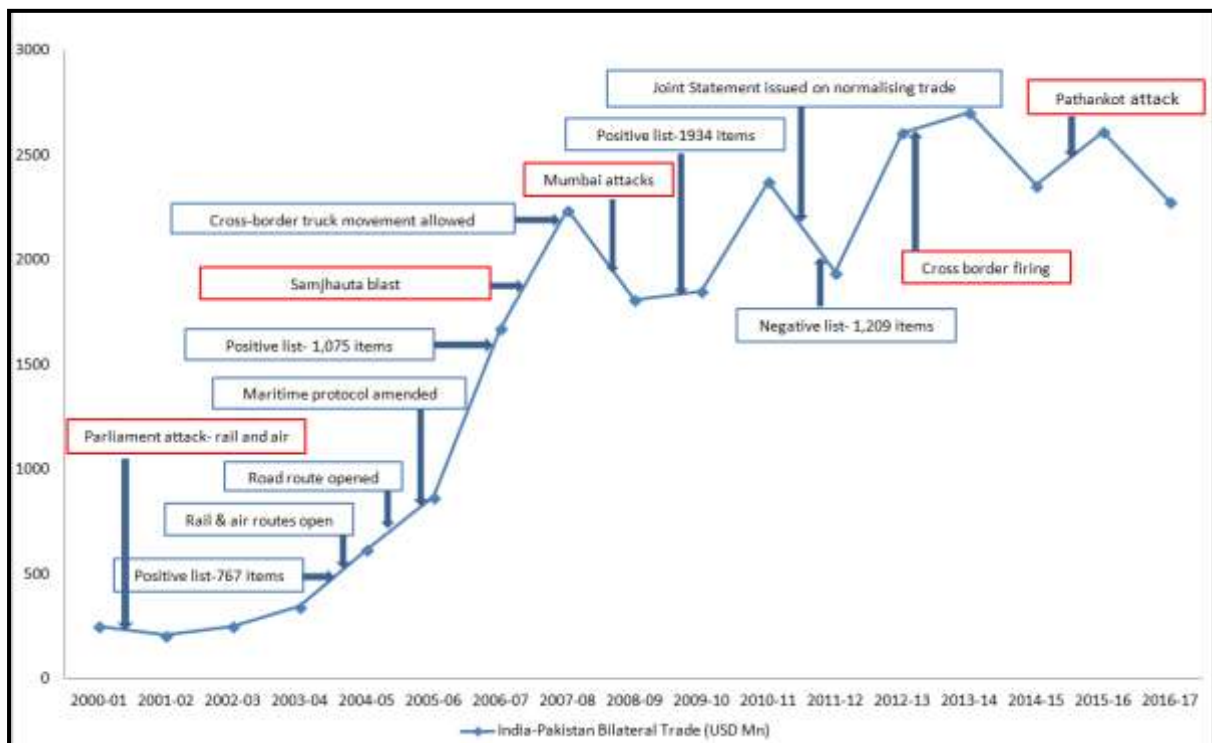
2. Trade Trends and Composition

Trade trends are examined in terms of value, trade balance, composition and structure.

(i) Trade Trends

We have made an attempt to map trade trends with major political events and trade measures. We find that during 2011-12 to 2016-17, while no proactive trade enhancing or trade restrictive measures were undertaken there have been several unfavourable political events. In this period, trade has fluctuated and has increased marginally reaching a slightly higher level in 2016-17 than was achieved in 2011-12 (Figure 1).

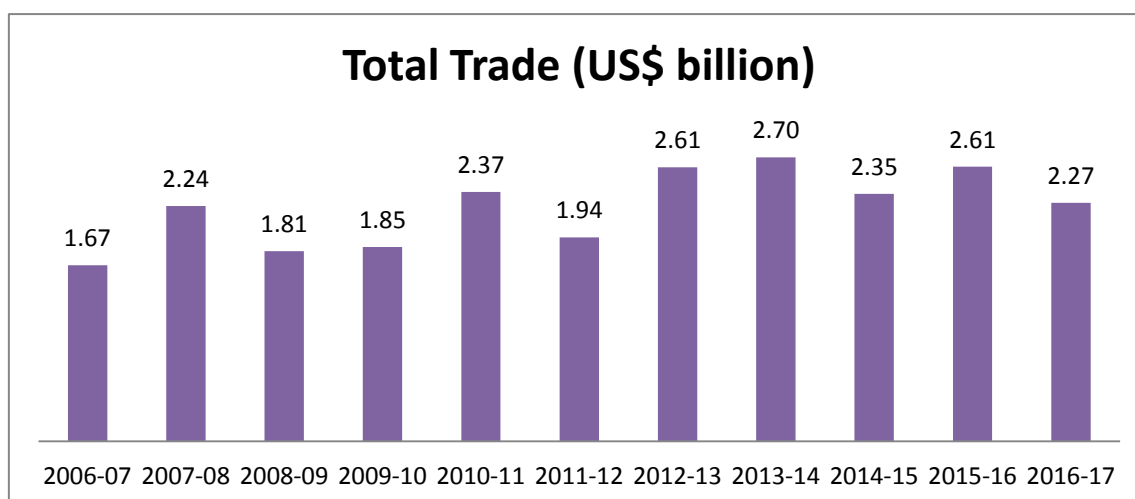
Figure 1: Impact of Political Relations between India and Pakistan on Trade



Source: Author's compilation from Ministry of Commerce DGFT Export-Import Databank and updated from Taneja et al (2013)

Since 2011-12, trade has been fluctuating ranging between US\$ 1.94 billion and US\$ 2.70 billion (Figure 1). Pre- and post-trade liberalization India has had a trade surplus with Pakistan. The average of trade balance ratio was 67.2 percent in the pre-trade liberalization period as compared to 62 percent in the post-trade liberalization period. Thus trade balance ratio has improved in Pakistan's favor in the post-liberalization period.

Figure 2: India's Trade with Pakistan (US\$ billion)



Source: Directorate General of Foreign Trade, Ministry of Commerce & Industry, Government of India

Table 1: India's Trade with Pakistan (US\$ million)

Year	Exports (X)	Imports (M)	Trade Balance (X-M)	Total Trade (X+M)	Trade Balance Ratio (X-M/X+M)*100 (%)
2006-07	1350	324	1026	1674	61
2007-08	1951	288	1663	2239	74
2008-09	1440	370	1070	1810	59
2009-10	1573	276	1297	1849	70
2010-11	2040	333	1707	2372	72
2011-12	1542	398	1144	1939	59
2012-13	2065	542	1523	2607	58
2013-14	2274	427	1847	2701	68
2014-15	1857	497	1360	2354	58
2015-16	2171	441	1730	2612	66
2016-17	1821	454	1367	2275	60

Source: Directorate General of Foreign Trade, Ministry of Commerce and Industry, Government of India

(ii) Commodity Composition

A comparison of commodities traded between the two countries in 2011-12 and 2016-17 helps us to understand whether there has been a change in the structure of trade. In 2011-12, India's top 3 exports to Pakistan at the HS-2 classification of items included organic

chemicals, residues and waste from the food industries (largely soyabean), edible vegetables and certain roots and tubers, and coffee, tea, mate and spices accounting for about 50% of total exports to Pakistan.⁴ However, in 2016-17 while organic chemicals and plastic continued to be among the top 5 top export items, cotton emerged as the highest export item that year with a share of 26 percent of total India's exports to Pakistan (Table 2). At a disaggregated level, (HS-6 classification) top commodities exported from India to Pakistan in 2016-17 included cotton, para-xylene, polypropylene, woven fabrics, single yarn of combined fibers, sugar, tomatoes, reactive dyes and preparations. Cotton alone accounted for nearly 14 percent of exports in that year (Appendix A Table 1).

Table 2: India's Top 10 Exports to Pakistan at HS-2 (All Values in US\$ Million)

HS Code	Commodity Description	2011-12	2016-17
52	Cotton	87.12	477.46
29	Organic chemicals	290.2	293.37
39	Plastic and articles thereof	77.14	124
32	Tanning/dyeing extracts; tannins and their derivatives. Dyes, pigments and other coloring matter;		87.2
7	Edible vegetables and certain roots and tubers	146.39	80.13
55	Man-made staple fibers		79.62
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof		70.26
12	Oil seeds and olea. Fruits; misc. Grains, seeds and fruit; industrial or medicinal plants; straw/fodder	48.31	55.22
17	Sugars and sugar confectionery		46.79
30	Pharmaceutical products		44.22
23	Residues and waste from the food industries; prepared animal fodder.	197.17	
9	Coffee, tea, mate and spices	103.74	
40	Rubber and articles thereof	62.25	
54	Man-made filaments	59.84	
38	Miscellaneous chemical products	46.98	

Source: Directorate General of Foreign Trade, Ministry of Commerce and Industry, Government of India

On the imports side, India's top 3 imports from Pakistan in 2011-12 included edible fruit and nuts; peel or citrus fruit or melons, cotton and salt; sulphur; earths and stone; plastering materials, lime and cement accounting for about 50 percent of total imports (Table 3). While these items continued to be among the top import items in 2016-17 as well, we find that there has been an increase in imports of mineral fuels, mineral oils and product of their distillation. At a disaggregated level (HS-6 classification), dates (fresh or dried) were the most important item being imported from Pakistan, accounting for about 28 percent of total imports in 2016-17. Other items imported constituted of cement, oils, cotton, gypsum, aluminum ores and concentrates, disodium carbonate and petroleum oil (Appendix A Table 2).

⁴ HS refers to Harmonized System of classification

Table 3: India's Top 10 Imports from Pakistan at HS-2 (All Values in US\$ Million)

HS Code	Commodity Description	2011-12	2016-17
8	Edible fruit and nuts; peel or citrus fruit or melons.	80.68	126.75
25	Salt; sulphur; earths and stone; plastering materials, lime and cement.	56.28	106.22
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes.	23.37	78.56
52	Cotton.	60.43	23.66
41	Raw hides and skins (other than furskins) and leather		19.93
26	Ores, slag and ash.		18.12
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, or radi. Elem. Or of isotopes.	14.51	15.42
90	Optical, photographic cinematographic measuring, checking precision, medical or surgical inst. And apparatus parts and accessories thereof;		8.9
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags		8.05
70	Glass and glassware.		7.76
71	Natural or cultured pearls, precious or semiprecious stones, pre. metals, clad with pre-metal and articles thereof; imitation jewelry; coin.	34.57	
29	Organic chemicals	24.08	
74	Copper and articles thereof.	14.02	
39	Plastic and articles thereof.	13.38	
78	Lead and articles thereof.	11.3	

Source: Directorate General of Foreign Trade, Ministry of Commerce and Industry, Government of India

(iii) Changes in Use-based Category for Trade Items

A more insightful inference can be drawn if we classify traded items into raw materials, intermediate goods, capital goods and consumer goods⁵. We find that while raw materials and intermediate goods comprised the bulk of exports both pre- and post-liberalization, their share increased from 78 percent in 2011-12 to 82 percent in 2016-17. Similarly, raw materials and intermediate goods comprised the bulk of India's imports from Pakistan however their combined share dropped from 86 percent in 2011-12 to 72 percent in 2016-17 (Table 4).

Table 4: Product Composition of India's Trade with Pakistan (in %)

Category	Exports		Imports	
	2011-12	2016-17	2011-12	2016-17
Raw Materials	19	25	41	41
Intermediate Goods	59	57	45	31
Consumer Goods	18	14	12	27
Capital goods	4	5	2	1

Source: UN ITC-WITS database

⁵ Product composition based on WTO Stage of Processing (SoP) categories

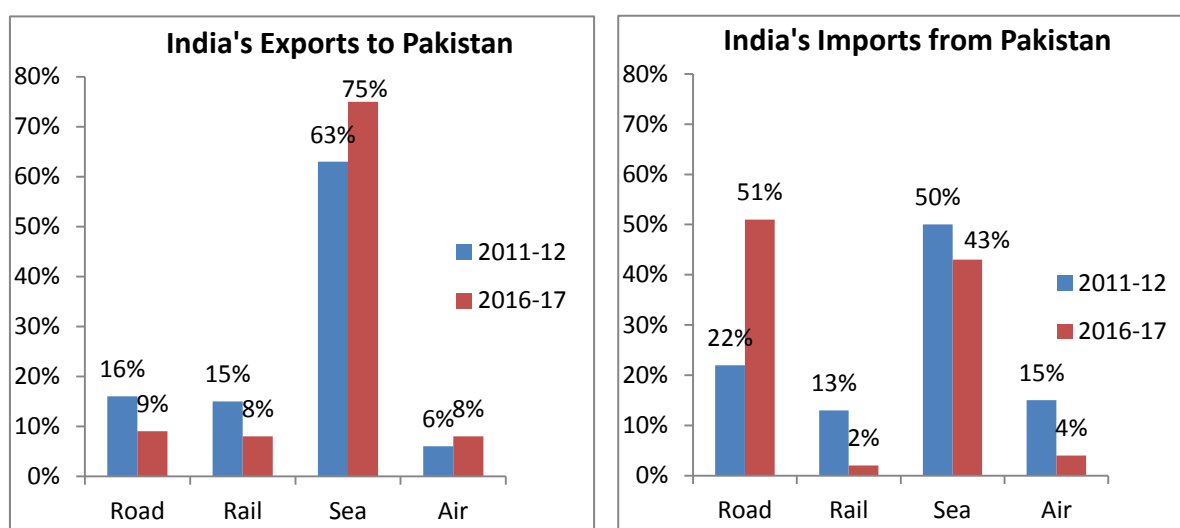
3. Trade through Different Modes of Transport

Sea is the dominant mode of transport for trade between India and Pakistan. In 2011-12, the sea route accounted for 60 percent of total bilateral trade and this share increased to 69 percent in 2016-17. The second most important mode of trade is the road route (Wagah-Attari) which has continued to account for a 17 percent share in bilateral trade, both in 2011-12 and 2016-17. It is the rail route that has witnessed a fall in its share from 15 percent in 2011-12 to 7 percent in 2016-17. The share of air route has remained meager at about 7 percent in 2011-12 as well as 2016-17. A similar trend in terms of importance of different modes exists for exports as well as imports. Data on mode-wise exports indicates that between 2011-12 and 2016-17, the share of road in India's exports to Pakistan decreased from 16 percent to 9 percent, while that of rail decreased from 15 percent to 8 percent and of sea increased from 63 percent to 75 percent (Figure 3). The decrease in share of exports by road indicates that the liberalization on the road route indicated by the increase in number of items allowed to be exported from India to Pakistan has not resulted in an increase in exports. This can also be attributed to infrastructure and institutional bottlenecks impeding growth of trade via the road route. The infrastructure at the port is poor with inadequate warehousing capacity, no full body truck scanners, no lab testing facilities etc (Taneja et al 2016). In terms of institutional mechanism supporting this trade, though there is a provision for regular meetings to be held by a Customs Liaison Border Committee comprising of customs officials from both sides, these are not functional. Earlier these meetings were held every 2 months to discuss operational day-to-day issues; however consultations reveal that these meetings have been discontinued for the past two years.

Data also suggests that exports of items that cannot be exported by the road route are being exported at a much higher cost by sea instead of the rail route. This can be attributed to the impediments encountered by businesses while transporting goods by rail. There is inadequacy in the number of wagons allocated to Indian exporters. Additionally, the allocation is done manually and is not computerized making the entire allocation system non-transparent. Only BCX wagons are allowed as a result of which there is no provision of sending liquid cargo or uncovered cargo. The infrastructure at the rail port is inadequate. The documentation process is also manual. There is no Electronic Data Interchange (EDI), no Risk Management System (RMS) and no provision for pre-arrival processing of documents. In addition, there is absence of an institutionalized consultative mechanism between different agencies at the border, and between the border agencies and the agencies at the centre to meet and identify roadblocks in facilitation of trade and collaborate to address them. There is thus an urgent need to address the impediments on the rail route, because for Indian exports this is the cheapest mode of transport available for the items on the positive list.

Data on mode-wise imports indicates that between 2011-12 and 2016-17, the share of road in India's imports from Pakistan increased from 22 percent to 51 percent while that of rail decreased from 13 percent to 2 percent and of sea decreased from 50 percent to 43 percent (Figure 3).

Figure 3: Mode-wise Export and Import Share of India-Pakistan Trade



Source: DGCIS, Ministry of Commerce and Industry, Government of India

In 2016-17, the top commodities exported from India to Pakistan by road at HS-6 classification included cotton, tomatoes; by rail included reactive, psyllium, kernel, and reactive yellow, vegetable seeds; and by sea included para-xylene, polyprylene, sugar and cotton. In the same year, India's major imports from Pakistan by road included dates, cement and aluminium; by rail included hides/skins, surgical instruments, and by sea included dry dates, petroleum oils and oils obtained from bituminous minerals, cement and cotton (Appendix B).

4. New Commodities Traded in Post- liberalization Period

In order to examine if the trade liberalization process undertaken so far has been effective in expanding bilateral trade, the study undertakes a secondary data exercise to understand (i) whether the growth in bilateral trade is accounted for by old items that were on the positive list before 2012 or by new items which have entered the permissible list in 2012?; (ii) by which modes are these new items being traded? and (iii) whether the new items are the ones that were previously traded informally?

New items of export are those items which have entered the trading basket in the post-trade liberalization period. These items are in addition to the items that were on the positive list prior to 2012. While the Ministry of Commerce, Government of Pakistan vide S.R.O No. 766 (I)/2009 has notified the positive list i.e. list of items importable from India at the 8 digit level of HS classification, the official list has many discrepancies. Firstly, even though both countries follow a standardized international coding system at the 6 digit level, some codes do not match at the 8 digit level. Secondly, in some cases, descriptions of items do not match even though the codes match. Therefore in order to identify if any new items are being exported from India to Pakistan after the policy change in 2012, we generated a positive list comprising of all items that were traded during 2008-09 and 2011-12. The generated positive

list constituted 2342 items at the 8 digit level of classification. The items in the generated positive list were then matched to items that were traded post liberalization. New items were identified as those items which did not appear in the traded positive list before 2011-12 and were traded at least once in 2012-17.

4.1 New Exports

The shift from a positive list to a small negative list of 1209 items has led to a modest increase in exports of new commodities over the five years. The share of new commodities in total exports has shown a rise from a mere 3 percent in 2012-13 to 12 percent in 2016-17 (Table 5). Interestingly, the trade basket has witnessed a diversification in terms of number of new items traded. In 2016-17, 753 new items were exported accounting for a share of 32 percent in total number of items exported that year.

Table 5: India's Exports to Pakistan in New Commodities

Year	Value of New Exports (in US\$ Million)	Share in Value	No. of New Items	Share in No. of Items
2012-13	56.02	3%	410	24%
2013-14	136.5	6%	614	33%
2014-15	205.87	12%	663	35%
2015-16	198.99	10%	770	39%
2016-17	220.7	12%	753	32%

Source: Directorate General of Foreign Trade, Ministry of Commerce and Industry, Government of India

In 2016-17, India's top 5 new exports to Pakistan at the HS-2 classification of items included organic chemicals, oil seeds, miscellaneous grains, medicinal plants, straw, nuclear reactors, boilers, machinery and mechanical appliances and parts thereof, coffee tea, mate and spices and cotton (Table 6).

Table 6: India's Top New Exports to Pakistan (2016-17)

HS Code	Commodity Description	Value (US\$ million)	Share
29	Organic Chemicals	34.9	16%
12	Oil Seeds , Misc. grains, Medicinal plants , Straw	29.81	14%
84	Nuclear reactors, boilers, machinery and mechanical appliances and parts thereof	26.9	12%
9	Coffee, tea, mate and spices	20.71	9%
52	Cotton	14.28	6%

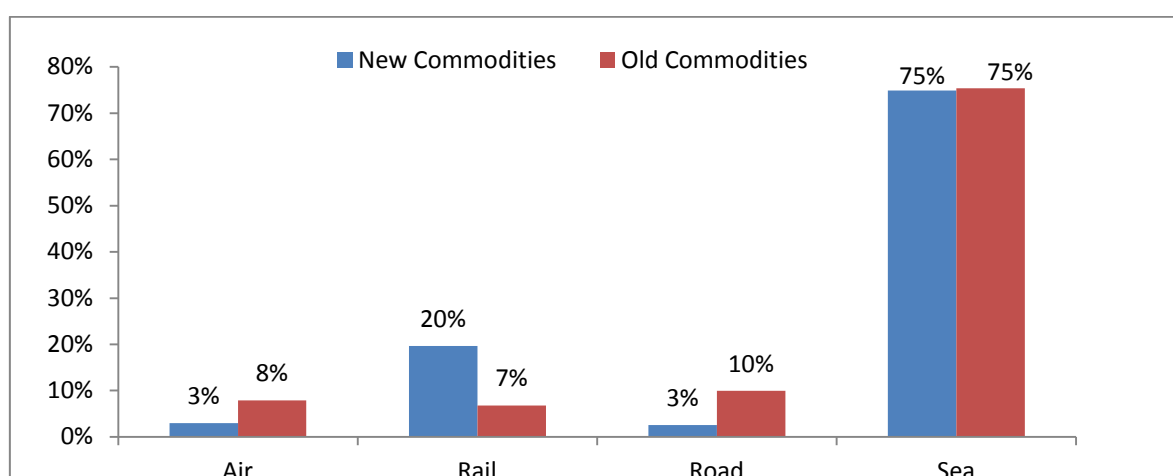
4.2 New Exports through Different Modes of Transport

In line with the mode-wise distribution of trade in old commodities, the maximum percentage of new commodities (75 percent) was exported by sea (Figure 4). This was followed by rail

(20 percent); and air and road (3 percent each). It is important to note here that for new commodities, the reliance on rail route is more. This could perhaps be because the road route has a restriction on the number of items that can be exported from India to Pakistan. Only 137 items are allowed to be exported via road route. No such restriction is present on the rail route.

This trend also reflects the importance of addressing the impediments of the land route which is the most feasible and cost-effective way of moving goods between the two countries. Unless the land route is improved substantially, transaction costs of trading between the two countries will remain high which will deter trade realization.

Figure 4: Mode-wise India’s Total Trade with Pakistan-Old Commodities v/s New Commodities



Source: DGCIIS, Ministry of Commerce and Industry, Government of India

4.3 New Exports and Informal Trade

Despite trade normalization efforts, while formal trade between India and Pakistan continues to remain low, informal trade has continued to thrive between the two countries⁶. A recent study (Taneja and Bimal, 2016) estimates informal trade between India and Pakistan to be close to US\$ 4.71 billion in 2012–13, which is almost twice the value of formal trade between the two countries in that year. Of this, it is estimated that India exported US\$4 billion to Pakistan and imported US\$720 million from Pakistan. A similar study conducted on the Pakistan side by Ahmed et al (2014) estimates the informal flow of goods from India to Pakistan to be US\$ 1.79 billion.

The main items India exported informally were jewellery (24 per cent), textiles (20 per cent), machinery and machine parts (8 per cent), electronic appliances (6 per cent), chemicals (5 per cent), paper (5 per cent) and tyres (5 per cent). India’s informal imports from Pakistan mainly

⁶ Informal trade can be broadly defined as trade between two countries that should be included in the national income statistics, according to conventional national income accounting, but is not.

consisted of textiles (49 per cent), dried fruits (32 per cent), spices (10 per cent) and carpets (4 per cent) (Taneja and Bimal 2016).

Mapping the previously informally exported items with new items of export (Table 7), we find that many items which were exported through formal channels in the post-liberalization period were those that were previously exported through informal channels. While the progress is only incremental, this does indicate a shift from informal trade to formal trade for these commodities.

Table 7: Comparison between Informal Export Commodities and New Export Commodities

HS Codes	Commodity Description	Informal Exports*	New Exports
7113	Real Jewellery	910	
50-63	Textiles	780	34.26
84-85	Machinery and Machine Parts	305	34.43
8509	Electronic Appliances	220	
7204, 7404, 7602	Scraps	193	0.01
4801-4823	Paper	190	0.01
2901-2942	Chemicals	187	34.9
4011	Tyres	187	0.16
1904-1906, 2106	Packaged Food Items	170	0.49
910	Spices	160	0.08
713	Pulses	156	1.69
3307, 3401, 3304	Consumer Durable Items	150	0.39
3811	Industrial Additives	133	0.01
3001-3006	Pharmaceutical Products	83	0.59
7018, 7117, 3926	Jewelry (Artificial)	28	0.23
14049040	Pan Leaves/Betel Leaves	26	
2905	Alcohol	22	0.89
1513	Coconut Oil	20	
902	Tea	16	
8212	Shaving Blades	15	0.09
0701-0814	Fruits and Vegetables	12	3.42
21069020	Pan Masala	8	0.03
2402	Tobacco Products	6	0.01
4202	Leather	5	0.01
8708	Auto Components	4	
6802	Stone	3	
9403	Furniture	2	0.02
8045090	Aampapad	0.5	
3926	Soda bottles	0.5	0.2
3305	Herbal Products	1.6	

Note: The commodities mentioned in the table were identified during ICRIER survey September 2013- March 2014. Authors have assigned HS codes corresponding to the commodities and then mapped these with new items of export. Any inference or quantification is thus only an approximation.

*Source: Ahmed et al 2014; Taneja and Bimal 2016. Informal value of exports estimated at 2012-13

5. Measures Affecting India's Exports to Pakistan

Based on information on regulations imposed on certain products and on non-tariff barriers being faced by Indian export products, three items were selected for analysis. An important measure adopted by Pakistan was the imposition of a 10 percent regulatory duty on imports of cotton yarn and grey and processed fabric. While the duty was applicable to imports from all countries, Pakistan imported a substantial amount of cotton yarn and fabric from India. Hence this product was selected for the analysis. In addition, soya bean and cotton were selected as media reports indicated that India's exports of cotton and soya bean oil could not comply with phytosanitary requirements.

5.1 Cotton Yarn and Cotton Fabric (HS Codes: 5205-5212)

In October 2015, the Federal Board of Revenue, Government of Pakistan vide SRO Notification (1055(I)/2015) imposed regulatory duty of 10 percent on the imports of cotton yarn and cotton fabric affecting the HS codes from 5205 to 5212⁷. Regulatory duties, by definition (WTO 2015) provide additional protection for some goods during the period under review. As per Customs Act of Pakistan (section 18(3)), regulatory duties up to 100 percent may be imposed on specified imports in addition to tariffs and "special" duties. They are issued in SROs by the FBR and are not included in the tariff schedule. Though regulatory duties are being phased out in Pakistan, they are still imposed periodically under "certain peculiar and compelling circumstances" (Trade Policy Review, WTO). As a result of the imposition of the regulatory duty on import of cotton yarn and fabric, Pakistan's imports of these products from the world fell sharply from US\$ 216.75 million in 2014 to US\$ 113.53 million in 2015 and have stayed relatively low in 2016 as well at a value of US\$ 133.84 million. In line with the world trend, imports from India have also witnessed a decline, though the decline is marginal compared to the total imports decline from the world. Interestingly, India's share in Pakistan's import of cotton yarn and fabric has steadily increased from 46 percent in 2014-15 to 59 percent in 2015-16 to 65 percent in 2016-17 (Table 8). *These figures indicate that the imposition of the regulatory duty has not impacted India's exports adversely.*

Table 8: Value of Import of Cotton by Pakistan from India and the World (US\$ million)

	2014	2015	2016
Pakistan importing Cotton yarn & fabric from India	98.96	66.72	86.60
Pakistan importing Cotton yarn & fabric from World	216.75	113.53	133.84
Share of India in Pakistan's Cotton yarn & fabric Imports	46%	59%	65%

Source: World Integrated Trade Solution, WITS database

⁷ Detailed list of all the product codes and their description falling under the chapter heads 5205 to 5212 is given in Appendix C.

Data on mode-wise exports of cotton yarn and fabric shows that while the share of sea has declined from 92 percent in 2014-15 to 67 percent in 2016-17, the share of road has increased from 8 percent in 2014-15 to 33 percent in 2016-17 (Table 9).

Table 9: Shares of modes of India’s Exports of Cotton yarn and fabric to Pakistan

	2014-15	2015-16	2016-17
Road	8%	13%	33%
Rail	0%	0%	0%
Sea	92%	87%	67%

Source: DGCIS, Ministry of Commerce and Industry, Government of India

5.2 Cotton not Carded or Combed (HS Code: 5201)

If we look at cotton (not carded or combed), which is the largest export item to Pakistan, we see a different trend. While Pakistan’s imports of cotton have increased from the world, its imports from India have declined (Table 10). Though there was no formal restriction imposed on the imports, it has been reported that during October-November 2016, Pakistan suspended cotton imports from India, claiming shipments to have failed to fulfill phytosanitary requirements. However, it must be kept in mind that the declining trend in cotton started before this measure. Therefore, this decline may not necessarily be linked to imposition of the standard requirements.

What is essential to note here is that despite the decline and the standards imposition measure, cotton continued to be the largest export item from India in 2016. In fact more recent data from DGFT also indicates that cotton was the largest export item from India in 2016-17.

Table 10: Value of Import of Cotton by Pakistan from India and the World (US\$ million)

	2014	2015	2016
Pakistan Importing Cotton from India	282.02	273.47	209.06
Pakistan Importing Cotton from World	521.64	543.75	580.50
Share of India in Pakistan's Cotton Imports	54%	50%	36%

Source: World Integrated Trade Solution, WITS database

Mode-wise distribution of India’s exports of cotton shows that the share of road witnessed a steep decline from 31 percent in 2014-15 to 6 percent in 2016-17 (Table 11). This can be possibly attributed to the fact that the phytosanitary measures were imposed more stringently at the road route. According to reports in the Pakistan media, the Department of Plant Protection (DPP) restricted the import of cotton through the Wagah border on the ground that consignments through the road route usually come in open trucks and there is a greater risk that the cotton may be exposed to pests and other diseases (Reuters, 2016; Dawn, 2016).

Table 11: Shares of modes of India's Exports of Cotton to Pakistan

	2014	2015	2016
Road	31%	19%	6%
Rail	0%	0%	0%
Sea	69%	81%	94%

Source: DGCIS, Ministry of Commerce and Industry, Government of India

5.3 Soya bean (HS Code: 2304)

Soya bean has been one of the traditional export commodities from India to Pakistan. However, the exports of soya bean to Pakistan in the past few years have declined substantially to reach a negligible value in 2016. If we look at Pakistan's imports of soya bean from the world and compare it to its imports from India, we find that while Pakistan's imports of soya bean from the world have fallen significantly, India's share has dropped from 40 percent in 2014 to almost zero in 2016 (Table 12).

Table 12: Value of Import of Soya bean by Pakistan from India and the World (US\$ million)

	2014	2015	2016
Pakistan importing Soya bean from India	193.65	68.70	0.35
Pakistan importing Soya bean from World	478.91	396.94	141.73
Share of India in Pakistan's Soya bean Imports	40%	17%	0%

Source: World Integrated Trade Solution, WITS database

In terms of use of different modes of transport for exporting soya bean, there has been no change in the last three years. Road has continued to be the predominant mode of transportation for soya bean with almost all trade being routed through this route (Table 13).

Table 13: Shares of modes of India's Exports of Soya bean to Pakistan

	2014-15	2015-16	2016-17
Road	97%	96%	98%
Rail	0%	0%	0%
Sea	3%	4%	2%

Source: DGCIS, Ministry of Commerce and Industry, Government of India

Based on media articles and stakeholder consultations held in Amritsar, it was reported that in February 2017 the Pakistan Standard and Quality Control Authority disallowed the entry of dried oil cakes from India on the ground that either they are genetically modified or they had pork pieces in them. It was also reported that the Indian custom officials tried communicating with their counterparts and addressed the issues by conveying that the only genetically modified crop in India is BT Cotton. With regard to the second claim, it was conveyed that during the oil expelling process from Soya bean, no additives or extracts

containing any animal produce is used (ICRIER Survey 2017). As a result of this, Indian exports of soya bean to Pakistan have been adversely impacted in the last one year.

6. Impact of GST on India's Imports from Pakistan

The Government of India introduced the Goods and Services Tax on 1st July 2017. This was a very significant step in the field of indirect tax reforms in India. By amalgamating a large number of Central and State taxes into a single tax, the aim was to mitigate cascading or double taxation effect and pave the way for a common national market.

The tax regime in India before GST was extremely complicated. The Constitution (One Hundred and First Amendment) Act, 2016, demarcated the fiscal powers between the Centre and the States with almost no overlap between the respective domains. The Centre had powers to levy tax on the manufacture of goods⁸ while the States had powers to levy tax on sale of goods. In case of inter-State sales, the Centre had power to levy a tax (Central Sales Tax) but the tax was collected and retained entirely by the originating States. As for services, it was the Centre alone that was empowered to levy service tax. Since the States were not empowered to levy any tax on the sale or purchase of goods in the course of their importation into or exportation from India, the Centre levied and collected this tax as additional duties of customs, which was in addition to the Basic Customs Duty. These additional duties were imposed in the form of Countervailing Duties (CVD) and Special Additional Duty (SAD). The purpose of these additional duties was to counter balance excise duties, sales tax, state VAT and other taxes levied on the domestic products. In the pre-GST regime, there was an anomaly between taxes imposed on imported goods and those imposed on domestic manufactured goods. The taxes imposed on imported goods were often different from taxes imposed on domestic manufactured goods.

The introduction of GST essentially amended the constitution so as to concurrently empower the Centre and the States to levy and collect the GST. The Constitution (122nd Amendment) Bill was introduced in 2015 and provided for a levy of GST on supply of all goods or services except for alcohol for human consumption. This tax is now levied as dual GST separately but concurrently by the Union (central tax - CGST) and the States (state tax - SGST)/ Union territories without legislatures (Union territory tax- UTGST). An Integrated GST (integrated tax- IGST) is levied on inter-State supply (including stock transfers) of goods or services. Import of goods is treated as inter-State supplies and subjected to IGST in addition to the applicable customs duties. Similar to import of goods, the import of services is also now treated as inter-State supplies and subjected to IGST. With GST, several indirect taxes were subsumed removing the anomaly between taxes imposed on imports and taxes imposed on domestic manufactured goods. Apart from Basic Customs Duty and Social Welfare Surcharge⁹, the duty rate for domestic manufacturing and imports is now the same (i.e IGST levied on imported goods is the same as IGST levied on domestic manufacturing).

⁸ Except alcoholic liquor for human consumption, opium, narcotics etc.

⁹ As recent as in February 2018, Education Cess and Secondary and Higher Education Cess on imported goods was abolished and was replaced by a Social Welfare Surcharge (PIB 2018). This Surcharge is

While GST has an impact on imports from all countries, this section presents the change in duty structure for top 10 items of imports from Pakistan (Table 14). The customs duties on imports from Pakistan, applicable under the South Asian Free Trade Agreement (SAFTA) tariff concession schedule, have remained the same in the pre- and post-GST period. As we can see from Table 14, total duty that will be applicable on imports from Pakistan post-GST has increased on all selected items. However, at this stage, it is difficult to analyze its impact on actual trade. India is still in the transition stage of moving to a seamless and integrated system of GST. The government is in the process of streamlining the GST policy and procedures. Therefore, any impact of the policy change will be reflected only after 2-3 years of its implementation.

imposed at the rate of 10% of the aggregate duties of customs, on imported goods and is expected to provide for social welfare schemes of the Government of India. For certain goods exemption on the whole of Welfare Surcharge can be claimed vide Notification No.11/2018-Customs dated 02.02.2018.

Table 14: Pre-GST and Post-GST Duty Rates for India's Top Ten Imports from Pakistan in 2016-17

S. No.	HS Code	Commodity	PRE-GST				POST-GST					
			BCD	CVD	Spl. CVD/SAD	Cess	Total Duty	BCD	Additional Duty of Customs	Social Welfare Surcharge	IGST Levy	Total Duty
1	8041030	Dry dates hard	5	0	4	3	9.36	5	~	10	12	18.16
2	25232910	Ordinary portland cement, dry	5	12.5*	4	3	23.42	5	~	10	28	35.04
3	27101290	Other	5	14	4	3	25.10	5	14	10	18	49.31
4	26060090	Other aluminium ores and concentrates	5	0/12.5**	4	3	9.36/ 23.42	5	~	10	5	10.78
5	25201010	Natural gypsum and anhydrite	5	0	4	3	9.36	5	~	10	5	10.78
6	52010020	Foreign cotton of all staple lengths	5	0	4	3	9.36	5	~	10	5	10.78
7	41079900	Other/hides/skins including sides	5	0	4	3	9.36	5	~	10	5	10.78
8	27101990	Other petroleum oils and oils obtained from bituminous minerals nes ¹⁰	8	14	4	3	28.76					
9	28362020	Disodium carbonate light	5	12.5^	4	3	23.41	5	~	10	18	24.49
10	63109040	Synthetic rags	5	0^^	4	3	9.36	5	~	10	12	18.16

Source: Author's calculations using Customs Tariff Manual, 2017-18 and Customs Duty Calculator, Central Board of Indirect Taxes and Customs

Note:

- All duties are calculated on Assessable Value (AV) INR 100.

- Total Duty (Pre-GST) = Aggregate of (i), (ii), (iii) and (iv) as per calculation details given below

(i) BCD on AV

(ii) CVD calculated on [(AV+BCD)]

(iii) Education Cess 3% * [BCD+CVD] on aggregate of Customs Duty without SAD

(iv) SAD 4% of [(AV+BCD+ADC+3% of (BCD+CVD)]

-Post-GST BCD is as per SAFTA Notification 068/2012-60(I)

-Exemption on the whole of Welfare Surcharge is available vide Notification No.11/2018-Customs. However exemption is not available for the above listed commodities.

*Portland Cement under 252329 in packed form 12.5% plus Rs. 125 per tonne [Ref: S. No. 51 of 12-CE/17.03.2012 as amended by 12-CE/01.03.2015]

Portland cement under 252329 – Rs. 1000 per tonne – [Ref: Central Excise Tariff Schedule]

** Additional duty in headings 26.01 to 26.17 is NIL for *Ores* and 12.5% for *Others* [Ref: Sl. No. 56 of CE-12/17.03.2012 read with the Central Excise Tariff Schedule]

^ Additional Anti Dumping Duty on Disodium Carbonate by Ntn 34-ADD/03.07.2012; 40-ADD/12.08.2015.

^^ CVD is 0 under Ntn 12 17.03.2012, otherwise Not Excisable.

¹⁰ At the time of publication of this paper, GST on petroleum products was not levied.

7. Conclusion and Policy Recommendations

This paper examined whether there has been an increase in trade since the trade liberalization took place between India and Pakistan in 2012. The study finds that trade has increased only marginally post liberalization during 2012-17. In terms of mode-wise distribution of trade, the study finds that there has been a shift from road and rail to sea for exports. For imports the share of road has increased while the share of rail and sea has decreased. There are infrastructure and institutional barriers that continue to inhibit the shift of exports from road to rail which is the cheapest mode of transportation between India and Pakistan.

The shift from a positive list to a small negative list of 1209 items has led to a modest increase in exports of new commodities over the five years. The share of new commodities in total exports has shown a rise from a mere 3 percent in 2012-13 to 12 percent in 2016-17 (Table 5). Interestingly, the trade basket has witnessed a diversification in terms of number of new items traded. In 2016-17, 753 new items were exported accounting for a share of 32 percent in total number of items exported that year.

In addition, the study finds that there is evidence of items shifting from informal to formal channels. Our analysis on trade trends conducted in this paper suggests that the political relationship between India and Pakistan and the weak institutional structure has inhibited the two countries from realizing the benefits of trade liberalization.

The study also finds that the imposition of regulatory duties and compliance of standards has not affected India's exports of cotton yarn and fabric to Pakistan. The study also briefly analyzed the change in duty structure under recently imposed Goods Services Tax (GST) for top imports from Pakistan. Although it is still very early to analyze its impact on actual trade, the GST rates show that total duty that will be applicable on imports from Pakistan post-GST has increased on all items compared to pre-GST rates.

As a way forward, it is important for the two governments to complete the unfinished India-Pakistan trade normalisation agenda. The trade normalization process, when completed, is likely to unleash the untapped trade potential between the two countries. Taneja et al (2014) estimated bilateral trade potential between the two countries to be US\$ 19.8 billion. However, in the interim period it is important to undertake certain steps that can facilitate the ongoing trade process.

This study proposes the following key measures that can enhance and facilitate trade between India and Pakistan.

1. There is a need to bridge the information asymmetries which increases the cost of trading between the two countries. Trade related rules, regulations and procedures must be made publically available. Government bodies should ensure that any revisions or changes in policy reach traders in a timely manner. A dedicated web portal should be designed for India-Pakistan trade, tracking the latest developments in trade policy. The governments

should also establish a point of enquiry to address questions on trade related matters by traders, businessmen and other interested parties.

2. Since only a few new items have entered the export basket, it is important to have forums that would bring buyers and sellers together. Holding exhibitions and fairs showcasing the products of the other country can enable a better understanding of the market demand, rules and regulations, and can enable increased acceptability among consumers for products made in the other country.
3. A large proportion of bilateral trade between India and Pakistan in recent years has shifted to the sea and road from the rail route. It is important to address the impediments on the rail route so that it is used for trading. Rail is the cheapest mode of transporting goods.
4. Non-tariff barriers between India and Pakistan continue to persist despite several agreements and policies enacted on this front. The Bureau of Indian Standards and Pakistan Standards and Quality Control Authority have signed a Mutual Recognition Agreement in order to overcome technical barriers to trade, however lack of testing facilities, especially at ports, continues to create hassles and delays especially in case of food products. Both countries can therefore address the concerns related to the imposition of non-tariff barriers by improving infrastructure for testing facilities and simplifying trading procedures.
5. While it may be difficult to implement new steps to facilitate trade it must be ensured that existing institutions in place for facilitating trade should continue their operations. For example, the Customs Liaison Border Committee formalized to resolve the operational issues at Wagah-Attari should be resumed for the road route. A similar institutional mechanism should be put in place for the rail route. Regular consultations should be held between customs officials of the two countries as they can resolve trade and operational related issues at the Wagah-Attari border.

India and Pakistan need to view the consultative meeting process not just at the bilateral level but also as a mandate under the WTO's Trade Facilitation Agreement (TFA), of which both India and Pakistan are signatories. The TFA has a provision for consultative mechanism in Article 2 Para 2 whereby Members have to provide for consultations between its border agencies and traders/ stakeholders within its territory. Meeting the requirements of these provisions will automatically ensure that there are consultations between border agencies and traders, and also between border agencies of the two countries. Also the provisions require countries to hold such consultations at regular intervals. These measures would make the consultative process more sustainable.

References

- Ahmed, V. et al (2014).** Informal Flow of Merchandise from India: The Case of Pakistan. Working Paper 141, Sustainable Development Policy Institute, Pakistan.
- Economic Times (2016).** Pakistan Suspends Import of Cotton, Agri Commodities from India Available at <https://economictimes.indiatimes.com/news/defence/pakistan-suspends-import-of-cotton-agri-commodities-from-india/articleshow/55643459.cms>
- Dawn (2016).** Pakistan Puts 'Unofficial Hold' on Cotton Imports from India as Tensions Simmer. Available at <https://www.dawn.com/news/1299627>
- Department of Revenue, Ministry of Commerce, Government of India.** Notification No.11/2018-Customs dated February 2, 2018. Available at <http://www.cbic.gov.in/resources/htdocs-cbec/customs/cs-act/notifications/notfns-2018/cs-tarr2018/cs11-2018.pdf;jsessionid=8351833DBF8EFB4BBFCBD6A82B518B89>
- Department of Revenue, Ministry of Commerce, Government of India.** Notification No.68/2012-Customs dated December 31, 2012. Available at <http://www.cbic.gov.in/htdocs-cbec/customs/cs-act/notifications/notfns-2012/cs-tarr2012/cs68-2012>
- Revenue Division, Ministry Of Finance, Economic Affairs, Revenue and Statistics, Government of Pakistan.** S.R.O. 1055(I)/2015 dated October 30, 2015. Available at <http://download1.fbr.gov.pk/SROs/20151030151019315612015SRO1055.pdf>
- Ministry of Commerce, Government of Pakistan.** S.R.O. 766 (I)/2009 dated September 4, 2009. Available at http://www.apgmja.org/documents/import_2009-trade-policy.pdf
- Express Tribune (2016).** Pakistan Suspends Cotton Imports from India. Available at <https://tribune.com.pk/story/1243541/unannounced-cotton-imports-india-suspended/>
- Press Information Bureau (2018).** Social Welfare Surcharge, On Imported Goods, To Provide For Social Welfare Schemes Of The Government. Ministry of Finance.
- Reuters (2016).** Pakistan Puts Cotton Imports from India on Hold as Tensions Mount. Available at <https://in.reuters.com/article/india-pakistan-cotton-idINKBN13P14E>
- Taneja, N., Dayal, I. and Bimal, S. (2016).** Facilitating India-Pakistan Trade through the Land Route. Working Paper 318, ICRIER, New Delhi.
- Taneja, N. & Bimal, S. (2016).** India's Informal Trade with Pakistan. Working Paper 327, ICRIER, New Delhi.

Taneja, N., Mehra, M., Mukherjee, P., Bimal, S., Dayal, I. (2013). Normalizing India Pakistan Trade. Working Paper No. 267, ICRIER, New Delhi

WTO (2014). Trade Facilitation Agreement. WT/L/931

WTO (2015). Trade Policy Review, Pakistan. Report by the Secretariat, Pakistan.

APPENDIX

Appendix A

Table 1: India's Top 10 Exports to Pakistan at HS-6 (2016-17)

HS Code	Commodity Description	Exports (US\$ million)	Share of the Product in Exports (%)
520100	Cotton, not carded or combed	251.51	13.81
290243	Para-xylene	88.35	4.85
390210	Polypropylene	77.54	4.26
520524	Single yarn of combined fibers measuring <192.31 but >=125 dctx(>52 but <=80 mtrc no)	63.4	3.48
70200	Tomatoes fresh or chilled	55.01	3.02
520527	Single yarn of combined fibers measuring between 83.33 and 106.38 dctx and 94 to 120 mtrc no.	49.21	2.70
170199	Sugar refined not containing flavoring/coloring matter	42.37	2.33
320416	Reactive dyes and preparations based thereon	36.91	2.03
520513	Single yarn of uncombined fibers measuring <232.56 but >=192.31 dctx(>43 but <=52 mtrc no)	34.64	1.90
520528	Single yarn of combined fibers measuring <83.83 dctx and > 120 mtrc no.	29.16	1.60
	Total	728.1	39.98

Source: Directorate General of Foreign Trade, Ministry of Commerce and Industry, Government of India

Table 2: India's Top 10 Imports from Pakistan at HS-6 (2016-17)

HS Code	Commodity Description	Imports (US\$ million)	Share of the Product in Imports (%)
80410	Dates fresh or dried	126.49	27.86
252329	Other port land cement	83.45	18.38
271012	Light oils and preparations	67.96	14.97
260600	Aluminum ores and concentrates	16.56	3.65
252010	Gypsum; anhydrite	16.39	3.61
520100	Cotton, not carded or combed	12.39	2.73
271019	Other petroleum oils and oils obtained from bituminous minerals etc	10.59	2.33
283620	Disodium carbonate	10.07	2.22
410799	Other/hides/skins including sides	9.56	2.11
631090	Other rags, scrap twine, cordage, rope etc	7.54	1.66
	Total	361.00	79.52

Source: Directorate General of Foreign Trade, Ministry of Commerce and Industry, Government of India

Appendix B

Top Commodities Exported from India to Pakistan

Top 5 commodities exported from India to Pakistan by Road (2016-17)

HS Code	Commodity Description	Value (US\$ million)
07020000	Tomatoes fresh or chilled	54.76
52052410	Grey2401	30.23
52010015	Indian cotton of staple length 28.5mm (1.4/32") and above	13.99
52052790	Other	13.41
52051310	Grey	11.27

Source: DGCIS, Ministry of Commerce and Industry, Govt. of India

Top 5 commodities exported from India to Pakistan by Rail (2016-17)

HS Code	Commodity Description	Value (US\$ million)
12119032	Psyllium husk (isobgul husk)	9.10
09083110	Large (amomum)	7.08
12024210	Kernels, h.p.s	6.30
32041610	Reactive yellows	5.62
12099190	Vegetable seeds for planting n.e.s.	5.53

Source: DGCIS, Ministry of Commerce and Industry, Govt. of India

Top 5 commodities exported from India to Pakistan by Sea (2016-17)

HS Code	Commodity Description	Value (US\$ million)
52010015	Indian cotton of staple length 28.5mm (1.4/32") and above	231.11
29024300	Para-xylene	88.47
39021000	Polypropylene	65.82
17019990	Other refined sugar including centrifugal sugar	42.58
52052790	Other	34.21

Source: DGCIS, Ministry of Commerce and Industry, Govt. of India

Top Commodities Imported by India from Pakistan

Top 5 commodities imported by India from Pakistan by Road (2016-17)

HS Code	Commodity Description	Value (US\$ million)
08041030	Dry dates hard (chhohara or kharek)	112.2488
25232910	Ordinary portland cement, dry	56.58157
26060090	Other aluminum ores and concentrates	16.61556
25201010	Natural gypsum and anhydrite	16.25269
28362020	Disodium carbonate light	8.066337

Source: DGCIS, Ministry of Commerce and Industry, Govt. of India

Top 5 commodities imported by India from Pakistan by Rail (2016-17)

HS Code	Commodity Description	Value (US\$ million)
41071900	Other whole hids/skins	2.52
90189023	Srgcl frcps,frcp clmps,clips,ndle holders,introducers,cephal	1.51
90189022	Surgical knives, scissors and blade	1.49
90184900	Other instruments and aplncs, used in dental science	1.09
41079900	Other/hides/skins including sides	0.68

Source: DGCIS, Ministry of Commerce and Industry, Govt. of India

Top 5 commodities imported by India from Pakistan by Sea (2016-17)

HS Code	Commodity Description	Value (US\$ million)
27101290	Other	68.02
25232910	Ordinary portland cement, dry	27.06
8041030	Dry dates hard (chhohara or kharek)	13.70
52010020	Foreign cotton of all staple lengths	12.39
27101990	Other petroleum oils and oils obtained from bituminous min	8.21

Source: DGCIS, Ministry of Commerce and Industry, Govt. of India

Appendix C

HS Code	Product Description
520511	Cotton yarn; (not sewing thread), single, of uncombed fibres, 85% or more by weight of cotton, measuring 714.29 decitex or more, (not exceeding 14 metric number), not for retail sale
520512	Cotton yarn; (not sewing thread), single, of uncombed fibres, 85% or more by weight of cotton, less than 714.29 but not less than 232.56 decitex (exceeding 14 but not exceeding 43 metric number), not for retail sale
520513	Cotton yarn; (not sewing thread), single, of uncombed fibres, 85% or more by weight of cotton, less than 232.56 but not less than 192.31 decitex (exceeding 43 but not exceeding 52 metric number), not for retail sale
520514	Cotton yarn; (not sewing thread), single, of uncombed fibres, 85% or more by weight of cotton, less than 192.31 but not less than 125 decitex (exceeding 52 but not exceeding 80 metric number), not for retail sale
520515	Cotton yarn; (not sewing thread), single, of uncombed fibres, 85% or more by weight of cotton, measuring less than 125 decitex (exceeding 80 metric number), not for retail sale
520521	Cotton yarn; (not sewing thread), single, of combed fibres, 85% or more by weight of cotton, measuring 714.29 decitex or more, (not exceeding 14 metric number), not for retail sale
520522	Cotton yarn; (not sewing thread), single, of combed fibres, 85% or more by weight of cotton, less than 714.29 but not less than 232.56 decitex (exceeding 14 but not exceeding 43 metric number), not for retail sale
520523	Cotton yarn; (not sewing thread), single, of combed fibres, 85% or more by weight of cotton, less than 232.56 but not less than 192.31 decitex (exceeding 43 but not exceeding 52 metric number), not for retail sale
520524	Cotton yarn; (not sewing thread), single, of combed fibres, 85% or more by weight of cotton, less than 192.31 but not less than 125 decitex (exceeding 52 but not exceeding 80 metric number), not for retail sale
520526	Cotton yarn; (not sewing thread), single, of combed fibres, 85% or more by weight of cotton, less than 125 but not less than 106.38 decitex (over 80 but not over 94 metric number), not for retail sale
520527	Cotton yarn; (not sewing thread), single, of combed fibres, 85% or more by weight of cotton, less than 106.38 but not less than 83.33 decitex (over 94 but not over 120 metric number), not for retail sale
520528	Cotton yarn; (not sewing thread), single, of combed fibres, 85% or more by weight of cotton, measuring less than 83.33 decitex (exceeding 120 metric number), not for retail sale
520531	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, 85% or more by weight of cotton, 714.29 decitex or more (not exceeding 14 metric number) per single yarn, not for retail sale
520532	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, 85% or more by weight of cotton, 714.28 to 232.56 decitex (15 to 43 metric number) per single yarn, not for retail sale
520533	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, 85% or more by weight of cotton, 232.55 to 192.31 decitex (44 to 52 metric number) per single yarn, not for retail sale
520534	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, 85% or more by weight of cotton, 192.30 to 125 decitex (53 to 80 metric number) per single yarn, not for retail sale
520535	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, 85% or more by weight of cotton, less than 125 decitex (exceeding 80 metric number), per single yarn, not for retail sale

520541	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, 85% or more by weight of cotton, 714.29 decitex or more (not exceeding 14 metric number) per single yarn, not for retail sale
520542	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, 85% or more by weight of cotton, 714.28 to 232.56 decitex (15 to 43 metric number) per single yarn, not for retail sale
520543	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, 85% or more by weight of cotton, 232.55 to 192.31 decitex (44 to 52 metric number) per single yarn, not for retail sale
520544	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, 85% or more by weight of cotton, 192.30 to 125 decitex (53 to 80 metric number) per single yarn, not for retail sale
520546	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, 85% or more by weight of cotton, 124 to 106.38 decitex (81 to 94 metric number) per single yarn, not for retail sale
520547	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, 85% or more by weight of cotton, 106.37 to 83.33 decitex (95 to 120 metric number) per single yarn, not for retail sale
520548	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, 85% or more by weight of cotton, less than 83.33 decitex (exceeding 120 metric number) per single yarn, not for retail sale
520611	Cotton yarn; (not sewing thread), single, of uncombed fibres, less than 85% by weight of cotton, measuring 714.29 decitex or more (not exceeding 14 metric number), not for retail sale
520612	Cotton yarn; (not sewing thread), single, of uncombed fibres, less than 85% by weight of cotton, less than 714.29 but not less than 232.56 decitex (exceeding 14 but not exceeding 43 metric number), not for retail sale
520613	Cotton yarn; (not sewing thread), single, of uncombed fibres, less than 85% by weight of cotton, less than 232.56 but not less than 192.31 decitex (exceeding 43 but not exceeding 52 metric number), not for retail sale
520614	Cotton yarn; (not sewing thread), single, of uncombed fibres, less than 85% by weight of cotton, less than 192.31 but not less than 125 decitex (exceeding 52 but not exceeding 80 metric number), not for retail sale
520615	Cotton yarn; (not sewing thread), single, of uncombed fibres, less than 85% by weight of cotton, measuring less than 125 decitex (exceeding 80 metric number), not for retail sale
520621	Cotton yarn; (not sewing thread), single, of combed fibres, less than 85% by weight of cotton, measuring 714.29 decitex or more, (not exceeding 14 metric number), not for retail sale
520622	Cotton yarn; (not sewing thread), single, of combed fibres, less than 85% by weight of cotton, less than 714.29 but not less than 232.56 decitex (exceeding 14 but not exceeding 43 metric number), not for retail sale
520623	Cotton yarn; (not sewing thread), single, of combed fibres, less than 85% by weight of cotton, less than 232.56 but not less than 192.31 decitex (exceeding 43 but not exceeding 52 metric number), not for retail sale
520624	Cotton yarn; (not sewing thread), single, of combed fibres, less than 85% by weight of cotton, less than 192.31 but not less than 125 decitex (exceeding 52 but not exceeding 80 metric number), not for retail sale
520625	Cotton yarn; (not sewing thread), single, of combed fibres, less than 85% by weight of cotton, measuring less than 125 decitex (exceeding 80 metric number), not for retail sale
520631	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, less than 85% by weight of cotton, 714.29 decitex or more (not exceeding 14 metric number) per single yarn, not for retail sale
520632	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, less than 85% by weight of cotton, 714.28 to 232.56 decitex (15 to 43 metric number) per single yarn,

	not for retail sale
520633	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, less than 85% by weight of cotton, 232.55 to 192.31 decitex (44 to 52 metric number) per single yarn, not for retail sale
520634	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, less than 85% by weight of cotton, 192.30 to 125 decitex (53 to 80 metric number) per single yarn, not for retail sale
520635	Cotton yarn; (not sewing thread), multiple or cabled, of uncombed fibres, less than 85% by weight of cotton, less than 125 decitex (exceeding 80 metric number) per single yarn, not for retail sale
520641	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, less than 85% by weight of cotton, 714.29 decitex or more (not exceeding 14 metric number) per single yarn, not for retail sale
520642	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, less than 85% by weight of cotton, 714.28 to 232.56 decitex (15 to 43 metric number) per single yarn, not for retail sale
520643	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, less than 85% by weight of cotton, 232.55 to 192.31 decitex (44 to 52 metric number) per single yarn, not for retail sale
520644	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, less than 85% by weight of cotton, 192.30 to 125 decitex (53 to 80 metric number) per single yarn, not for retail sale
520645	Cotton yarn; (not sewing thread), multiple or cabled, of combed fibres, less than 85% by weight of cotton, less than 125 decitex (exceeding 80 metric number) per single yarn, not for retail sale
520710	Cotton yarn; (not sewing thread), containing 85% or more by weight of cotton, put up for retail sale
520790	Cotton yarn; (not sewing thread), containing less than 85% by weight of cotton, put up for retail sale
520811	Fabrics, woven; containing 85% or more by weight of cotton, unbleached, plain weave, weighing not more than 100g/m ²
520812	Fabrics, woven; containing 85% or more by weight of cotton, unbleached, plain weave, weighing more than 100g/m ² but not more than 200g/m ²
520813	Fabrics, woven; containing 85% or more by weight of cotton, unbleached, 3-thread or 4-thread twill, including cross twill, weighing not more than 200g/m ²
520819	Fabrics, woven; containing 85% or more by weight of cotton, unbleached, of weaves n.e.c. in item no. 5208.1, weighing not more than 200g/m ²
520821	Fabrics, woven; containing 85% or more by weight of cotton, bleached, plain weave, weighing not more than 100g/m ²
520822	Fabrics, woven; containing 85% or more by weight of cotton, bleached, plain weave, weighing more than 100g/m ² but not more than 200g/m ²
520823	Fabrics, woven; containing 85% or more by weight of cotton, bleached, 3-thread or 4-thread twill, including cross twill, weighing not more than 200g/m ²
520829	Fabrics, woven; containing 85% or more by weight of cotton, bleached, of weaves n.e.c. in item no. 5208.2, weighing not more than 200g/m ²
520831	Fabrics, woven; containing 85% or more by weight of cotton, dyed, plain weave, weighing not more than 100g/m ²
520832	Fabrics, woven; containing 85% or more by weight of cotton, dyed, plain weave, weighing more than 100g/m ² but not more than 200g/m ²
520833	Fabrics, woven; containing 85% or more by weight of cotton, dyed, 3-thread or 4-thread twill, including cross twill, weighing not more than 200g/m ²
520839	Fabrics, woven; containing 85% or more by weight of cotton, dyed, of weaves n.e.c. in item no. 5208.3 weighing not more than 200g/m ²

520841	Fabrics, woven; containing 85% or more by weight of cotton, of yarns of different colours, plain weave, weighing not more than 100g/m ²
520842	Fabrics, woven; containing 85% or more by weight of cotton, of yarns of different colours, weighing more than 100g/m ² but not more than 200g/m ²
520843	Fabrics, woven; containing 85% or more by weight of cotton, of yarns of different colours, 3-thread or 4-thread twill, including cross twill, weighing not more than 200g/m ²
520849	Fabrics, woven; containing 85% or more by weight of cotton, of yarns of different colours, of weaves n.e.c. in item no. 5208.4, weighing not more than 200g/m ²
520851	Fabrics, woven; containing 85% or more by weight of cotton, printed, plain weave, weighing not more than 100g/m ²
520852	Fabrics, woven; containing 85% or more by weight of cotton, printed, plain weave, weighing more than 100g/m ² but not more than 200g/m ²
520859	Fabrics, woven; containing 85% or more by weight of cotton, printed, of weaves n.e.c. in item no. 5208.5, weighing not more than 200g/m ²
520911	Fabrics, woven; containing 85% or more by weight of cotton, unbleached, plain weave, weighing more than 200g/m ²
520912	Fabrics, woven; containing 85% or more by weight of cotton, unbleached, 3-thread or 4-thread twill, including cross twill, weighing more than 200g/m ²
520919	Fabrics, woven; containing 85% or more by weight of cotton, unbleached, of weaves n.e.c. in item no. 5209.1, weighing more than 200g/m ²
520921	Fabrics, woven; containing 85% or more by weight of cotton, bleached, plain weave, weighing more than 200g/m ²
520922	Fabrics, woven; containing 85% or more by weight of cotton, bleached, 3-thread or 4-thread twill, including cross twill, weighing more than 200g/m ²
520929	Fabrics, woven; containing 85% or more by weight of cotton, bleached, of weaves n.e.c. in item no. 5209.2, weighing more than 200g/m ²
520931	Fabrics, woven; containing 85% or more by weight of cotton, dyed, plain weave, weighing more than 200g/m ²
520932	Fabrics, woven; containing 85% or more by weight of cotton, dyed, 3-thread or 4-thread twill, including cross twill, weighing more than 200g/m ²
520939	Fabrics, woven; containing 85% or more by weight of cotton, dyed, of weaves n.e.c. in item no. 5209.3, weighing more than 200g/m ²
520941	Fabrics, woven; containing 85% or more by weight of cotton, of yarns of different colours, plain weave, weighing more than 200g/m ²
520942	Fabrics, woven; containing 85% or more by weight of cotton, of yarns of different colours, weighing more than 200g/m ² , denim
520943	Fabrics, woven; containing 85% or more by weight of cotton, of yarns of different colours, 3-thread or 4-thread twill, including cross twill, weighing more than 200g/m ²
520949	Fabrics, woven; containing 85% or more by weight of cotton, of yarns of different colours, of weaves n.e.c. in item no. 5209.4, weighing more than 200g/m ²
520951	Fabrics, woven; containing 85% or more by weight of cotton, printed, plain weave, weighing more than 200g/m ²
520952	Fabrics, woven; containing 85% or more by weight of cotton, printed, 3-thread or 4-thread twill, including cross twill, weighing more than 200g/m ²
520959	Fabrics, woven; containing 85% or more by weight of cotton, printed, of weaves n.e.c. in item no. 5209.5, weighing more than 200g/m ²
521011	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, unbleached, plain weave, weighing 200g/m ² or less
521019	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, unbleached, of weaves n.e.c. in item no. 5210.1, weighing 200g/m ² or less
521021	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, bleached, plain weave, weighing 200g/m ² or less

521029	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing 200g/m ² or less, bleached, of weaves n.e.c. in item no. 5210.2
521031	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing 200g/m ² or less, dyed, plain weave
521032	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing 200g/m ² or less, dyed, 3-thread or 4-thread twill, including cross twill
521039	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing 200g/m ² or less, dyed, of weaves n.e.c. in item no. 5210.3
521041	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing 200g/m ² or less, of yarns of different colours, plain weave
521049	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing 200g/m ² or less, of yarns of different colours, of weaves n.e.c. in item no. 5210.4
521051	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing 200g/m ² or less, printed, plain weave
521059	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing 200g/m ² or less, printed, of weaves n.e.c. in item no. 5210.5
521111	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, unbleached, plain weave, weighing more than 200g/m ²
521112	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, unbleached, 3- or 4-thread twill, including cross twill, weighing more than 200g/m ²
521119	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, unbleached, of weaves n.e.c. in item no. 5211.1, weighing more than 200g/m ²
521120	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , bleached
521131	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , dyed, plain weave
521132	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , dyed, 3-thread or 4-thread twill, including cross twill
521139	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , dyed, of weaves n.e.c. in item no. 5211.3
521141	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , of yarns of different colours, plain weave
521142	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , of yarns of different colours, denim
521143	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , of yarns of different colours, 3-thread or 4-thread twill, including cross twill
521149	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , of yarns of different colours, of weaves n.e.c. in item no. 5211.4
521151	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , printed, plain weave

521152	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , printed, 3-thread or 4-thread twill, including cross twill
521159	Fabrics, woven; containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200g/m ² , printed, of weaves n.e.c. in item no. 5211.5
521211	Fabrics, woven; of cotton, unbleached, weighing not more than 200g/m ² , n.e.c. in chapter 52
521212	Fabrics, woven; of cotton, bleached, weighing not more than 200g/m ² , n.e.c. in chapter 52
521213	Fabrics, woven; of cotton, dyed, weighing not more than 200g/m ² , n.e.c. in chapter 52
521214	Fabrics, woven; of cotton, of yarns of different colours, weighing not more than 200g/m ² , n.e.c. in chapter 52
521215	Fabrics, woven; of cotton, printed, weighing not more than 200g/m ² , n.e.c. in chapter 52
521221	Fabrics, woven; of cotton, unbleached, weighing more than 200g/m ² , n.e.c. in chapter 52
521222	Fabrics, woven; of cotton, bleached, weighing more than 200g/m ² , n.e.c. in chapter 52
521223	Fabrics, woven; of cotton, dyed, weighing more than 200g/m ² , n.e.c. in chapter 52
521224	Fabrics, woven; of cotton, of yarns of different colours, weighing more than 200g/m ² , n.e.c. in chapter 52
521225	Fabrics, woven; of cotton, printed, weighing more than 200g/m ² , n.e.c. in chapter 52

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