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**Pakistan - India
Agricultural Trade**

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South Asia Network of Economic Research Institutes

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Pakistan – India Agricultural Trade¹

*M. Usman Khan
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Abstract

Trade in agricultural remains one of the most contentious issues within the broader topic of Pakistan-India trade. The main source of contention is the difference in policy regime vis-a-vis agriculture in the two countries. India, for reasons of food security, has extensive price support mechanisms and gives substantial input subsidies to its farmers. Moreover, high tariff rates and a range of nontariff barriers protect the Indian farmer from global competition. In sharp contrast, the government of Pakistan has over the past decade and a half gradually phased out agricultural subsidies, reduced external tariffs and withdrawn price support on most of the crops. The farmers associations and lobby groups in Pakistan emphasize this difference in policy regime and claim that opening trade with India in agriculture under such conditions would hurt Pakistan's agricultural sector. This paper is an attempt to investigate that claim by analyzing the agricultural policy regimes in both the countries using secondary and primary sources of data and information. The paper at the end puts forward some policy recommendations which could help assuage the farmers in Pakistan without curtailing overall trade and economic ties between the two neighbors.

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1. INTRODUCTION

The decision by Pakistan to grant MFN to India by the end of 2012 triggered considerable enthusiasm on both sides of the border. Proponents of trade saw this normalization process as a key to achieving regional economic integration and bringing long term stability and economic gains to both India and Pakistan, as well as the South Asian region. However, there were some sectors in the Pakistan economy, namely agriculture, automobile and pharmaceuticals, which were more sceptical of the purported gains from opening up trade with India. In September 2012, just a few months before Pakistan was to grant MFN status to India, the agriculture sector in Pakistan formed an alliance to oppose the implementation of this decision. Several farmers' associations held demonstrations, protesting the MFN decision as "farmer unfriendly," and potentially harmful for the food security of the country.² The main claim made by these groups is that Pakistani farmers would be at a serious disadvantage in competing with Indian farmers who are protected and subsidized by their government. While in Pakistan, as the government has withdrawn all support and subsidies to the agricultural sector, the farmers have to face adverse market outcomes and economic conditions such as increasing costs of agricultural inputs and chronic power shortages.³

Following these demonstrations, the Pakistan Senate asked the government to take the agriculturalists demands into consideration in its negotiations with India prior to granting MFN and eliminating the negative list. Thus the pressure from the farmers' alliance was one of major factors which resulted in the postponement of the granting of MFN to India by December 2012.

The agriculture sector of Pakistan emphasizes that the government has not taken into consideration the issues of concern to the sector in negotiating trade normalization with India. Broadly speaking, the agriculture sector feels threatened by trade with India due to: (i) high farm subsidies given by the Indian government resulting in lower costs of production and better yields; and (ii) restricted market access for Pakistani produce into India. The sector feels strongly that unless these two factors are appropriately addressed, trade will not be on a level playing field and Pakistan will be on the losing end. They claim that cheap Indian agriculture produce will flood Pakistani markets, in particular those in Punjab. This will lead to significant fall in agriculture activity in the country adversely impacting both employment and income. Since the sector currently employs over 45% of the labour force, any fall in overall production will have serious consequences for the whole economy.

However, as a result of the above concerns voiced by the farmers, an extensive debate has been triggered between the key sector stakeholders, researchers and policy makers. This engagement over the last two years have helped the farmers to become less opposed to the idea of free trade with India. The FAP has now negotiated a bilateral trade arrangement with their Indian counterparts and is in negotiation with government to approve the agreement.

The main purpose of this paper is to objectively assess the substance behind the claims made by the agriculture sector of Pakistan. In addition, the paper will provide information pertaining to agricultural trade that may be useful for policy makers and negotiators on the

², Mango Growers Association, Livestock The organizations that actively opposed the decision included the Farmers Association of Pakistan (FAP), Kisan Board, Muthida Kisan Mahaz, Guava Growers Association, Basmati Growers Association Farmers and Breeders Association and other farmers' bodies.

³ As stated by Mr. Tariq Bucha, President, Farmers Association of Pakistan, Lahore, 28 March, 2013.

Pakistan side. The material in this paper is based on both secondary as well as primary information. The secondary information has been extracted from research conducted on the topic over the last two years. The primary information has been derived from stakeholder meetings and a recent perception survey conducted in Pakistan.

2. THE AGRICULTURE SECTOR: SIZE AND IMPORTANCE

2.1. Overview

The agriculture sector is an integral part of both India and Pakistan's economy. In the case of Pakistan it contributed 21.1% to GDP during 2013-14 amounting to over US\$ 49.68 billion (at current prices).⁴ Agriculture also generates employment for over 45% of the country's labour force. Around 60% of the rural population depends upon agriculture for its livelihood. Apart from this, the sector also contributes substantially to the country's exports. In 2013-14, Pakistan exported agriculture products worth more than US\$ 3.95 billion, or about 19% of total exports. This included rice exports of US\$ 1.85 billion (47%), fruit exports of US\$ 0.4 billion and meat exports of over US\$ 0.19 billion.⁵

Indian agriculture, including related activities, accounted for 13.9% of the GDP in 2013-14. This amounts to around US\$ 260.9 billion.⁶ This makes the Indian agriculture sector 5 times as large as Pakistan. Agriculture and its allied activities in India employ 54.6% of the labour force. Agriculture exports in India grew by 5.1% between 2012 and 2013-14 reaching US\$ 37.3 billion (13.8% of total exports) with rice alone contribution US\$ 7.7 billion. However, the structure and pattern of agriculture in India is much different from that of Pakistan. Whereas Pakistan has grown substantially in livestock production, Indian agriculture has been dominated by the rise of cotton production, trebling in only the last 10 years, after it adopted bio-genetic varieties. Similarly India produces more rice per capita than Pakistan; which focuses on wheat production, along with pulses and vegetables (Pasha and Imran, 2012). Finally, even though India is one of the top countries in agriculture production, the current level for farm mechanization on average is 25% as compared to around 90% in developed economies.

2.2 Relative Growth Performance

Figure 1 below shows the growth pattern over time of agriculture in Pakistan and India. The growth rates of GDP and agriculture in Pakistan have generally moved in tandem. Although the overall growth performance of India has been superior, the agriculture sector has shown much higher volatility compared to Pakistan over the last ten years. The Coefficient of Variation (CV) of Indian agriculture growth during 2000-01 to 2013-14 was 1.5 compared to 0.8 for Pakistan during the same period. For India, this is almost six times more than the CV observed in the overall GDP growth of the country indicating that high and increasing volatility is a real challenge in agriculture.

⁴ Economic Survey of Pakistan 2013-14.

⁵ Economic Survey of Pakistan 2013-14.

⁶ Economic Survey of India 2013-14.

Although Indian GDP growth rate has been impressive, averaging around 7.1 percent in the last decade, this growth has not been mirrored by the agriculture sector, which grew at an average rate of 3.2 percent during the same period (World Bank, 2013). However, notwithstanding the weather and price shocks encountered in the past few years, India leads the world in the production of milk, pulses, jute and jute-like fibres. It is second in the world in rice, wheat, sugarcane, groundnut, vegetables, fruits and cotton production, and is also a leading producer of spices and plantation crops as well as livestock, fisheries and poultry (Government of India, 2013).

As evident in figure 1, the floods of 2010 played havoc with the Pakistan agricultural sector, but there has been a recovery in the last 3 years. Most recently, 2012-13, the agriculture sector grew by 3.0%.

Moreover, the difference in growth patterns can also be attributed to the structural change in the composition of agriculture in both countries. Both countries have diversified into horticulture, livestock and fisheries. For instance, horticulture in India contributes over 30% to agriculture, whereas, livestock and dairy sector contributes over 55% to value added agriculture in Pakistan.

Table 1 provides the yield per hectare comparison of key crops in Pakistan and India with World. Both countries have yields lower than world averages, however, amongst the two, India has higher yields in wheat, sugarcane, tomatoes and jute, whilst Pakistan has higher yields in rice paddy, pulses and mangoes.

2.3 Economic Size and Variety of Production

The major crops in Pakistan include wheat, rice, sugar and cotton – contributing 25.6% to the value addition in overall agriculture and 5.4% to GDP. Minor crops (tobacco, mustard, rapeseed, mung, potato, mash, etc.) account for 11.6% of value added in overall agriculture. Wheat, rice, cotton and sugarcane have remained the most important crops and account for 39%, 10%, 11% and 4% of the total area under cultivation in 2011, respectively.

Livestock production, on the other hand, holds a share of 55% in Pakistan's agriculture and includes: milk, beef, mutton, poultry meat, wool, hair, bones, fats, eggs, hides and skins. Livestock's share in agriculture is more than the total combined share of both the major and minor crops, and grew at a rate of 4% in 2011-12.

According to the Food and Agriculture Organization's (FAO) country rankings for global agricultural production, Pakistan ranks second in production of indigenous buffalo meat, buffalo milk, and oilseed; third in root and tubers and goat milk.

The top commodities produced in Pakistan and India sorted over values shows that seven out of the nine commodities are the same for both countries (see Figure 2 and Figure 3). India is generating more value through fruits and vegetables, such as mangos, guavas, bananas and potatoes, while Pakistan's livestock sector plays a very important role though the production of milk and meat. This evidence backs the structural change and its impact on agriculture performance presented above.

2.4. Trade Patterns

Since the liberalization of its economy in the early 1990s, India's total trade has accelerated significantly and it is now one of the major global players. In 2013-14, the Indian economy exported US\$ 312.6 billion worth of goods, while importing US\$ 450.1 billion. Pakistan on the other hand exported only US\$ 25.2 billion while its imports were US\$ 41.7 billion. In agricultural trade, India's exports in 2013-14 were US\$ 47.0 billion and it imported only US\$ 24.4 billion worth of agricultural commodities, generating an agricultural trade surplus of US\$ 22.6 billion. In comparison, Pakistan is a net importer of agricultural commodities. Pakistan's agriculture exports in 2013-14 totalled US\$ 5.57 billion and imports exceeded exports by US\$ 0.8 billion and amounted to US\$ 6.3 billion. Moreover, the size of agriculture trade of Pakistan is almost six times smaller than that of India. Figure 4 presents the top exports and imports of Pakistan and India.

In exports, the only product where Pakistan comes closest to India is rice. In 2012-13, India was the 3rd largest rice exporter while Pakistan was the 4th largest exporter. In cotton lint, India is the 2nd largest exporter in the world, whereas Pakistan is the 8th largest. However, India's exports of cotton lint are 15 times larger than that of Pakistan.

The Herfindhal Hirshman (HH) Product Concentration Index was extracted from the World Bank's World Integrated Trade Solutions (WITS) website. The index values for 2010 are presented in Table 2.⁷

The HH Index values are generally higher for Pakistan than India suggesting that Pakistan's exports are more concentrated and hence more vulnerable to trade shocks as compared with India. However, values for both countries are much lower than 1; suggesting diversified agriculture sector exports.

3. COMPARATIVE AGRICULTURE TRADE ANALYSIS

3.1. Bilateral agriculture trade trends and potential

Pakistan's imports from India grew significantly in the food and beverage sector after 2003. A major portion of this growth has been in agriculture commodities. More recently, the issuance of S.R.O. No. 280 (I) /2012 dated March 2012 by the Pakistan Ministry of Commerce, allowing 137 items of agriculture and textile origin to be imported duty free via

⁷ Herfeindhal Hirshman Product Concentration Index (HHPCI) is a measure of the dispersion of trade value across an exporter's products. A county with a preponderance of trade value concentrated in a very few products will have an index value close to 1. Thus, it is an indicator of the exporter's vulnerability to trade shocks. A fall in the index may be an indication of diversification in the exporter's trade profile.

A higher index indicates that exports are concentrated in fewer sectors, whereas a country with a completely diversified portfolio will have an index close to 0. A low index may not be a true indicator of a diversified trade portfolio if the number of products is low: it simply implies that it exports similar values of each product.

Mathematical Definition:
$$\frac{\sum_{k=1}^n \left(\frac{x_k}{X_i}\right)^2 - \frac{1}{n}}{1 - \frac{1}{n}}$$

X is the total value of exports from reporter i, x is the value of exports of product k from country i, and n is the number of products exported by country i

Wagah land route significantly increased imports from India. The current trade in agriculture is predominantly in favour of India. In 2013-14, Pakistan's agriculture exports to India accounted for only 2.2% of Pakistan's total agriculture exports, while imports represented 14.2% of total world imports. Over the same period agriculture imports of India from Pakistan only accounted for 0.8% of their total agriculture imports. However, in terms of trade share India is strategically more important for Pakistan as 32% of Pakistan total agriculture exports are to India.

Table 3 below shows the top 10 agricultural exports of Pakistan to India (6 digit HS-code) with their indicative trade potential. The total value of top ten agricultural exports from Pakistan to India is \$ 155.4 million. Dried dates are the only major commodity being exported by Pakistan at the moment. Pakistan exported US\$ 67.1 million worth of dates to India in 2012 and US\$ 73.41 million worth of dates in 2013. This represented about 85.6% of total export of dates by Pakistan, whereas for India this constitutes 40% of total import of dates from the world. India provides a large market for exports of dates, as it constitutes 20.5% of total world imports of dates. As Pakistan already has gained a significant share and is exporting of its produce to India, dates present relatively low indicative trade potential (ITP) and relative trade potential (RITP).⁸

Another major export of Pakistan to India is refined sugar, the value of exports of sugar in 2013 amounted to US\$0.03 billion, which constituted 5.5% of total exports of sugar by Pakistan to world. The data on India's import of sugar from world was found underreported in COMTRADE and total import figure was lower than Pakistan's exports. It was therefore assumed that Pakistan is the sole exporter of sugar to India. Therefore, it can be implied that indicative trade potential is low relative to the market size of India.

In 2013-14, cotton was another major export of Pakistan to India, its value amounting to US\$20.1 million. This constitutes 9.26% of Pakistan's total exports and 5.03% of total market share Pakistan has in Indian imports. Hence, India does not depend on Pakistan to meet demand of cotton, which is corroborated by high ITP and RITP. Comparing other top exports, only sesame seeds and medicinal plant provide high export potential as evidenced by their high ITP and RITP.

Table 4 illustrates the top ten imports of Pakistan from India and their indicative trade potential. Among the top imports of Pakistan from India; cotton, onions, chickpeas, vegetable and medicinal plants have high indicative trade potential.

Figure 5 shows that fine animal hair is the fastest growing agricultural export from Pakistan to India (average growth 2009-13 equaling 345% and absolute value of US\$ 1 million). Other growing sectors include; cotton, skins of sheep, sesame seeds, greasy and degreased wool, and dates. Despite, India being one of the leading countries in terms of sheep population, its wool productivity is much lower than the world average. The demand for wool in India exceeds its production and hence there is increasing reliance on exports. In terms of share, Pakistan has captured more than 50% of India's total imports of wool (greasy and degreased), waste of wool and dates. However, for other major commodities such as cotton, sesame seeds and nuts Pakistan accounts for less than 8% of Indian import demand of these items.

⁸ ITP = Minimum[Country's product export to World, Partner's product import from World] – Country's product export to Partner.

RITP = ITP/ Country's product export to World

Figure 6 shows the fastest growing agriculture imports of Pakistan from India. Sunflower seeds is the fastest growing crop during the period 2009-2013 followed by dried fruits, fresh vegetables, garlic, tomatoes, soyabean oil cakes, cumin seeds, cashew nuts, spices and seeds alfafa. Imports of fresh vegetables have seen a significant growth since they have been allowed to come via land route duty free. A case in point is import of tomatoes, which has increased to over US\$ 100 million. Indian tomatoes have made significant inroads into key metropolitan markets of Punjab and have replaced Pakistani tomatoes coming mostly from the north of the country. A key reason is that the transport cost of importing tomatoes from Wagah border to Pakistani Punjab is much lower as compared to transporting them from the northern regions of Pakistan. This is evident by the 100% share of India in market of tomatoes in Pakistan. India has also captured more than 30% of market share of sunflower seeds, garlic, and seed alfalfa and India is capturing an increasing share of fresh vegetables market in Pakistan.

3.2. Potential for agriculture trade

The growth figures presented above suggest that efforts of normalizing trade are beginning to have an impact on the size of total trade between the two countries. The TRTA II/ITC (2013) calculates the trade similarity index between Pakistan and India and shows that for overall trade the similarity index is as high as 90%. This implies little opportunity for trade. However, if calculations are done at sector level the similarity index for agriculture goes down to around 45%. This suggests better opportunities for trade and also reflects that trade in agriculture between Pakistan and India will not happen in major crops such as wheat, rice, cotton or grains, but instead in seasonal and high value perishable items.

So far, the benefit has been tilted more towards India, as it has managed to gain relatively much larger market shares in Pakistan. However, given the profile of Pakistan's agriculture sector there are certain products that are high quality and have strong international competitiveness. These products, which include citrus fruits, mangoes, apricots, peaches, olives, fish and fish products, have strong potential to attract significant demand in Indian markets.

Indian import appetite is very promising for countries exporting agricultural goods. With its huge population (300 million plus middleclass) India offers substantial opportunities for exports of value-added agricultural processed fresh and preserved food, dairy products, juices and vegetable food supplements (especially health conscious diets and supplements like vitamins, traditional spices, medicinal herbs, roots, salads and seeds). Niche export market opportunities exist for vegetarian, halal, kosher and organic products. India's agricultural imports in year 2011 were US\$ 22.56 billion compared to US\$ 17.86 billion the previous year - registering an increase of 23.6 %. Moreover, with a GDP of US\$ 1,876 billion and consumption patterns as high as 49%, India presents a food market with a potential size of over US\$ 900 billion.

Table 5 provides total production, total per capita production and total exports of major agriculture products in 2010. With the exception of rice and potatoes in Pakistan and maize in India, both countries only export less than 10% of their production. This suggests that the major crops mainly satisfy local demand. Trade in these key commodities across the border is thus expected to stay minimal even after the successful completion of the liberalization process.

In 2012, two major studies were conducted (TDAP, 2012; TRTA II/ITC, 2013) to explore the potential of trade in agriculture sector between Pakistan and India. The studies used trade data to estimate indices such as Revealed Comparative Analysis (RCA); Trade Similarity Index, Trade Specialization Index and Grubel Lloyd Index for assessing intra industry trade.

This paper has estimated the revealed comparative advantage (RCA) in agricultural products using trade data on Pakistan and India in order to explore the potential of trade in agriculture sector between Pakistan and India. The conclusions of the RCA analysis and trade potential matches that of the studies mentioned above.

RCA is an index, which captures a country's static comparative advantage in a commodity and can be used to assess the competitive positioning of its exports. An RCA value of greater than 1 indicates that a country has a comparative advantage in a commodity, i.e., it is competitive globally. RCA is a static point in time analysis and therefore any interpretation of this index of competitiveness or trade potential has to be substantiated with additional information derived from stakeholders. Besides calculating their RCA, we have also calculated the export potential (Calculated using the ITP formula) of all the products with RCA greater than 1.

Table 6 presents the result of the RCA analysis. One of the primary products with the highest export potential is ethyl alcohol. This is a waste by-product of the sugar industry and is used as a fuel. The large Pakistan sugar industry produces ample quantities of ethyl that can be exported to India. Other products with a revealed comparative advantage and export potential include rice, refined sugar, fruits and vegetables, wool products, meat etc. In negotiating with the Indian side on market access, specific emphasis should be given to these products. Pakistan has comparative revealed advantage in processed meat, fruits, vegetables etc.

The RCA evidence is also supported by the views of the stakeholders. The stakeholders emphasize that in the right environment (where there is a level playing field and market access to India is available) Pakistan can generate significant export revenues by exporting horticulture and agriculture by-products to India. Mango, citrus, peaches and olives exports present immense opportunities for Pakistan. The demand in India is significant for these high value added table-fruits. Moreover, for mangoes, the season complementarity is a significant factor - as the mango season finishes in India, Pakistani season is at its peak. This provides a convenient and natural window for export. Moreover, the Indian mango varieties are more suited for juicing and pulping whereas Pakistani mangoes are preferred as table fruits, which fetch higher prices due to their exotic nature.

Similarly, kinnow's (citrus) from Sargodha have made their mark globally and are being exported to different countries. The government and various development agencies have worked closely with farmers to build their capacity to improve traceability and SPS measures. Kinnow's are now being exported to key European markets, China and Russia. India is thus a big potential market for Pakistani kinnow.

Intra-industry trade captures the opportunities of trade that exist within the same product (horizontal) or in a products value chain (vertical) spread across countries. However, TRTAII/ITC, 2013 concludes on the basis of a low value of Grubel Lloyd Index that limited to no opportunities exist for intra-industry trade in agriculture products between India and Pakistan. However, stakeholders feel that intra-industry trade potential does exist, where Pakistan can focus more on production of inputs and India can specialise in processing and final value addition. An example of this is the juicing industry. Pakistan can supply large

quantities of fruit pulp and juice concentrate that can feed the expanding juice industry of India. The success of this, however, will depend on the extent of cross border investments.

To further substantiate the finding of the literature Trade Complementarity Index (TCI) has been calculated. TCI measures the degree to which the export pattern of one country matches the import pattern of another. With perfect correlation between import and export share, the index is 100 and with perfect negative correlation it is 0. Figure 23 compares the TCI index between Pakistan and India and shows that, there is low level of trade but there is high trade complementarity in agricultural commodities. It is also revealed that India has a high level of trade complementarity with Pakistan but Pakistan has moderate level of trade complementarity with India. It suggests India's import basket over time has become less favorable to Pakistan export basket. On the other hand, Pakistan's imports have become more favorable to Indian exports from 2009-2013.

4. IMPACT OF AGRICULTURE TRADE: EVIDENCE AND STAKEHOLDER ASSESSMENT

This section addresses the following two questions: First, how real is the threat of subsidized agricultural products flooding Pakistani markets and drive out local producers? And second, how high are the barriers to market access for Pakistani products in India?

These two questions stem directly from differences in the way the agriculture sectors are managed by the governments on either side. Over the past 20 years, Pakistan has moved towards a free market in agriculture which is now largely unregulated and unsupported. Government intervention has been fairly limited in Pakistan. On the other hand, the Indian agriculture sector has been receiving significant support from the government. This support comes in the form of direct subsidies, cheap formal credit, minimum support prices along with procurement, as well as a high degree of trade restrictiveness that makes it harder for agriculture imports to penetrate the Indian market.

4.1. Subsidy and price supports in Pakistan and India

Overall Comparison: In 2012-13, India subsidized fertilizer use to the tune of \$15.2 billion, irrigation costs were subsidized by \$6.3 billion, electricity consumption by farmers received support worth \$7.3 billion. Indian Government also spent \$8.8 billion to support farmers' costs of inputs such as seed, tractors Crop insurance. The total agricultural subsidy bill for India in 2012 was estimated to be at \$37.4 billion, equaling to 2.2% of the GDP. In comparison, Pakistan spent \$356 million on fertilizer (net of the GST on the input), \$193 million on irrigation and \$342 million on electricity and other costs. The total subsidy aggregates to \$897 million, which is 0.4 percent of the GDP. Hence, India spends over five times as much as Pakistan on agriculture subsidies. The section below provides more information on agriculture subsidies in both countries.

A. Pakistan

Constitutionally, agriculture is a provincial responsibility in Pakistan. However, issues such as the import and export of agricultural inputs, standardization, quality control and quarantine

issues, national research and inter-provincial issues, such as the construction, management and maintenance of primary irrigation structure, fall under the purview of the Federal Government.

Direct Subsidy

Pakistan at present does not subsidize its agricultural sector. Historically, fertilizer subsidies were provided to farmers, but they were phased out by 1994-95. While the Ministry of Finance still claims that it is assisting the fertilizer sector by providing subsidized gas for production, the agriculture sector feels that these subsidies do not filter down to the farmers. The farmers currently receive a subsidy of Rs.1000/crop/acre on urea. Given that the Pakistani government procures only wheat, and that too at a support price lower than the international price, this amount of subsidy does not even compensate farmers for the forced sale of wheat to the government. This pricing differential has been subsidizing the urban consumer at the cost of the farmer. The sector feels that although the procurement price over the last few years has improved, it still does not compensate the farmer fully.

Credit

Similarly, there is little formal credit available to farmers in Pakistan. The amount of loans given by the commercial banking sector is neither enough for technology upgrades or working capital. The State Bank of Pakistan's figure of US\$0.23 billion is not the actual credit forwarded to the sector—it is the total disbursements made, including the poultry and ginning sectors. The major beneficiary of this credit is the ginning sector in Pakistan.

Price Support

The Agricultural Produce Markets Act of 1939, established during British rule, is still in effect in Pakistan, although the provinces of Punjab and Sindh have made certain amendments. This Act places control of agricultural markets in the hands of the government. Unlike in India, where the state procures 25 agricultural commodities from farmers, Pakistan's government only procures wheat at the national level. This creates room for middlemen, since farmers cannot sell their produce directly to the markets due to lack of requisite agricultural infrastructure and poor road networks. This policy has strengthened the position of the middlemen over the years, establishing strong networks with not only market vendors, but also processors and factories, leaving little room for farmers to negotiate prices. The middlemen can secure up to 50 % or more profit by exploiting their close links with transporters, market committees and commission agents.

Similarly, the farmers feel captive at the hands of middlemen, who control the bulk of capital in the sector. This distorts farmer prices and income generation from their produce. More specifically, there are at least three layers of intermediaries between the farmer and the final consumer in Pakistan. The maximum rents are enjoyed by the end-retailers — in some cases as high as 200%. This pricing structure has resulted in persistently low prices for farm output and therefore the inability to earn enough to re-invest in technology and yield improvements.

For example, in February 2013 the farm-gate price of potatoes was less than Rs. 4/kg; however, the consumer was still paying up to Rs. 30/kg in the market.⁹

Recently the government has taken some steps to improve the functioning of agriculture markets. First, good storage facilities are much needed and would provide hedging opportunities to farmers and facilitate the development of futures and forward contracts with banks and open exchange markets. Through the Pakistan Horticulture Development and Export Board (PHDEB), the government aims to implement a number of measures to promote the provision of cold storage facilities in the private sector.

Second, the deregulation of agricultural markets has been initiated through the Pakistan Mercantile Exchange. Currently, IRRI rice has been listed and sugar is expected to start trading soon after a final approval from the Securities and Exchange Commission of Pakistan. Other commodities such as wheat, basmati rice, maize and cotton also await approval. Once this process has been regularized and strengthened, it will allow greater efficiency and financial returns for the farmers.

Irrigation

The availability of water and electricity is another major constraint that adds to the cost of production. Pakistan is increasingly becoming a water scarce economy and this has had a direct implication on the cost of irrigation. The shortage of canal water necessitates pumping water out of the ground using electric tube wells. Due to declining water levels, wells have to be dug deeper, raising costs, while the price of electricity and diesel to run the tube wells is also prohibitively high. The government of Pakistan subsidizes canal irrigation by charging low “water” rates and even those are not recovered fully to compensate for the operational and management costs. Punjab has the lowest recovery rates and “abiana” rates compared to the other provinces. While federal government subsidizes tube well irrigation by charging low power tariffs, the agreed flat tariff of Rs. 10.50 is high when compared to India.

Seeds

The sector also suffers from poor quality seeds in the market due to lack of quality checks. There are 5,500 seed companies operating in Punjab only. The quality of the seeds provided by these companies is unregulated. This causes significant losses to the farmers. For example, while the penalty to sell adulterated inputs/seeds is only Rs. 1000, this can potentially destroy an entire crop, valued at millions of rupees. Similarly, the consumption of DAP (fertilizer) in Pakistan is around 25 million bags, which is 4 times the production capacity. Even if imports are included, there is a significant shortage of DAP. Hence according to the farmers locally added poor quality DAP is adversely impacting soil quality and fertility, yet no action has been taken by the government. Hence, weak controls and quality enforcement by government agencies is impacting the competitiveness of agriculture produce in Pakistan.¹⁰

B. India

⁹ Focus Group Discussions held at Lahore University of Management Sciences with key stakeholders.

¹⁰ Focus Group Discussions held at Lahore University of Management Sciences with key stakeholders.

India not only heavily subsidizes its agriculture sector, but it also supports prices and incomes of farmers by exercising close control of the market. Agricultural subsidies and food subsidies, on average, constitute above 10% of the total subsidies in the country every year.

Fertilizers

The percentage share of fertilizer subsidies in total subsidies declined from 38.4% in 1980-81 to 35.2% in 1990-91 and further declined to 24.8% in 2000-01 but increased to 87.3% in 2008-09. The Government of India pays fertilizer producers directly, in exchange for company compliance to sell fertilizer at rates lower than market prices. This policy results in effective subsidies to the farmer of 40-75% for fertilizer. The effective rate of the fertilizer subsidy increased from 41% of the cost of fertilizer production in 2003-04 to 67% in 2009-10. The increase occurred because the government allowed real (inflation adjusted) subsidized fertilizer prices to fall by keeping the nominal (non-inflation adjusted) subsidized fertilizer prices unchanged despite inflation, increased real world prices for fertilizers and also increased real domestic prices for fertilizer industry inputs (Govt. of India, Fertilizers Association, Fertilizer Statistics).

Under the Nutrient Based Subsidy (NBS) scheme for phosphatic and potassic (P&K) fertilizers implemented in 2010, a fixed amount of subsidy, decided on annual basis, is provided to each grade of P&K fertilizer, depending upon its nutrient content. An additional subsidy is also provided to secondary and micro-nutrients. Under this scheme, manufacturers/marketers are allowed to fix the maximum retail price (MRP). By November 2012, farmers paid only 58 -73% of the cost of P&K fertilizers; the rest is borne by the Government of India in the form of subsidy (Table 7).

Pesticides

The government also subsidizes pesticides for farmers who engage in crop farming and need pesticides to control pests for better production. It is sponsored by the state at the rate of 50 % to small farmers and 30 % to big farmers.

Water

The percentage share of subsidy allocated to irrigation was 32.5, 34.8 and 26.6 in 1980-81, 1985-86 and 2000-01, respectively. With a view to save standing crops, the government has also introduced a “Diesel Subsidy Scheme” to make irrigation through diesel pumps sets more feasible. The Centre and States bear the burden of the expenditure incurred by the Command Area Development and Water Management.

Electricity

The percentage share of electricity subsidy has increased from 29.1 in 1980-81 to 35.1 in 1990-91 and further increased to 48.6 in 2000-01 and declined to 12.7 in 2008-09. The Government of India directly supplies irrigation and electricity to farmers at rates much below the cost of production and those provided to other sectors.

Seed

The Indian government has raised the ceiling on seed subsidies for farmers from INR 500 to INR 700 per quintal for cereals. This decision was made in light of low rainfall and the fear of facing a drought situation in the 2012 season (Commodity Online, 2012).

Production Subsidies

The government has also initiated several crop development programmes such as National Food Security Mission, with the aim of increasing agricultural productivity and competitiveness in the world. The motivation behind these development programmes was, in essence, to increase the production and productivity of rice.

Export Subsidies

In India, the profits earned from exports of agriculture are exempted from income tax as under Section 80-HHC of the Indian Income Tax Act. However, no direct subsidies are given.

Price Support

The government has adopted the strategy of fixing Minimum Support Prices (MSP) for major agricultural commodities and organizes purchase operations as required at any time during the year. This pricing policy is facilitated through cooperatives and other public institutions to ensure that prices do not fall below a certain level set by the authorities. In addition to this, another committee - the Commission for Agriculture Costs and Prices (CACP) - makes recommendations for support prices of various agricultural products. The views of state governments, central ministries and relevant factions are equally important in determining the pricing policy (Government of India, 2013).

The MSP decisions are given well in advance before sowing season, so that farmers can make informed decisions about the harvest. In addition, the Government of India has central agencies that carry out the operations of the price support scheme (PSS). In the event of losses, if any, the central government fully refunds the price differences. For agricultural and horticultural products that are perishable, the state governments have negotiated a floor plan with the Center to implement a Market Intervention Scheme (MIS) if prices drop below a certain threshold. This applies only to products that are not covered by the PSS (Government of India, 2013).

Table 8 below provides details on the products covered under MSP and the means used to assess MSP. The MSP is determined by considering 12 key indicators that capture the impact on consumers, farmers and also international competitiveness. The pricing structure is designed to support all players associated with the agriculture sector.

4.2. Agriculture sector cost and price comparisons

Table 9 below compiles the average pre-retail market prices of some key agriculture commodities in Pakistan and India. With the exception of milk and onions, prices in Pakistan are generally higher. Lower prices in India reflect lower costs of production due to subsidies

and price supports, as well as better yields. The subsidy given on fertilizers has a catalytic impact on yields—the lower prices of fertilizers triggers excessive use, raising yields.

It is clear that all key inputs are significantly cheaper in India with large differentials existing specifically in the case of electricity and Urea (Table 10). Table 11 shows the cost of cultivating a hectare of land for four main crops in India and Pakistan. Looking at the breakdown, the operational cost in India is higher than that in Pakistan due to labour costs (minimum wages being higher in agriculture sector) and more mechanization. This is especially true for cotton, where the operational cost is three times as large as Pakistan. The cost of fertilizer is broadly similar, but this is due to the fact that India uses higher quantity of fertilizer per hectare as compared to Pakistan - this excess use results in much higher yields as depicted earlier. The cost of seeds, plant protection and irrigation are also lower in India.

4.3. Impact of Indian subsidies on Pakistan Agriculture

The stakeholders in the agriculture sector are of the opinion that India is well within its right to protect and support its sector through subsidies and support prices. The problem or weakness, however, lies on the side of Pakistan. When discussing these weaknesses, the stakeholders are not looking for compensating subsidies from the government. The sector wants supportive policies that address the issue of cost of production, regulation and enforcement of quality checks for inputs. In particular they require unadulterated seeds, access to formal credit and market regulation. The sector feels that given its internal set of constraints, Pakistan will not be able to compete with the heavily subsidized and protected Indian agriculture sector. They claim that cheaper imports from India will have an adverse effect on the local farmers.

The proponents for trade openness, however, are sceptical about the above mentioned apprehensions of the agriculture sector. The main argument is that the Indian government's agricultural policy interventions are primarily aimed at ensuring food security and welfare of its farmers and are not to subsidize Pakistani consumers through the export of low priced staple food items. According to that view, opening up trade will be overall beneficial – with consumers getting low priced food items - although in some products Pakistani producers may face increased competition.

These two conflicting views have been analysed in this paper through the use of comparative agricultural costs and trade data. It is found that there is some merit to the claim made by the agriculture sector; however, the claim does not hold true for all agricultural commodities. The research suggests that there is strong evidence that the production of perishable fruits and vegetables have been severely impacted by cheaper Indian imports. Indian exports of products such as tomatoes, capsicum, ginger and other fresh items have indeed made significant inroads into key urban markets in Punjab.

A direct impact of this influx of vegetable exports from India has been observed in the tunnel-farming sector of Punjab in Pakistan. Tunnel farming in Punjab over the past five years had increased to 55,000 acres, and a significant amount of off-season vegetables were being sold in local markets. However, since the import of vegetables from India, the acreage of tunnel farming has plummeted down to 35,000 acres. Several farms have been forced to close. Farmers who had incurred high set-up costs of tunnel farming lost their market share to subsidized cheaper vegetables from India. This not only resulted in loss of assets and

investments of the private sector, but also wasted public funds used in partially subsidizing the cost of setting up these farms.

However, this particular negative impact was not due to MFN or SAFTA but the result of an SRO issued by the Ministry of Commerce, Government of Pakistan. In order to lower food price inflation the SRO allowed the import of 137 items free of duty from India via the land route. All items in that list belonged to the agriculture sector most of which were fresh grown vegetables. Given that the transport cost is very low via the land route (Wahga Border), fresh vegetables from India have a large market across the border.

The government rationale for issuing this SRO was to control consumer inflation in food items. However, there are mixed views on the efficacy of this particular policy. Vegetables from India are still retailing at a multiple of 3 to 4 times their price in India. For example, the biggest import—tomatoes— sells at PKR 35/kg in India, while it has been retailing between PKR 100-120/kg in Pakistan. Thus the main beneficiaries of this seem to have been the traders or middlemen and not the final consumer in Pakistan.

A remedial strategy to balance this influx of cheap Indian vegetables could be a quota cum tariff policy to regulate trade. The policy entails a certain quantity/quota of import allowed to bring down food inflation which is subsequently replaced by a tariff as soon as prices go below a certain threshold. This trigger strategy if implemented properly could protect the interests of both the consumer and farmer in both countries. The other issue in which the government of Pakistan is weak is in the effective enforcement of food quality standards both domestically and in trade. Indian vegetables are generally high in arsenic content due to heavy fertiliser usage. Proper testing and enforcement of food quality standards in Pakistan would not only protect local consumers but also help regulate quantity and quality of trade across the border.

In sharp contrast to trade in fresh vegetable this paper finds the threat of subsidized crops wiping out local production in key staple items such as wheat, rice and other grains quite small. While production levels in India are significantly larger than that of Pakistan in absolute terms, per capita production in India is much smaller than that of Pakistan. Moreover, India is not exporting significant quantities of these major crops. Hence, the subsidy given by India in these crops is primarily to address the food security concerns of its citizens. Some claims made by the sector are relevant, but they operate in indirect ways. Specifically, Pakistan is at a disadvantage whilst competing with India in international markets, not in trade between the two countries. An example of this is *basmati* rice. India has displaced a significant amount of Pakistan's share in international export markets. This has come through investments made by Indian companies in Dubai and other key markets to obtain distribution channels. However this is more a result of inadequacies in private sector development and a lack of government support to create a foothold in international markets.

Therefore, it is reasonable to conclude that unregulated cheaper agriculture imports from India will hurt the fresh perishable produce of Pakistan but does not pose a significant threat to large or major crops.

4.4. Issue of market access

Pakistan has a clear competitive advantage in products such as mangoes, citrus, peaches, apricots, dates and olives, etc. Similarly, *halal* poultry and fish are other potential items that can be exported. India provides a big and growing market for such products. As discussed above, based on the data of production and export patterns, trade in major agriculture commodities will always be fairly restricted between India and Pakistan.

Pakistan is also internationally competitiveness in certain fruit items; however, the existing trade even in these products in the post MFN era is negligible. India granted MFN to Pakistan in 1995, yet to date, only a few consignments (excluding dried dates) have crossed the border to be sold in India. Mangoes and Kinnows — the two prime fruits of Pakistan — have continued to be on the sensitive and negative lists. However, after several discussions, Kinnows have finally been taken off the Indian sensitive list. This lack of exports suggests that, historically, Indian policies have been quite protectionist, as even the products in which Pakistan has a clear competitive advantage have not been exported. This restrictiveness exist in the shape of both tariff and non-tariff barriers. The items on the Sensitive list include all fruits and vegetables that Pakistan could potentially export to India.

An aggregate way to capture trade restrictiveness incorporating both tariff and non-tariff barriers is the Overall Trade Restrictiveness Index (OTRI) calculated by the World Bank. Table 12 below provides the latest OTRI estimates between Pakistan and India.¹¹

The OTRI estimates show that India is much more restrictive than Pakistan in terms of market access (India is ranked among the top 10 countries with most restrictive tariff regimes whereas Pakistan is ranked as 103rd least trade restricted country). In terms of both tariff and non-tariff measures, India adds at least 65% more on the import price of products from Pakistan. With this high tariff it will be very difficult for Pakistan to export anything of significance to India.

Disaggregating the above estimates (Table 13 & 14) provides the applied and bound tariff rates on key tradable agriculture commodities to India, and shows that the bound rates applied by India are very high. The applied rates may be low, but having high bound rates allows India the flexibility of increasing tariff rates when Pakistan may have exportable surpluses. Moreover, India has not reduced tariffs on dried vegetables, dates, oilseeds and sugar. (Chand and Saxena, 2014)

Non-Tariff Barriers

Non-Tariff Barriers (NTBs) are a key constraint limiting exports from Pakistan to India. The NTBs which may include certifications, testing, labelling, packaging and quality tests usually

¹¹ According to the World Bank, the "Overall Trade Restrictiveness Index (OTRI) summarizes the trade policy stance of a country by calculating the uniform tariff that will keep its overall imports at the current level when the country in fact has different tariffs for different goods. In a nutshell, the OTRI is a more sophisticated way to calculate the weighted average tariff of a given country, with the weights reflect the composition of import volume and import demand elasticity of each imported product." In estimating the indices, OTRI uses both applied tariffs and non-tariff barriers (NTBs). In the case of agricultural indices the NTBs also include domestic agriculture support as a component. However, data suggests that although NTBs can be more powerful than applied tariffs in determining the index value at times, the impact of agricultural domestic support is generally lower (around 1%)- but that this could simply reflect that in most countries only a very small number of products are affected by domestic support.

become more stringent on items that are on the sensitive lists. Pakistan only has 47 agricultural items on sensitive list, whereas India maintains a sensitive list of 246 agricultural items. Importantly, products where the RCA analyses presented above suggest comparative advantage for Pakistan (Fish, Dairy, Vegetables and Fruits) are all on India's sensitive list (Table 15). In addition to this the enforcement of standards in Pakistan is significantly less stringent as compared to India.

In the case of agriculture commodities India maintains stringent SPS requirements and certifications. Although as per 2003 QPR Policy of India, there are no quarantine restrictions on imports of agriculture commodities from Pakistan, farmers in Pakistan have failed to export successfully to India. For example, Pakistan had a major glut in the potato crop in February 2013; however, the stakeholders indicated that they were simply denied exporting to India on the basis of the SPS. A summary of key NTBs affecting agriculture exports from Pakistan to India is presented in Table 16.

The Potato Growers Association in Pakistan was perhaps the most vocal in stating that India protects its farmers by way of strong NTB's and stringent SPS measures. They stated that while there were no barriers and restriction on importing final agriculture produce from India, importing seeds was restricted. Final produce is currently allowed to be imported free of duty by road, however there is a restriction on seeds - which have to be transported only by rail. This option is not only expensive (Rs 2/ kg), but is also inefficient in terms of the time it takes for the import to come through. The Potato Growers also suggested that Pakistan's duty on Indian potatoes should not only factor in their subsidies but also the capital expenditure the Indian government has made to facilitate potato farmers. They were of the view that allowing Indian agricultural goods without placing duties on them to compensate for their inefficient and trade distorting subsidies will threaten Pakistan's food security.

Another major NTB identified by the stakeholders in the agriculture sector is the restrictive visa regime. With the recent visa agreement between India and Pakistan, businessmen who are members of the chambers and registered trade bodies are allowed visa for up to six cities. However, growers/farmers are usually not part of powerful trade bodies; hence they face significant difficulties in obtaining visas. If a farmer from Punjab in Pakistan has to sell his produce in India, the closest market to access is that of Amritsar. Due to visa restrictions the grower or farmer from Pakistan is unable to export perishable agriculture produce to India. These visa restrictions compound the impact of SPS and the quarantine NTB outlined above, effectively stopping the flow of information and business to business (B2B) contact. Most of the SPS and technical barriers can be eliminated by way of B2B meetings and though information about the legitimate Non-Tariff Measures or trade regulatory requirements.

Key Results of Perception Survey on Market Access into India

Lahore University of Management Sciences (LUMS) carried out a trade perception survey for Indian Council for Research and International Economic Relations (ICRIER) from March-May 2014 in seven cities of Pakistan primarily to identify the barriers and problems of

exporting to India.¹² The survey covered all the key tradeable commodity sectors. Out of the total 121 exporting firms 32 were from the agriculture sector. While out of the total of 120 importing firms there were 58 from the agriculture sector. Majority of these firms were small in terms of invested capital but large in terms of turnover.

The most feasible route identified by the firms was the land route; however, the only operational rail route is through the Wagah border. Although India permits import through 12 rails stations, respondents felt rail to be a relatively expensive route and availability of wagons was identified as a major constraint.¹³ It is interesting to note that goods from Kolkata are being shipped to Karachi via Singapore.

The survey shows that majority of the firms using road, rail and air as mode of transport to export or import from India considered them to offer average availability and quality of service while sea route was ranked the highest in terms of availability and quality of service. Rail was ranked the lowest by majority of importers as it provided low availability of service and average quality. Majority of the exporters ranked air to have lowest availability and quality of service. However, respondents consider that quality and availability of all modes of transport will increase in the future.

In India there are 24 standard setting agencies both at the center and in the states, as compared to a single authority in Pakistan, the PSQCA. Given that there is multiplicity in standards compounded by incomplete information, the problem becomes acute for Pakistani exporters to India. Also, enforcement of standards is stricter in India as compared to Pakistan. In the case of exports of agricultural items by Pakistan, obtaining the SPS certificate and testing requirements takes a long time. Also, plant quarantine facilities are not available at the Amritsar railway station. Testing requirements are available only in Delhi and Mumbai.

Supporting the stakeholder analysis, the survey finding shows that Pakistani exporters are more negative when asked about SPS issues as compared to Pakistani importers. Table 17 illustrates ranking of importers and exporters ease of meeting SPS and procedural obstacles of SPS standards. Majority of the importers and exporters considered inconsistency, discriminatory behavior, inefficiency, non-transparency and fees to be areas of concern. It is important to note that the survey only interviewed existing exporters and importers to India and not the potential traders. These traders had already crossed the main obstacle of market access to India and were thus generally positive in their perception about trade. This goes to show that perhaps informational costs vis a vis standards and procedures act as one of the main NTBs in trade with India. Once trade begins the perceived barriers and costs tend to go down with time which is indicative of the fact that NTBs are to some extent endogenous to the extent of trade.

4.5. Other Issues Identified by Stakeholders

Another message that comes out from the agriculture sector is scepticism on the efforts and capacity of the Government of Pakistan to safeguard the interests of the agriculture sector. This is because the sector was ignored previously by the Ministry of Commerce in its

¹² Cities included Lahore, Faisalbad, Karachi, Sialkot, Peshawar, Islamabad and Rawalpindi.

¹³ These include: Amritsar Railway station, Attari Road, Attari Railway station, Khalra, Assara Naka, Khavda Naka, Lakhpat, Santal pur Naka, Suigam Naka, Dekhi Railway station, Hussainwala, Bamer railway and Munabao railway station.

negotiations with India. The general view of the sector is that trade with India is welcome provided that there is a level playing field and the trade regime between the two countries was fair and equitable. In view of India's large subsidies for agricultural goods and protection of its agricultural sector, the representatives of the agriculture sector demand that agriculture trade must be covered under a separate agreement and not lumped under a general agreement, just as is the case with the Uruguay Round Agreements of the WTO, and also in NAFTA. The government should work closely with the agriculture sector to develop a strategy for policy negotiation, and form an effective negotiations team with representatives from the sector who will be able to safeguard the interests of the approximately 100 million people who rely directly (whether partially or wholly) on agriculture for their livelihood. The same goes for the SAFTA Agreement: agriculture must be kept out of any generic agreement, just as is the case with services. There has been some headway in a bilateral trade agreement in agriculture between the two countries. The agriculture group within the Joint Business Forum of India and Pakistan has in principle agreed to a bilateral arrangement by which the interests of the farmers and consumers on both sides of the border could be protected.

The scepticism of the sector towards the Government of Pakistan is predominantly based on its past actions. The case of Indus Water Treaty signed in 1961 is often used as an example of Pakistani government's lack of capacity in negotiating with India. The prevalent view amongst stakeholders was that the government not only conceded the waters of 3 of Punjab's rivers to India, it has been largely ineffective in keeping India in recent years from building dams on the 3 rivers that were exclusively meant for Pakistan.

The stakeholders are of the view that granting of MFN to India or any similar agreement (Non Discriminatory Market Access – NDMA) must be on the basis of reciprocity and mutual benefit. In its current form there seems to be limited benefit to Pakistan's agriculture. Secondly, if we look at the current trade pattern, not only is that hugely in favour of India, Pakistan is exporting natural resources such as rock salt, phosphate, and gypsum. The export price for these products is less than the freight cost to import these items from Australia, so this benefits India. In return Pakistan has imported significant amounts of cotton from India because of a powerful textile lobby in the country. This is damaging local cotton growers in Pakistan but benefits India and the local Pakistani textile industry which already gets large indirect subsidies in the form of tax breaks and export promotion assistance.

A critical drawback identified is the weak negotiating capacity of Pakistan. The sector strongly feels that the team representing Pakistan in conducting trade negotiations with India is not equipped with the required skills and knowledge. This results in agreements that put Pakistan at a disadvantage. This lack of capacity has affected MFN negotiations. The Pakistan team has completely discounted the agriculture sector impact in MFN discussions. They failed to realize that the agriculture sector must be dealt with under a separate agreement. Each country due to reasons of food security protects its agriculture sector. Even in NAFTA, which is considered a successful example of a regional free trade agreement, does not cover the agriculture sector. Agriculture-related products are covered by special bilateral agreements between US and Mexico and US and Canada. Similarly the WTO Doha Round negotiations broke down due to disagreement on agriculture sector. This is a clear reason or precedent for Pakistan and India agriculture to be discussed separately. The sector makes a strong case for keeping agriculture independent of MFN agenda. As mentioned above, this strong push by the sector has resulted in Pakistan-India Joint Business Forum agreeing to

conduct sector impact studies and also to ensure that trade negotiation teams will have representatives from the sector.

On the issue of SAFTA, the sector feels that protection offered under the sensitive list is not sufficient as it is time bound. The protection under SAFTA has a life span of 4 to 5 years. The sector lags behind India due to 60 years of subsidies and other support policies, the disadvantage can only be compensated over the long-term by suitable policies, and 5 years would not provide enough protection.

The sector stakeholders felt that granting MFN in its current state would result in abuse of this agreement by rent seekers on both sides and agriculture sector will be the worst hit. Pakistan will also lose a significant share of its exports to Afghanistan worth US\$2 billion annually. The 'middlemen' sitting in Lahore will buy agriculture produce from India and sell directly to Afghanistan. Pakistan's produce will not be able to compete due to subsidies and low costs of production. An example of this is the current violation of the intra-Kashmir barter trade agreement. The barter trade agreement allows exchange of goods produced only within Kashmir at the Kashmir border. However, products from other regions in India and Pakistan travel across the border with no restraint. Hence, the sector feels that traders and profiteers will abuse provisions under MFN.

The Mango Growers association however were far more positive about trade with India. They were of the opinion that there was significant potential for Pakistan to export mangoes to India. The reason for this being seasonal variation - Pakistani mango season peaks in July/August when India's season is almost over. Secondly, Pakistan produces more varieties of fresh mangoes as compared to India where most varieties are used for pulping and juicing.

5. KEY POLICY OPTIONS

The analysis of relative competitiveness in agricultural products indicates that Pakistan has a considerable potential to export to India. Pakistan has a competitive advantage in citrus fruit, mangoes, apricots, peaches, olives, fish and fish products. These products have the potential to garner significant demand in Indian markets. However, for the agriculture sector of Pakistan to realise the potential of trade with India, it is imperative that the issue of market access be addressed in bilateral trade negotiations between the two countries. The WTO compliant agricultural subsidies and price support given by the Indian government to its farmers are domestic issues. Given the political economy of subsidy provision in India, it is highly unlikely that India would reduce these in the near future. Therefore, in the short term, Pakistan needs to negotiate for Indian reductions in both its applied MFN tariffs on agricultural goods and the specific agriculture-related NTBs that hinder Pakistan's potential exports.

Over the medium to long run, there are considerable opportunities for cross-border investments in agriculture and processed foods, given the fact that there have been significant efforts to liberalize the investment regime in both countries. Likewise, there is scope in trade and joint ventures/investments in inputs such as seeds and agricultural equipment. Moreover, with increased water scarcity and changing weather patterns, there is a dire need for the two countries to resolve their outstanding water issues and treat water as a common resource.

Under the WTO and SAFTA trade agreement, Pakistan can take recourse to prescribed safeguard measures to protect its domestic agriculture sector in case of a surge in imports. The SAFTA agreement has a provision that permits the importing state to temporarily suspend concessions granted if a surge in imports causes or threatens to cause injury to domestic industry. Additionally, there are special safeguards for agriculture that Pakistan can apply under the WTO, in case of serious difficulties faced due to import surge. Finally, Pakistan may continue to protect its agriculture sector by retaining the agricultural items in the revised SAFTA sensitive list.

A consensus policy that supports Pakistan in implementing the above recommendations can be achieved more swiftly by treating the agriculture sector separately from the MFN and SAFTA arrangements. As part of that bilateral agreement a remedial strategy could be a quota cum tariff policy to regulate agriculture trade. The policy entails a certain quantity/quota of import allowed to bring down food inflation which is subsequently replaced by a tariff as soon as prices go below a certain threshold. This trigger strategy if implemented properly could protect the interests of both the consumer and farmer in both countries. Both countries should therefore negotiate a bilateral trade agreement on agriculture. The negotiating team from Pakistan should have adequate capacity and must allow representation from academia and the agriculture sector. Only then are farmers willing to discontinue their opposition to MFN and proceed on opening up trade with India.

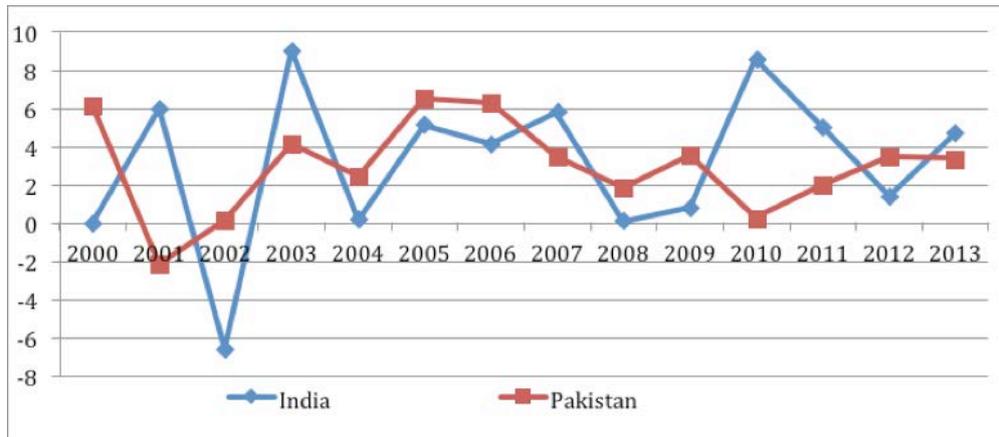
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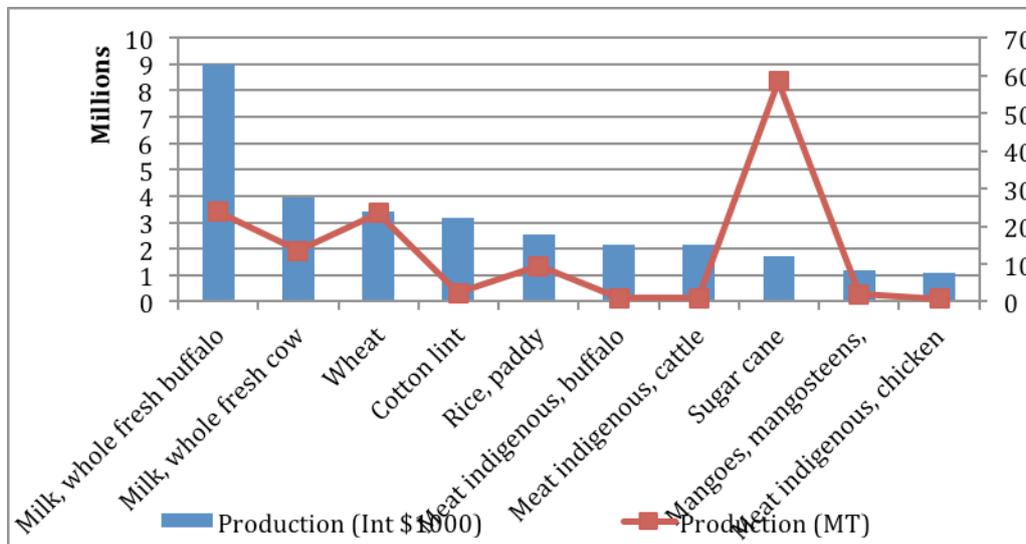
Reference Figure in Text

Figure 1: Agriculture Growth Rates in Pakistan & India 2000-2013 (%)



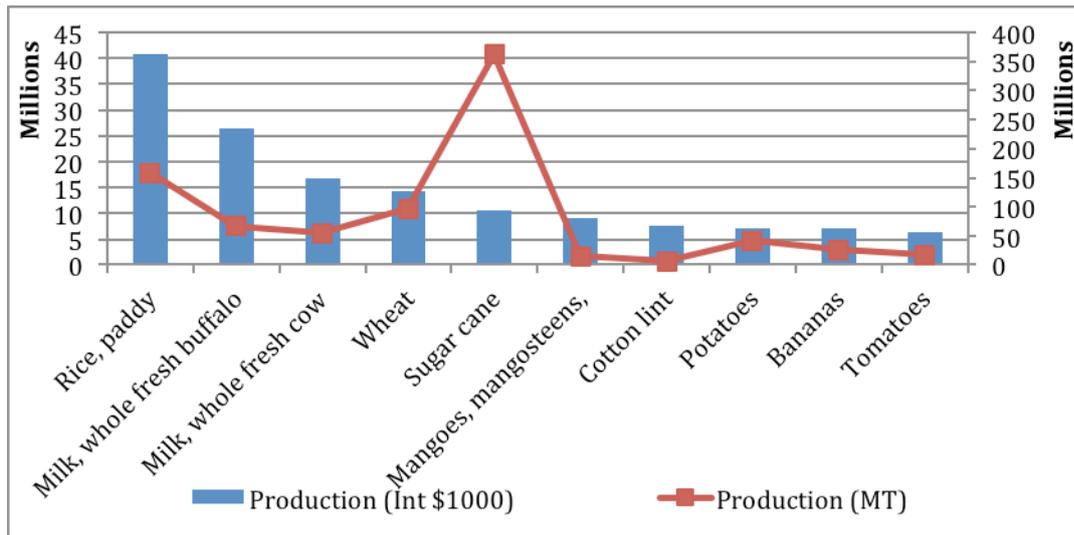
Source: Databank –World Development Indicators

Figure 2: Production of Key Agriculture Products in Pakistan 2012-13



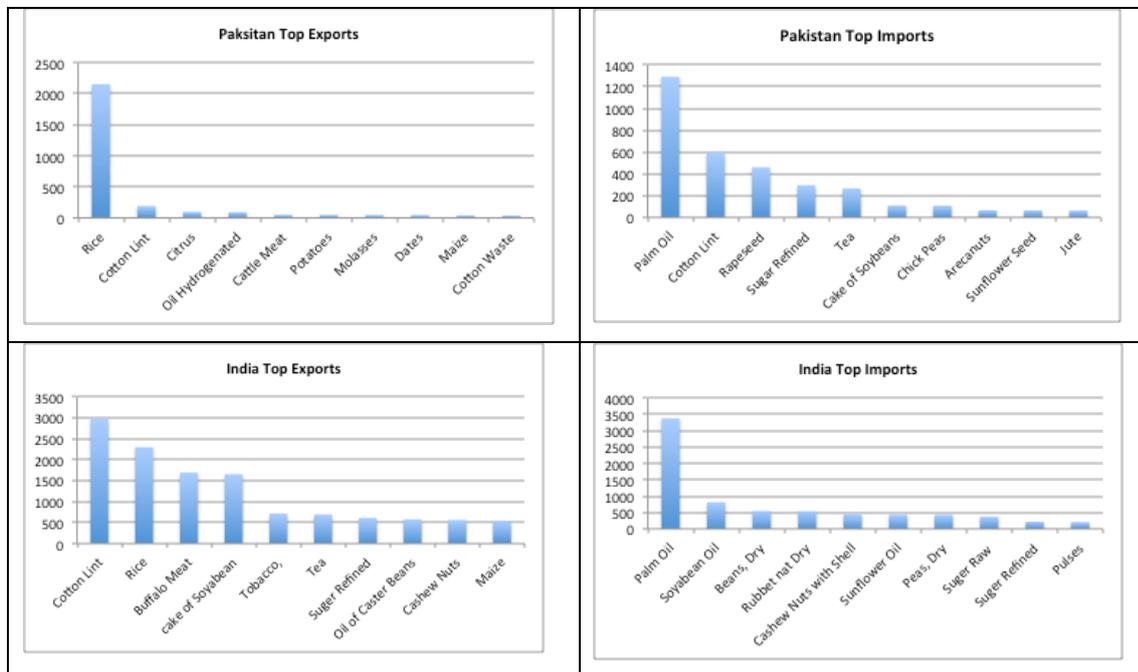
Source: FAOSTAT: Country Dataset

Figure 3: Production of Key Agriculture Products in India



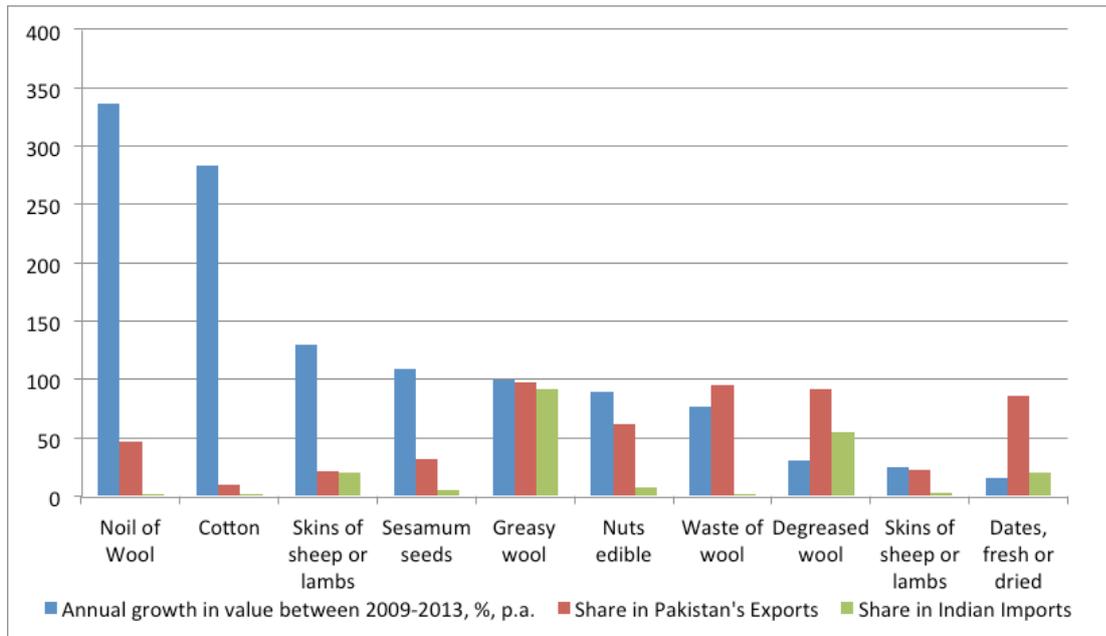
Source: FAOSTAT: Country Dataset

Figure 4: Top 10 Exports and Imports of Pakistan and India, 2010 (US\$ Million)



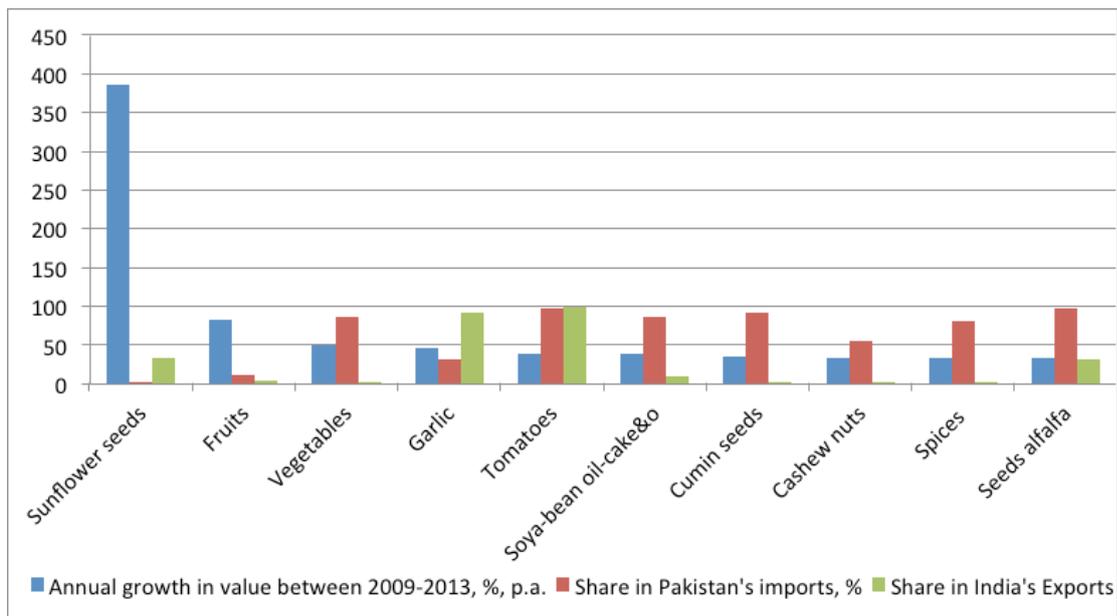
Source: FAO Statistics

Figure 5: Fastest Growing Agriculture Exports of Pakistan to India, 2013-14



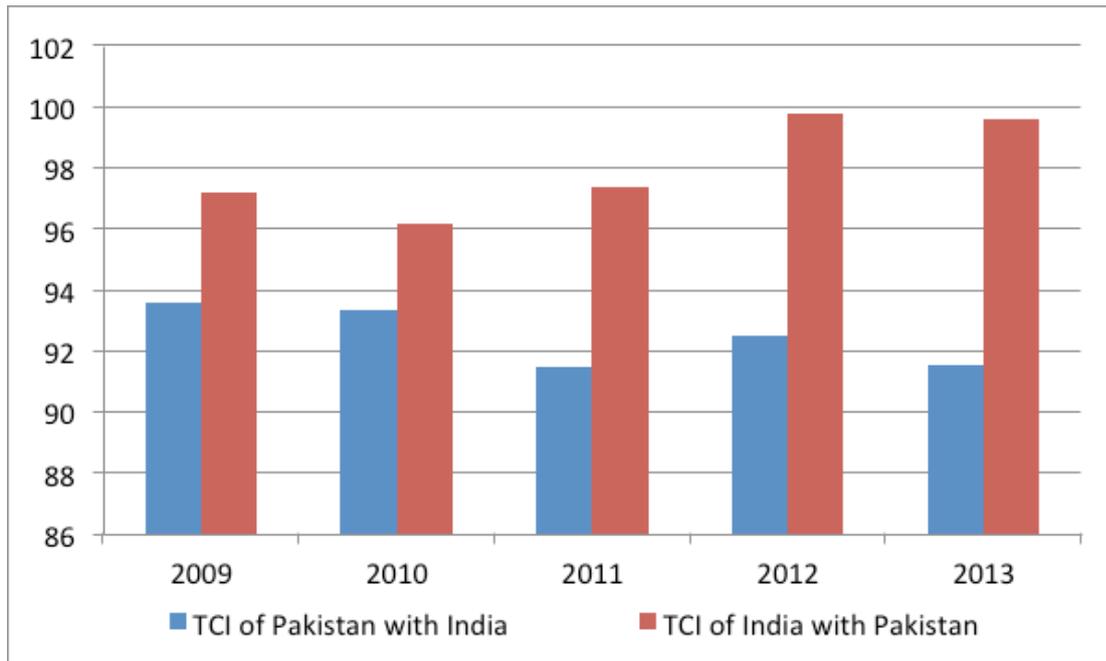
Source: COMTRADE DATA

Figure 6: Fastest Growing Agriculture Imports of Pakistan from India, 2013-14



Source: COMTRADE DATA

Figure 7: Percentage Shares of Fastest Growing Agriculture Exports of Pakistan to India, 2011



Source: COMTRADE

Reference Tables in Texts

Table 1: Yield Comparison Key Crops Hg/Hectare, 2012-13

Countries/ Regions	Wheat	Rice Paddy	Sugarcane	Pulses	Mangoes	Tomatoes	Jute	Tobacco
India	28,065	32,091	671,832	4,944	64,398	175,197	22,701	14,886
Pakistan	25,407	32,484	505,084	7,228	105,427	101,062	10,680	19,956
World	29,202	41,859	687,038	7,844	73,607	311,471	21,535	16,968

Source: Author's calculations and FAOSTAT

Table 2: Trade Diversification Indicators

	India	Pakistan
HH Product Index		
Product Code		
01-05_Animal	0.2355	0.0538
06-15_Vegetable	0.0909	0.2421
16-24_FoodProd	0.1367	0.1055
41-43_HidesSkin	0.0879	0.1471
50-63_TextCloth	0.0206	0.0221

Source: World Bank, WITS. <https://wits.worldbank.org>

Table 3: Top 10 Agricultural Exports of Pakistan to India (6 digit HS-code)

		Pakistan's exports to India (1,000 US\$)	India's Imports from world (1,000 US\$)	Major Exporters (Competitors of Pakistan)	Overall Assessment
HS code	Product Description				
'080410	Dates, fresh or dried	73,414	183,367	Iraq,Iran, UAE, Oman and Tunisia	Low ITP and RITP/Larege Market Size
'170199	Refined sugar, in solid form, nes	26,997	10,353	Germany, USA,Italy, UAE and UK	Strong Current trade/Small Import Market
'520100	Cotton, not carded or combed	20,100	399,780	USA, Mali, Egypt and Australia	High ITP/Large Market size
'120740	Sesamum seeds, whether or not broken	18,487	122,684	Sudan, Somalia, Nigeria and Ethiopia	High ITP and RITP/Large Market Size
'510129	Degreased wool (other than shorn wool),notcarded,combed or carbonized	5,683	71,967	New Zealand, Australia, Uruguay and Russia	Low ITP and RITP/ Large Market Size/Average Current trade
'510320	Waste (other than noils) of wool/of fine animal hair,exgarnettd stock	5,299	457	UK, Iran, Belgium, Spain and Australia	Strong Current trade/Small Import Market
'121190	Plants &pts of plants(inclsd&fruit) usd in pharm,perf,insectetcnes	2,531	54,805	Netherlands, Australia, Vietnam, Sri lanka and Congo	High ITP/Small Market size
'510119	Greasy wool (other than shorn wool) not carded or combed	1,925	232,790	Australia, Argentina and South Africa	Low ITP and RITP/ Large Market Size
'080280	Areca nuts	507	13,154	China, Spain and Greece	Low ITP and RITP/Small Market Size
'130219	Vegetable saps and extracts nes	444	22,044	China, Italy, USA, Brazil, and Germany	Low ITP and RITP/ Small Market Size

Sources: UNCOMTRADE and FAOSTAT country trade statistics

Table 4: Top Ten Agriculture Imports of Pakistan from India (6 Digit HS-code)

		Pakistan's Imports from India (1,000 US\$)	India's Exports to world (1,000 US\$)	Major Exporters (Competitors of India)	Overall Assessment
Column	Product Description	A	D	K	L
HS code	Product Description				
'520100	Cotton, not carded or combed	294,981	4,513,411	USA, Afghanistan and Brazil	High ITP and RITP/ Large Import Market
'230400	Soya-bean oil-cake & oth solid residues, whether or not ground or pellet	291,433	2,860,253	USA, UAE and Argentina	Low ITP and RITP/Strong current trade
'070200	Tomatoes, fresh or chilled	128,165	69,417	Afghanistan, Iran and UAE	Low ITP and RITP/Strong current trade
'071310	Peas dried, shelled, whether or not skinned or split	37,298	340	Australia, Russia and Ethiopia	Low ITP and RITP/strong current trade
'070310	Onions and shallots, fresh or chilled	25,320	600,886	Afghanistan, Iran and Spain	Medium ITP and RITP/ strong current trade
'071320	Chickpeas, dried, shelled, whether or not skinned or split	22,671	346,901	Australia, Ethiopia and Canada	High ITP and RITP/ Large Import Market
'070320	Garlic, fresh or chilled	10,275	11,290	China, Thailand and Chile	Low ITP and RITP/ Pakistan Major Importer
'120991	Seeds, vegetable, nes for sowing	9,814	39,135	USA, China, and Thailand	High ITP and RITP/ Pakistan small importer
'120929	Seeds of forage plants, except beet seeds, for sowing nes	8,732	2,884	USA, China, South Africa	Low ITP and RITP/ Pakistan Major Importer
'120929	Plants & pts of plants(inclsd & fruit) used in pharm, perf, insect etc. nes	5,357	207,685	Egypt, Ethiopia and UAE	Medium ITP and RITP/ strong current trade

Sources: UNCOMTRADE and FAOSTAT country trade statistics

Table 5: Pakistan-India Agriculture Trade, 2011 (US\$ Million)

Commodity	India Production ('Billion' MT)	India Production/Capita (KG)	India Export to World % of Production
Wheat	94,880	75.78	0.20
Rice, paddy	157,800	126.04	0.05
Maize	222,600	17.78	0.01
Sugar cane	361,000	288.37	0.45
Tomatoes	17,500	13.98	0.40
Cotton	5,321	4.25	68.54
Milk	37,860	30.24	0.01

Sources: COMTRADE, FAOSTAT, Statistical Bureau of Pakistan, Reserve Bank of India database

Table 6: RCA & Trade Potential Analysis, 2013

Product code	Product label	RCA	Potential in 2013 US\$
'100630	Rice, semi-milled or wholly milled, whether or not polished or glazed	64.08	1,790,214
'170199	Refined sugar, in solid form, nes	24.10	487,781
'220710	Udenaturd ethyl alcohol of an alcohol strgth by vol of 80% vol/higher	28.29	274,068
'100640	Rice, broken	115.47	253,701
'110100	Wheat or meslin flour	28.49	208,393
'080520	Mandarins(tang&sats)clementines&wilkg&sim citrus hybrids,fresh/drid	23.46	152,469
'151620	Veg fats &oils&fractionshydrogenatd,inter/re-esterifid,etc,ref'd/not	20.40	150,547
'070190	Potatoes, fresh or chilled nes	25.88	130,263
'030339	Flatfish nes, frozen, excluding heading No 03.04, livers and roes	204.52	127,617
'130232	Mucilages& thickeners derived from locust beans & seeds or guar seeds	25.73	1192,33

'080410	Dates, fresh or dried	64.51	85,723
'220720	Ethyl alcohol and other spirits, denatured, of any strength	35.04	82,492
'020110	Bovine carcasses and half carcasses, fresh or chilled	24.68	78,844
'030617	Other frozen shrimps and prawns	4.26	76,117
'081340	Fruits, dried nes	72.48	74,931
'100620	Rice, husked (brown)	40.96	64,251
'120740	Sesamum seeds, whether or not broken	16.77	57,636
'080450	Guavas, mangoes and mangosteens, fresh or dried	21.26	57,200
'070999	Fresh or chilled vegetables n.e.s.	18.78	52,301
'040120	Milk not concentrated & unsweetened exceeding 1% not exceeding 6% fat	6.76	50,637
'170310	Cane molasses	45.14	42,532
'050400	Guts, bladders and stomachs of animals except fish whole or in pieces	6.49	42,418
'190531	Sweet biscuits	3.85	40,330
'170490	Sugar confectionery nes (includg white chocolate),notcontaing cocoa	2.85	38,832
'091091	Mixtures of two/more of the prods of different headgs to this chapter	74.42	37,692
'030319	Frozen Pacific salmon "Oncorhynchusgorbuscha, Oncorhynchusketa, Onco	178.21	34,407
'080390	Fresh or dried bananas (excl. plantains)	2.55	33,018
'020120	Bovine cuts bone in, fresh or chilled	3.72	25,000
'230641	Oil-cake and other solid residues, whether or not ground or in the for	5.84	23,757
'170230	Glucose&glucose syrup ntcntgfruct/cntg in dry state <20% by wtfruct	11.00	23,589
'070310	Onions and shallots, fresh or chilled	4.85	23,349
'020421	Sheep carcasses and half carcasses, fresh or chilled	51.04	20,402
'020450	Goat meat, fresh, chilled or frozen	58.20	19,077
'100111	Durum wheat seed for sowing	87.64	18,310
'040390	Buttermilk,curdled milk &cream,kephir&ferm or acid milk & cream nes	6.21	18,112
'121190	Plants &pts of plants(inclsd&fruit) usd in	4.54	17,973

	pharm,perf,insectetctnes		
'230120	Flour,meal&pellet of fish,crust,mol/oth aqua invert,unfit human cons	2.81	16,978
'080590	Citrus fruits, fresh or dried, nes	147.96	16,121
'100119	Durum wheat (excl. seed for sowing)	2.88	15,444
'121300	Cereal straw&husks,unprepd,whether or not choppd,ground,pressd,pelletd	42.93	15,238
'020680	Sheep, goats, asses, mules or hinnies edible offal, fresh or chilled	250.40	13,974
'240110	Tobacco, unmanufactured, not stemmed or stripped	3.92	13,107
'110812	Maize (corn) starch	11.01	12,149
'020410	Lamb carcasses and half carcasses, fresh or chilled	9.49	11,950
'230230	Wheat bran, sharps and other residues, pelleted or not	8.21	11,231
'040229	Milk and cream powder sweetened exceeding 1.5% fat	16.37	11,195
'030499	Frozen fish meat whether or not minced (excl. swordfish, toothfish and	3.69	11,175
'030624	Crabs, not frozen, in shell or not, including boiled in shell	10.53	11,023
'030229	Flatfish nes,fresh or chilled excluding heading No 03.04,livers & roes	46.22	10,921
'090240	Black tea (fermented) & partly fermented tea in packages exceedg 3 kg	2.44	10,688
'091099	Spices nes	11.89	10,263

Source: Author's calculations based on COMMTRADE Data

Table 7: Detail of Subsidies Given by India to Agriculture Sector (INR, Crores)

Subsidies/Years	Fertilizers	Electricity	Irrigation	Total
1980-81	471.88 (38.41)	357.56 (29.10)	399.10 (32.49)	1,228.54 (100.00)
1985-86	1,804.80 (37.63)	1,324.15 (27.61)	1,677.21 (34.76)	4,796.16 (100.00)
1990-91	4,638.56 (35.20)	4621.00 (35.07)	3,917.41 (29.73)	13,176.97 (100.00)
1996-97	8,148.41 (23.86)	15,594.00 (45.67)	10,404.73 (30.47)	34,147.14 (100.00)
2000-01	13,724.05 (24.80)	26,904.00 (48.62)	14,711.71 (26.58)	55,339.76 (100.00)
2008-09	1,01,180.68 (87.26)	14,771.52 (12.74)	-	1,15,952.20 (100.00)

Note: Percentages are shown in parentheses

*Source: (1) Govt. of India, Fertilizers Association, Fertilizer Statistics, various issues, New Delhi
(2) Govt. of India, State Electricity Boards, Annual Reports, Various Years.*

Table 8: Price Support Regime in India

In formulating the recommendations in respect of the level of minimum support prices and other non-price measures, the CACP takes into account, apart from a comprehensive view of the entire structure of the economy of a particular commodity/commodity group, the following factors:

1. Cost of production
2. Changes in input prices
3. Input-output price parity
4. Trends in market prices
5. Demand and supply
6. Inter-crop price parity
7. Effect on industrial cost structure
8. Effect on cost of living
9. Effect on general price level
10. International price situation
11. Parity between prices paid and prices received by the farmers.
12. Effect on issue prices and implications for subsidy

Presently, the following crops are covered under the MSPs:

- **Cereals** - Paddy, Wheat, Jowar, Bajra, Maize, Ragi and Barley
- **Pulses** - Moong, Urad, Arhar, Gram, Lentil and Peas
- **Oilseeds**- Groundnut, Rapeseed and Mustard, Niger seed, Soybean, Sunflower, Sesamum and Safflower.
- **Fibre Crops** - Cotton and Jute
- **Others** - Sugarcane, VFC Tobacco, Onion, Potato and Coconut

Table 9: Wholesale Prices of Top traded and non-traded items between India and Pakistan 2013-14 (PKR)

Commodities	Unit	Pakistan	India
Wheat	100KG	3330.7995	2976.219
Dried Dates	40KG	2820.5941	N/A ¹⁴
Cotton (Lint)	100KG	17910.811	17647.166
Tomatoes	100KG	5233.4424	2327.491
Rice Paddy	100KG	4085.9307	2481.3386
Peas	100KG	3560.2793	3068.6759
Onions	100KG	3011.644	3559.8681
Milk	100Litres	5571.7953	5735.8073

Source: Pakistan Bureau of Statistics & Ministry of Consumer Affairs, Food & Public Distribution, India

¹⁴Officially no figure available for dates in India. India meets majority of its demand of dates by importing from other countries. There are only few dates producers in India

Table 10: Estimated Input Price Comparisons 2013-14 (PKRs)¹⁵

Sr.#	Input	India	Pakistan	% Cheaper in India
1	Fertilizer			
	DAP (PKR/50kg)	1160.00	4200	262.07
	Urea (PKR/50kg)	463.97	1800	287.96
2	Irrigation (PKR/Ha/crop)	50-900	-	-
	Canal(PKR/Ha/yr)	-	376.90	-
	Tubewell Rent-Electric (PKR/hr)	-	124.32	-
	Tubewell Rent-Diesel(PKR/hr)	-	128.84	-
3	Electricity Tariff (PKR/kwh)	3.25	6.50	100.17
4	Diesel (PKR/Ltr)	74.00	113.00	52.70

Source: Pakistan Agriculture Forum, Ministry of Chemicals and Fertilizers India, State Bank of Pakistan and NEPRA

¹⁵ Official figures for all input prices were not available for 2013-14; we have used average wholesale food inflation figures for both India and Pakistan to adjust the remaining figures. Food inflation figures closely mirror the increase the increase the agricultural inputs in both countries (State bank of Pakistan and Reserve Bank of Pakistan)

Table 11: Estimates of Cost of Cultivation in India and Pakistan (2010-11)

	Input	India (PKR/ha)				Pakistan (PKR/ha)			
		Paddy	Maize	Wheat	Cotton	Wheat	Paddy (Basmati)	Maize	Cotton
I	Operational Cost	85,408	67,780	35793.08	99,984	40,839	40,398	57,768	39,243
(a+b+c)	Labor Charges					21,330			
A	Human Labour	46,350	344,14	9063.601	63,207				
B	Animal Labour	744	1,197	122.077	2,259				
C	Machine Labour	13,870	11,774	11452.19	9,017		10,357		
	Seed	10,009	6,448	3081.828	6,606	2,875	12,000	8,028	2,099
	Fertilizer & Manure	10,436	17,191	7599.884	13,763	11,000	11,782	36,666	16,639
	Plant Protection	2280	1,618	2495.685	3,410	1,250	4,199	3,211	9,880
	Irrigation	250	461	842.792		3,140	12,350	7,212	8,077
	Interest on working capital	1467	1,296	959.327	1,720	1,244	1,710	2,651	2,547
II	Fixed Cost*	173,57	9,149	48014.95	7,980	29,975	18,782	21,365	26,078
	Sub Total (I+II)	102,766	76,929	83808.03	107,964	70,814	71,180	79,133	65,321
	Managerial cost	10,277	7,693		10,796		1,186	1,186	1,581
III	Total Cost	11,304	84,622	83808.03	118,760	70,814	72,466	80,319	66,902
	Yield (Qtl)	54	54	49.51	20	28.328	28	63	20
IV	Cost of Production (PKR/qtl)	2,094	1,566	1692.75	5,938	2,500	2,622	1,274	3,340

Source: India: Commission for agriculture costs and price; Pakistan: Agriculture Marketing Information Service (AIMS)

Table 12: Market Access Indicators

	Pakistan				India		
	Year	Total	Agriculture	Non-Agriculture	Total	Agriculture	Non-Agriculture
OTRI(Applied Tarrifs)	2009	7.4	5.8	7.5	14.9	69.5	13.1
OTRI(MFN Tarrifs)	2009	7.4	5.8	7.5	15.3	71.7	13.4
TTRI (Applied Tarrifs)	2009	12.2	7.5	12.5	12	28	11
TTRI (MFN Tarrifs)	2009	12.2	12.5	7.9	12	11	28
Simple Average Final Bound		60	95.5	54.8	48.6	113.5	34.6
Simple Average MFN Applied	2013	13.5	15.4	13.2	13.5	33.5	10.2
Trade Weighted Average	2012	10	7.1	10.4	7	51.6	5
Imports in Billions US\$	2012	44	5.6	38.4	479.5	20.5	459

Source: World Tariff Profiles 2014 (WTO) and World Trade Indicators (2009/10)

Table 13: Tariff Structure Applied by India on Pakistan's Imports

Product	Product Name	Duty Type	Simple Average	Weighted Average	Standard Deviation
1	LIVE ANIMALS	AHS	5	5	0
		BND	100	100	0
		MFN	5	5	0
2	MEAT AND EDIBLE MEAT OFFAL	AHS	2.5	0.27	2.5
		BND	100	100	0
		MFN	2.5	0.27	2.5
4	DAIRY PRODUCE; BIRDS' EGGS; NATURAL HONEY; EDIBLE	AHS	25	25	0
		BND	100	100	0
		MFN	25	25	0
5	PRODUCTS OF ANIMAL ORIGIN, NOT ELSEWHERE SPECIFIED	AHS	5	5	0
		BND	100	100	0
		MFN	5	5	0
6	LIVE TREES AND OTHER PLANTS; BULBS, ROOTS AND THE	AHS	4	0.4	7
		BND	100	100	0
		MFN	4	0.4	7
7	EDIBLE VEGETABLES AND CERTAIN ROOTS AND TUBERS	AHS	2.31	0.02	3.5
		BND	100	100	0
		MFN	2.31	0.02	3.5
8	EDIBLE FRUIT AND NUTS; PEEL OF CITRUS FRUIT OR MEL	AHS	28.25	13.46	11.18
		BND	100	100	0
		MFN	28.25	13.46	11.18
9	COFFEE, TEA, MATĀ% AND SPICES	AHS	6.11	5.8	5.38
		BND	105.56	122.44	17.76
		MFN	6.11	5.8	5.38
10	CEREALS	AHS	3.75	4.5	4.15
		BND	125	137.65	25
		MFN	3.75	4.5	4.15

11	PRODUCTS OF THE MILLING INDUSTRY; MALT; STARCHES;	AHS	20	20	0
		BND	100	100	0
		MFN	20	20	0
12	OIL SEEDS AND OLEAGINOUS FRUITS; MISCELLANEOUS GRA	AHS	3.08	3.62	3.88
		BND	100	100	0
		MFN	3.08	3.62	3.88
13	LAC; GUMS, RESINS AND OTHER VEGETABLE SAPS AND EXT	AHS	17.08	18.85	4.52
		BND	100	100	0
		MFN	17.08	18.85	4.52
14	VEGETABLE PLAITING MATERIALS; VEGETABLE PRODUCTS N	AHS	19.17	19.17	5.34
		BND	100	100	0
		MFN	19.17	19.17	5.34
15	ANIMAL OR VEGETABLE FATS AND OILS AND THEIR CLEAVA	AHS	10	10	0
		BND	100	100	0
		MFN	10	10	0
17	SUGARS AND SUGAR CONFECTIONERY	AHS	12.5	13.86	6
		BND	116.67	125.74	24.49
		MFN	12.5	13.86	6
19	PREPARATIONS OF CEREALS, FLOUR, STARCH OR MILK; PA	AHS	30	30	0
		BND	100	100	0
		MFN	30	30	0
20	PREPARATIONS OF VEGETABLES, FRUIT, NUTS OR OTHER P	AHS	30	30	0
		BND	100	100	0
		MFN	30	30	0
21	MISCELLANEOUS EDIBLE PREPARATIONS	AHS	25.48	14.61	10.39
		BND	100	100	0
		MFN	25.48	14.61	10.39
23	RESIDUES AND WASTE FROM THE FOOD INDUSTRIES; PREPA	AHS	15	10	4.33
		BND	100	100	0
		MFN	15	10	4.33
41	RAW HIDES AND SKINS (OTHER THAN FURSKINS) AND LEAT	AHS	0	0	0
		BND	66	72.16	21.32
		MFN	0	0	0
51	WOOL, FINE OR COARSE ANIMAL HAIR; HORSEHAIR YARN A	AHS	0	0	0
		BND	5	5	0
		MFN	0	0	0
52	COTTON	AHS	10.77	0.17	9.52
		BND	11.54	5.02	9.49
		MFN	10.77	0.17	9.52

Table 14: Tariff Structure Applied by Pakistan on Indian Imports

Product	Product Name	Duty Type	Simple Average	Weighted Average	Standard Deviation
1	LIVE ANIMALS	AHS	20	20	0
		BND	100	100	0
		MFN	30	30	0
3	FISH AND CRUSTACEANS, MOLLUSCS AND OTHER AQUATIC I	AHS	23.33	23.33	4.71
		BND			
		MFN	30	30	0
4	DAIRY PRODUCE; BIRDS' EGGS; NATURAL HONEY; EDIBLE	AHS	60	60	0
		BND	100	100	0
		MFN	60	60	0
7	EDIBLE VEGETABLES AND CERTAIN ROOTS AND TUBERS	AHS	20.5	27.58	8.79
		BND	112.5	100.95	21.65
		MFN	26.88	29.31	8.75
8	EDIBLE FRUIT AND NUTS; PEEL OF CITRUS FRUIT OR MEL	AHS	37.14	24.08	23.79
		BND	114.29	100.1	22.59
		MFN	40	30.06	22
9	COFFEE, TEA, MATÃ% AND SPICES	AHS	26.25	29.43	4.69
		BND	130.83	115.04	46
		MFN	35	30.49	13.86
12	OIL SEEDS AND OLEAGINOUS FRUITS; MISCELLANEOUS GRA	AHS	24	21.48	6.58
		BND	100	100	0
		MFN	25	22.9	5.49
13	LAC; GUMS, RESINS AND OTHER VEGETABLE SAPS AND EXT	AHS	23.38	26.44	3.05
		BND	100	100	0
		MFN	29.8	29.62	1.8
14	VEGETABLE PLAINTING MATERIALS; VEGETABLE PRODUCTS	AHS	20	20	0
		BND	100	100	0
		MFN	30	30	0
19	PREPARATIONS OF CEREALS, FLOUR, STARCH OR MILK; PA	AHS	27.6	27.6	1.2
		BND	150	150	0
		MFN	30	30	0
20	PREPARATIONS OF VEGETABLES, FRUIT, NUTS OR OTHER P	AHS	20	20	0
		BND	90	45.45	47.08
		MFN	30	30	0
21	MISCELLANEOUS EDIBLE PREPARATIONS	AHS	20	20	0
		BND	150	150	0
		MFN	30	30	0
22	BEVERAGES, SPIRITS AND VINEGAR	AHS	8	8	0
		BND	150	150	0
		MFN	8	8	0
24	TOBACCO AND MANUFACTURED	AHS	30	30	0
		BND	150	150	0

	TOBACCO SUBSTITUTES	MFN	30	30	0
51	WOOL, FINE OR COARSE ANIMAL HAIR; HORSEHAIR YARN A	AHS	5	5	0
		BND	62.5	83.15	37.5
		MFN	5	5	0
52	COTTON	AHS	9.43	8.39	1.87
		BND	38.46	49.07	33.71
		MFN	9.81	8.96	1.69
53	OTHER VEGETABLE TEXTILE FIBRES; PAPER YARN AND WOV	AHS	10	10	0
		BND	37.5	38.16	2.5
		MFN	10	10	0

Table 15: Indian and Pakistan sensitive list for agricultural commodities under SAFTA

2 Digit HS code	Description	Sensitive List of Pakistan for India		Sensitive List of India for Pakistan
		2008	2012	
1	Live animals	31	0	0
2	Meat and edible meat offal	54	0	8
3	Fish, crustaceans, molluscs, aquatic invertebrates nes	106	0	8
4	Dairy products, eggs, honey, edible animal product nes	11	10	10
5	Products of animal origin, nes	22	0	1
6	Live trees, plants, bulbs, roots, cut flowers etc	18	0	0
7	Edible vegetables and certain roots and tubers	58	1	48
8	Edible fruit, nuts, peel of citrus fruit, melons	40	4	33
9	Coffee, tea, mate and spices	30	5	25
10	Cereals	13	3	11
12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	44	0	32
13	Lac, gums, resins, vegetable saps and extracts nes	13	0	2
14	Vegetable plaiting materials, vegetable products nes	9	1	0
15	Animal,vegetable fats and oils, cleavage products, etc	22	13	32
16	Meat, fish and seafood food preparations nes	28	0	2
17	Sugars and sugar confectionery	18	2	4

19	Cereal, flour, starch, milk preparations and products	25	0	1
20	Vegetable, fruit, nut, etc food preparations	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 furskins) and leather	43	0	0
51	Wool, animal hair, horsehair yarn and fabric thereof	38	0	0
52	Cotton	128	0	12
53	Vegetable textile fibres nes, paper yarn, woven fabric	25	2	0

Source: (Chand and Saxena, 2014)

Table 16: Non-Tariff Barriers on Agricultural Commodities: Specific NTB's faced by Pakistan's Exporters in India

NTM	NTM Description	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 a taxidermist; or (iii) a dealer in trophy or uncured trophy; or (iv) a dealer in captive article, or ii) animal; or (v) a dealer in meat; or (b) cook or serve meat in any eating-house	4101 Raw Hides and Skins of Bovine animals/4107 Leather of other animals
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 authorised officer	4101 Raw Hides and Skins of Bovine 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 microbiological and chemical analysis.	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	802 Nuts/804 Dates figs pineapple/806 grapes/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	802 Nuts/804 Dates figs pineapple/806 grapes/1207 oil seeds

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	713 Dried Vegetables /802 Nuts/804 Dates figs pineapple/806 grapes/1207 oil seeds
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)	1211 Medicinal Plants
Microbiological criteria for the final product	These rules require certain food products to conform to certain microbiological requirements such as the amount of E.coli, 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 E.Coli count cannot be more than 100/g and there should be no salmonella.	804 Dates figs pineapple/806 grapes
Non-automatic import licensing procedures	Licensing is required to import	1207 Oil seeds/ 1121 medicinal plants

Table 17: Perception of SPS standards

Ease of Meeting Standards						Procedural Obstacles for SPS Standards					
Exporters											
	Very Low	Low	Average	High	Very High		Very Low	Low	Average	High	Very High
SPS	0%	19%	65%	16%	0%	Arbitrariness or Inconsistency	71%	10%	16%	3%	0%
						Discriminatory behavior favoring specific producers or suppliers	84%	10%	3%	3%	0%
						Inefficiency or obstruction	71%	10%	10%	10%	0%
						Non-transparency	71%	19%	10%	0%	0%
						Fees or charges	58%	16%	16%	10%	0%
Importers											
SPS	0%	16%	52%	32%	0%	Arbitrariness or Inconsistency	43%	24%	31%	2%	0%
						Discriminatory behavior favoring specific producers or suppliers	57%	31%	10%	2%	0%
						Inefficiency or obstruction	53%	29%	12%	6%	0%
						Non-transparency	51%	37%	12%	0%	0%
						Fees or charges	29%	47%	18%	6%	0%

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