2

Agricultural Market Access and Related Issues

Agriculture will challenge negotiators of a US-Pakistan FTA. Pakistan will want to protect a key sector that provides employment and sustenance for the majority of its population, and US producers will want maximum access to a market with high growth potential. But empirical studies suggest that commerce stimulated by bilateral free trade will not displace major segments of agriculture in Pakistan. Trade expansion will affect some commodities that are accustomed to high protection, but long phaseout periods should allow adequate time for adjustment in truly sensitive items. Pakistan will emphasize assistance to build its capacity to ensure clean and safe agricultural shipments.

A US-Pakistan FTA could result in a solid relationship that fosters agricultural trade by eventually eliminating tariffs and tariff-rate quotas (TRQs) and reducing uncertainties and risks. Following the established US approach to other FTAs, subsidies will not be part of the negotiation. To be sure, US agricultural subsidies have a major impact on world trade and commodity prices, and are a legitimate concern to trading partners. However, US doctrine insists that subsidies can only be negotiated multilaterally.

Agricultural aspects of the negotiations for a US-Pakistan FTA are considered in three sections in this chapter. The first presents a brief discussion of Pakistan's agricultural sector and bilateral trade patterns. The second examines tariffs, TRQs, agricultural subsidies, and other barriers. The third section addresses sanitary and phytosanitary (SPS) matters. We conclude with our recommendations for the negotiations in these areas.

Pakistan's Agricultural Sector and Bilateral Trade

With more than 65 percent of its population living in rural areas, Pakistan remains an agrarian society. Agriculture accounts for nearly 23 percent of the country's GDP and employs 42 percent of its labor force. Pakistan's agricultural sector is also composed largely of small farm and livestock units. In fact, farms of fewer than 49 acres constitute about 80 percent of the farm area, while the median herd has just a few animals (table 2.1a).[1]

While these features underscore the economic importance of agriculture in Pakistan, the sector's special sensitivity results from the high incidence of poverty in rural areas. According to 2002 World Bank data, 72 percent of Pakistan's poor live in rural areas.[2] Agriculture provides, directly or indirectly, their main source of income. Milk, butter, and wheat are especially sensitive, as they furnish the livelihood of most people.

Livestock (including byproducts such as meats, milk, and eggs) contributes almost half of all value added in agriculture. The largest numbers of livestock are buffalo and cattle, although poultry flocks have grown rapidly in recent years (table 2.1b). Livestock production faces daunting development problems: lack of commercial farms, low productivity due to poor animal nutrition, weak infrastructure, lack of financing, and recently, avian flu. For these reasons, dairy items and poultry meats are the most sensitive animal products in Pakistan. Yet despite these problems, Pakistan is mostly self-sufficient in animal products.

A few major crops—sugarcane, wheat, cotton, and rice (table 2.1b)—contribute most of the remaining value added (some 34 percent) to the country's total agricultural GDP. Pakistan is the world's fourth-largest producer of cotton, the fifth in sugarcane, and the twelfth in paddy rice. The country's top exports (e.g., textiles and clothing, rice, and sugar) are based on these crops, but it also imports large quantities of cotton and nondurum wheat.[3] As the leading food staple and an important source of farm income, wheat is the most sensitive crop in Pakistan and benefits from specific governmental support (e.g., state purchases). Other "minor crops" are produced in Pakistan, but their contribution is declining. Notable exceptions are fruits, dates, and corn. In fact, Pakistan is among the top 10 world producers of mangoes, apricots, tropical fruit, dates, onions,

1. Conversely, in the United States all farmland is controlled by farm units well over 50 acres—the median size is over 2,000 acres—while most of the livestock is held in large herds of well over 50 animals (table 2.1a).

2. In 2002, about 47 million Pakistanis lived below the national poverty line, of which 34 million lived in rural areas (World Bank 2004a).

3. Pakistan is emerging, however, as a wheat exporter, particularly of wheat flour.

Table 2.1a Agricultural profile of the United States and Pakistan (percent distribution)

	Pakistan			United States		
Type of farm or herd	**Share of total farms**	**Share of farm area**	**Livestock[a]**	**Share of total farms**	**Share of farm area**	**Livestock[b]**
0–10 acres or heads[c]	86	43	76	8	0	2
10–49 acres or heads[c]	13	35	21	26	0	16
More than 50 acres or heads	2	21	3	65	100	82
Total	100	100	100	100	100	100
Median	3 to 5 acres	12 to 25 acres	5 to 6 heads	70 to 99 acres	2,000 to 5,000 acres	200 to 499 heads

a. Cattle and buffalo only.
b. Cattle of all kinds.
c. For Pakistan's farm sizes, the categories used are 0 to 12.5 acres and 12.6 to 49 acres.

Sources: Government of Pakistan (2000); USDA (2002b).

Table 2.1b Pakistan's agricultural production

Product	2000–2001	2004–05
Selected livestock population (millions of heads)[a]		
Buffalo	23.3	26.3
Cattle	22.4	24.2
Goats	49.2	56.7
Poultry	292.4	366.0
Sheep	24.2	24.9
Animal products (millions of metric tons)		
All meats[b]	2.0	2.3
Milk	26.2	29.4
Major crops (millions of metric tons)		
Sugarcane	43.6	45.3
Wheat	19.0	21.1
Cotton (bales)	10.7	14.6
Rice	4.8	5.0
Corn	1.6	2.8

a. Ranked according to the Food and Agriculture Organization's (FAO) livestock unit conversion factors: cattle and buffalo (0.50); sheep and goats (0.10); and poultry (0.01).
b. Beef, mutton, and poultry.

Sources: FAO (2005); Government of Pakistan (2005a).

peas, and pulses (Food and Agriculture Organization's FAOSTAT database, 2005).

Pakistan's food processing industry (food, beverages, and tobacco) contributes 4 percent of GDP and employs 2 percent of the country's labor force.[4] While these sectors are relatively large components of the nation's manufacturing base (comprising 22 percent of manufacturing value added and 13 percent of the manufacturing labor force), they face important development challenges, such as the absence of a sophisticated canning and packaging industry, coupled with weak transportation and storage facilities. Pakistan has welcomed joint ventures with foreign firms to raise standards. EU and Swiss investors have strengthened Pakistan production of poultry, cereals, biscuits, breads, fruit juices, and dairy. US firms dominate Pakistan's small soft drink and fast foods sectors and have a stake in soups, noodles, mayonnaise, and canola and sunflower oil. Pakistan's imports of processed foods are small and limited to a few supermarkets that cater to the country's elite and the armed forces (Promopak 2001).

4. The government retains a small role in the food processing sector (i.e., vegetable ghee and breakfast cereal production), while sugar production is "almost entirely owned by politicians operating a cartel" (*The Economist,* 2006, 5).

Exports

For decades, Pakistan's agriculture has suffered development policies that established unfavorable relative prices and reduced investment incentives. In addition, geopolitical tensions effectively cut off agricultural exports to the Indian market. But priorities are now shifting. The government believes that the revitalization of agriculture can play a major role in raising the incomes of the poor and in diversifying national exports. Pakistan's total agricultural exports have increased rapidly in recent years, particularly in value terms (table 2.2). Export volume increased significantly during 1996–2000, but gains were small in 2000–2004.

Pakistan is strategically placed in a net food-importing region. About 54 percent of its agricultural exports are shipped to the Persian Gulf countries and Afghanistan (table 2.2).[5] Other important markets include the United Kingdom, India, some eastern African countries, China, and the Association for Southeast Asian Nations (ASEAN) (table 2.2). Progress in bilateral and regional negotiations could create new opportunities for Pakistani farmers in these and other regional markets.

Agricultural exports to the United States are very small—$38 million in 2004 (table 2.3), or just under 3 percent of Pakistan's total agricultural exports (table 2.2). Table 2.4 lists the principal product categories: rice, vegetable saps, sugars, spices, and dates. While total export values to the US market are barely significant, some commodities have performed well. Rice exports have doubled in volume and value; but fresh fruits (mangoes, tangerines, guava, and apricots) and shrimp perform rather poorly in the US market compared with Canada and the United Kingdom.[6]

Imports

While Pakistan is a significant producer of many agricultural products, the size of its domestic market creates substantial import needs for specific products, with the result that, on balance, Pakistan is a net agricultural importer. In 2004 Pakistan exported $1.3 billion in agricultural products and imported about $2.5 billion. The import figure is low in

5. Agricultural exports represent almost 30 percent of Pakistan's exports to Saudi Arabia, the United Arab Emirates, and Kuwait. The share of agriculture in total Pakistan exports is only 8 percent.

6. Shrimp exports (not technically an agricultural product) were the object of trade litigation with environmental overtones. In 1996 the government of Pakistan challenged in the WTO a US import ban on the importation of shrimp. The US import ban reflected US regulation requiring devices and measures that reduce the mortality of sea turtles. After some modifications to the original provisions, the WTO Appellate Body sustained the US regulation under Article XX of the GATT 1994.

Table 2.2 Pakistan's total agricultural exports
(millions of US dollars)

Country/region	1996	2000	2004
Middle East[a]	255	320	462
United Arab Emirates	119	151	236
Saudi Arabia	63	62	73
Economic Cooperation Organization[b]	60	89	249
Afghanistan	6	78	203
Iran	49	9	45
EU-15[c]	122	147	166
United Kingdom	36	62	56
Netherlands	53	38	31
Africa[d]	147	141	157
SAFTA[e]	72	107	89
India	29	47	43
North Asia[f]	68	59	76
China and Hong Kong	26	26	37
ASEAN[g]	31	41	59
Other partners	80	60	64
Total	835	964	1,322

ASEAN = Association of Southeast Asian Nations
SAFTA = South Asian Free Trade Area

a. Middle East includes Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, and Yemen.
b. The Economic Cooperation Organization comprises Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkey, Turkmenistan, and Uzbekistan.
c. European Union excluding the 10 new members.
d. All African countries excluding Egypt.
e. SAFTA comprises Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka.
f. North Asia comprises China, Hong Kong, Japan, North and South Korea, and Taiwan.
g. ASEAN includes Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.

Note: Agriculture is defined as sections 0, 1, 2 (2.2 only), and 4 of the Standard International Trade Classification (SITC) Rev. 3. Includes commodities and food, beverages and tobacco, and oils of animal and vegetable origin.

Source: UN Statistics Division (2005).

relation to the total population: Pakistanis spent only $15 per capita per year in foreign foods and fibers (including raw cotton). Trade barriers undoubtedly depressed imports, but consumer preferences for fresh foods, the relatively small urban population, and low income levels are important factors in the equation.

Table 2.3 Agricultural and total trade between the United States and Pakistan

Category	1996	1998	2000	2002	2004
Agricultural trade (millions of US dollars)					
US exports	345	188	56	194	300
US imports	43	29	32	31	38
Trade balance	302	159	24	163	261
Total trade (millions of US dollars)					
US exports	1,277	726	462	694	1,811
US imports	1,266	1,691	2,167	2,305	2,874
Trade balance	11	–965	–1,705	–1,611	–1,063
Shares of agriculture (percent)					
In total bilateral trade	15	9	3	7	7
In US exports to Pakistan	27	26	12	28	17
In US imports from Pakistan	3	2	1	1	1

Source: USITC (2005a).

Pakistan's agricultural imports are highly concentrated in a few products and countries. Animal and vegetable oils, raw cotton, oilseeds, cereals, and tea account for more than 85 percent of the country's imports (table 2.5). Malaysia, the United States, Indonesia, and Australia provide the bulk of Pakistan's imports (table 2.6). The country's current rapid GDP growth rates—if sustained—will expand import demand, especially for animal protein and packaged foods.[7]

Current levels of US agricultural exports to Pakistan, about one-sixth of total US exports to the country, total around $300 million,[8] and as table 2.5 illustrates, are highly concentrated in primary commodities or semiprocessed products, namely cotton and cereals.

The United States remains the leading supplier of high-quality cotton. The United States is the main corn supplier to Pakistan, and has traditionally been the main wheat supplier as well, although Australian wheat has successfully challenged US wheat over the past decade.[9] In

7. The UN Food and Agriculture Organization (FAO 2003) projects almost a doubling in consumption of milk, meats, and eggs between 2000 and 2015. It also estimates that, in 2015, domestic production of these products will match or exceed domestic consumption.

8. Estimates of bilateral trade differ substantially across sources. While the USITC estimates 2004 US exports to Pakistan at $300 million, UN Comtrade reports $400 million. Differences result from conflicting estimates of trade in cereals and animal and vegetable oils. Table 2.5 presents trade estimates from each source.

9. According to the Commerce Department, Australian wheat has made inroads into the market through "predatory pricing, cheap freight and credit, and other non-market tactics" (US Commercial Service 2001). As indicated in the text, political factors may have damaged the reputation of US producers as reliable suppliers.

Table 2.4 Pakistan's top agricultural exports to the United States
(millions of US dollars)

HS category	Description	Exports, 2004	Share, 2004	Average MFN tariff, 2002 (percent)	Under GSP
HS 10	Rice (HS 1006)	12	.32	4.2[a]	0
1006.30.90	Long grain rice	7	.17	11.2[b]	0
1006.20.20	Basmati rice	5	.13	1.1[c]	0
HS 13	Vegetable saps and extracts (HS 1302)	9	.24	1.1[a]	1
1302.32.00	Mucilages and thickeners	8	.21	Free	0
1302.12.00	Vegetable saps	1	.03	3.8	1
HS 17	Sugars and sugar confectionery	4	.12	13[a]	4
1703.10.50	Other molasses	3	.09	0[d]	3
HS 19-22	Prepared foodstuff	4	.09	9.6[a]	4
2106.90.99	Food preparation nesoi	1	.03	6.4	1
HS 09	Spices	3	.09	0.9[a]	2
091.50.00	Curry	1	.04	Free	0
091.91.00	Other mixed spices	1	.03	1.9	1
HS 08	Dates	2	.05	4.2[a]	0
0804.10.60	Dates without pit	2	.05	3.5[e]	0
	Other commodities	4	.10	n.a.	0
	Total	38	1.00	8.7[f]	11

GSP = generalized system of preferences
HS = Harmonized Schedule
MFN = most favored nation
n.a. = not applicable
nesoi = not elsewhere specified or included

a. Simple average of all tariff lines, including ad valorem equivalents (AVEs), for the corresponding HS category.
b. The value reported corresponds to the most recent AVE (2002). The actual value of the 2005 tariff is 1.4 cents/kg.
c. The value reported corresponds to the most recent AVE (2002). The actual value of the 2005 tariff is 0.83 cents/kg.
d. The value reported corresponds to the most recent AVE (2002). The actual value of the 2005 tariff is 0.01 cents/kg of total sugar.
e. The value reported corresponds to the most recent AVE (2002). The actual value of the 2005 tariff is 2.8 cents/kg.
f. Average estimated based on customs duties paid by Pakistan's agricultural exports.

Source: USITC (2005a, 2005b).

Table 2.5 Pakistan's agricultural imports from the world and the United States, 2004 (millions of US dollars)

HS chapter	Description	From world	From United States		US share in Pakistan imports[a] (percent)
			Comtrade	USITC	
15	Fats, animal and vegetable	798	46	26	6
52[b]	Cotton	591	196	181	33
12	Oilseeds	269	8	8	3
10	Cereals	254	140	68	55
09	Coffee, tea, spices	251	0	0	0
07	Edible vegetables	106	1	1	1
08	Edible fruit, nuts	50	1	1	1
23	Residues, wastes	27	0	0	0
19	Cereal, flour, starch	26	1	1	2
41[a]	Raw hides and skins	26	1	0	2
04	Dairy products	17	2	6	10
21	Miscellaneous edible preparations	15	3	3	18
11	Milling products	14	8	0	53
	Other agricultural chapters	108	4	4	3
	Of which, processed food products[c]	1,301	61	37	5
	Total	2,552	408	305	16

USITC = US International Trade Commission

a. Based on UN Comtrade database.
b. Tariff lines corresponding to agricultural products only.
c. Food products includes dairy products; fruits, vegetables, or spices; products of cereal and flours; preparations of vegetables, fruits, or nuts; vegetable and animal oils; miscellaneous edible preparations; and beverages.

Source: UN Statistics Division (2005).

vegetable oils—the largest agricultural import of Pakistan—US exports trail far behind palm oil exporters from Malaysia and Indonesia. Australian and EU firms outsell US oilseed producers.

Foreign policy decisions have often affected bilateral trade since US food aid programs have been used to exercise pressure on Pakistan to comply with US security concerns. In 1998–99, US agricultural exports to

Table 2.6 Pakistan's total agricultural imports, selected sources
(millions of US dollars)

Source country	1996	2000	2004
Malaysia	583	346	454
United States	437	71	405
Indonesia	71	62	282
Australia	101	227	241
Brazil, Canada, and Argentina	125	125	162
Kenya	105	144	146
India and Sri Lanka	172	115	118
Total	1,946	1,656	2,552

Note: Agriculture is defined as sections 0, 1, 2 (2.1, 2.2, 2.3, and 2.6.3 only), and 4 of SITC Rev. 3.

Source: UN Statistics Division (2005).

Pakistan, particularly exports of wheat, were sharply curtailed when the United States sanctioned both India and Pakistan after they detonated nuclear bombs (table 2.3).[10] The US reputation as a reliable source—particularly for wheat—was damaged in this episode.

Historically, Pakistan has been a prominent recipient of agricultural exports under US food aid programs, but such exports have declined since 2002. US food aid shipments to Pakistan in 2004 were only $24 million—about a third of average values recorded in earlier years and only 8 percent of total US agricultural exports to Pakistan that year (table 2.7).[11] Eligible food and commodities vary year to year, but vegetable oils have accounted for the largest share of shipments to Pakistan in recent years.

Impact of a US-Pakistan FTA: The CGE Model

The computable general equilibrium (CGE) and gravity models provide a reassuring view of the political feasibility of the US-Pakistan FTA negoti-

10. The United States imposed sanctions on India on May 13, 1998, and on Pakistan on May 30, 1998, pursuant to section 102 of the Arms Export Control Act (also known as the Glenn Amendment). In 1996 Pakistan was the top 25th export market for US agricultural exports; when the full effect of sanctions was felt in 1999, the country dropped to the 62nd position.

11. US food aid shipments to Pakistan were large between 2000 and 2002, partly on account of a drought that curtailed Pakistani agricultural production.

Table 2.7 Food aid in US agricultural exports to Pakistan
(average, millions of US dollars)

Category	1999–2000	2001–02	2003–04
US agricultural exports to Pakistan	72	164	266
US food aid to Pakistan	54	88	21
Vegetable oils	n.a.	63	8
Wheat	n.a.	1	2
Other commodities[a]	n.a.	24	12
Ratio of food aid to US exports (percent)	75	54	8

n.a. = not available

a. Other commodities include soybeans, dry milk, lentils, tallow, and peas.

Source: USDA (2005b).

ations, predicting, among other things, significant growth (nearly 40 percent) in two-way agricultural trade.

Additionally, the CGE model predicts that nearly all of these gains will accrue to US agricultural exports to Pakistan, with strong performances of US exports of grains and processed foods. For a net food importing country such as Pakistan, this could have important benefits for some segments of the population, particularly urban dwellers (who would, for example, enjoy a richer and more varied diet and access to cheaper foods).

On the other hand, the CGE model also predicts that a US-Pakistan FTA would not lead to higher agricultural exports overall from Pakistan to the United States. While the CGE estimates are too conservative, they reflect the fact that a number of Pakistan's agricultural exports already have duty-free access to the US market. The agreement should, however, help surmount SPS obstacles that currently limit Pakistan's exports, particularly in certain fruits and vegetables where the country could become a competitive supplier. As shown in table 2.8, over the four-year period 1999–2002, US producer prices for a wide range of fruits and vegetables averaged well above Pakistani levels. Gains could also be facilitated by the presence of large South Asian ethnic communities in the United States.[12]

A US-Pakistan FTA should not lead to large displacements in Pakistan's rural areas: Calculations suggest only a 1 percent fall in production by volume for the declining subsectors in agriculture. However, the

12. According to the latest census data, nearly 225,000 Pakistanis (by birth regardless of citizenship status) live in the United States, compared with 340,000 in the United Kingdom. The Pakistani-born US population has a higher median per capita income and better educational attainments than the Pakistani-born population in the United Kingdom.

Table 2.8 Ratio of average producer prices, 1999–2002
(based on prices in US dollars per ton; Pakistan price = 100)

Product	India	United States
Fruits and vegetables		
Bananas	79	498
Dates	n.a.	348
Fruits, fresh nes	84	381
Grapes	55	74
Lemons	62	92
Mangoes[a]	111	227
Oranges	357	161
Tangerines	n.a.	326
Potatoes	115	108
Onions, dry	94	208
Major crops		
Corn	82	55
Cotton lint[b]	215	173
Rice, paddy	82	70
Soybeans	81	67
Sugar cane	96	151
Tobacco	86	666
Wheat	103	74
Animal products (live weight)		
Cattle meat	n.a.	68
Chicken meat	125	96
Sheep meat	295	356
Milk and other animal products		
Cow milk, whole fresh	72	104
Hen eggs	65	110
Wool	155	157

n.a. = not applicable
nes = not elsewhere specified

a. US price corresponds to import unit price.
b. Quality differences distinguish all farm products, but in the case of cotton, the quality difference between US fiber and Pakistan fiber is sharp. Hence the higher US price index is a misleading indicator of bilateral comparative advantage.

Note: FAOSTAT producer prices refer to the national average prices of individual commodities comprising all grades, kinds, and varieties received by farmers when they participate in their capacity as sellers of their own products at the farm gate or first point of sale. Pakistan, however, reported wholesale prices.

Source: FAO (2005).

impact could be noticeable in the food processing sector, where the CGE calculations indicate a 5 percent decline. The drop might be mitigated by increased foreign investment and joint ventures.

Tariffs, TRQs, and Other Barriers

This section examines the principal trade policy measures that limit agricultural imports in both countries. The analysis for Pakistan centers on tariffs for two reasons: They are the country's principal trade policy instrument (WTO 2002a), and they are the focus of all US negotiating efforts with developing countries. US protection entails instruments besides tariffs, such as TRQs, antidumping measures, SPS measures, and subsidies.

Pakistan

In recent years, Pakistan has made significant efforts to lower and simplify its tariff structure (WTO 2002a). The simple average tariff for agricultural imports, using the WTO definition, dropped from 44 to 19 percent between 1996 and 2006. In overall terms, Pakistan's level of tariff protection for agricultural products is similar to that for manufactured products. While the government does not apply TRQs, it maintains import bans on imports from India and Israel.

The extent of tariff dispersion in agriculture was simplified by assigning nearly all products to one of five duty categories: 5, 10, 15, 20, and 25 percent. About half of all agricultural tariff lines fall in the first two categories (5 and 10 percent tariffs). However, tariffs of 25 percent affect close to a third of tariff lines in agriculture.[13] The *2002 WTO Trade Policy Review* identifies tariff escalation as a feature of the Pakistani tariff schedule (WTO 2002a). Table 2.9 shows that 2005 applied tariffs are particularly high for dairy products (HS 4); fruits (HS 8); certain food preparations based on meat (HS 16); and processed foods such as fruit juices, soups and broths, pasta, sauces and condiments, foods from roasted cereals, and honey (HS 19–22). Poultry meats and some instances exported final products (e.g., dates, fruits, and spices) also obtain above-average protection.[14]

13. We define agricultural products to mean HS chapters 1 through 24, plus selected lines in HS chapters corresponding to hides, wool, and cotton (HS 41, 50, 52). Fish and forestry products were excluded.

14. The following reassurance was extended by Minister of Finance Omar Ayub Khan in the 2005–06 budget speech: "[The] Agriculture Sector enjoys primary importance in our economy. Therefore we have proposed reduction[s] in many tariff lines pertaining to agriculture. At the same time it has been ensured that such reductions do not adversely affect the existing protections available to our developing dairy, poultry, and fish farming sectors."

Table 2.9 Pakistan's applied MFN tariffs for agricultural products, 2005

HS chapter	Item	Number of lines		Simple average tariff (percent)[a]	Standard deviation (percent)
		Ad valorem	Non ad valorem		
01	Live animals	32	0	6.9	5.9
02	Meat, edible offal	58	0	15.8	8.4
04	Dairy products	31	0	21.6	7.0
05	Animal products nes	23	0	7.6	6.9
06	Live trees, plants	14	0	9.3	6.2
07	Edible vegetables	67	0	8.6	4.5
08	Edible fruit, nuts	61	0	20.2	7.9
09	Coffee, tea, spices	38	0	9.1	4.2
10	Cereals	17	0	7.1	2.5
11	Milling products	30	0	14.3	3.4
12	Oilseed	49	0	5.8	3.1
13	Lac, gums, resins,	15	0	17.0	4.1
14	Vegetable plaiting	11	1	15.0	7.1
15	Fats, animal and vegetable	17	38	14.1	7.3
16	Meat, fish, preparations	28	0	20.5	1.6
17	Sugars	26	0	13.3	6.3
18	Cocoa and cocoa preparations	12	0	15.0	10.4
19	Cereal, flour, starch	20	0	22.1	3.3
20	Vegetable, fruit, preparations	52	0	22.7	4.0
21	Miscellaneous edible preparations	24	0	19.4	7.0
22	Beverages, vinegar	23	0	76.0	31.0
23	Residues, wastes	26	0	11.3	4.6
24	Tobacco	10	0	19.0	9.7
41[b]	Raw hides and skins	14	0	6.3	5.2
43[b]	Furskins	6	0	5.0	.0
50[b]	Silk	5	0	5.0	.0
51[b]	Wool, animal hair	17	0	5.0	.0
52[b]	Cotton	7	0	7.1	2.7
53[b]	Vegetable textile	6	0	5.0	.0
	Totals and averages	739	39	15.6	6.0

MFN = most favored nation
nes = not elsewhere specified

a. Ad valorem tariff lines only.
b. Tariff lines corresponding to agricultural products only.

Source: Pakistan Central Board of Revenue (2005a).

Two product categories are highly sensitive in Pakistan and consequently are granted differential treatment: animal and vegetable oils and alcoholic beverages. The government applies specific duties and surcharges on imports of vegetable and animal oil (HS 15)—its top agricultural import from the world and an important US export to Pakistan (table 2.5).[15] For religious reasons, imports of beer, wine, and spirits face tariff peaks ranging from 50 to 100 percent (table 2.10).[16] As a Muslim country, Pakistan bans the consumption of alcoholic beverages; however, the *Census of Manufacturing Industries 2000/01* reports the existence of a limited number of local breweries. Elimination of the high tariffs on vegetable oils and alcoholic beverages could in part explain the significant expansion in US exports of processed foods predicted by the CGE model.

Almost 90 percent of US agricultural exports to Pakistan are subject to tariffs below 10 percent.[17] The bulk of US exports to Pakistan are concentrated in three products—wheat, corn, and raw cotton (table 2.11)—that serve either as basic food staples or as inputs for manufactured exports. Though other factors also come into play to limit US exports—geographic distance, competitive suppliers, and income levels—high tariffs restrict specific US exports such as vegetable oils, poultry, and certain processed foods.

While applied tariffs are generally moderate, bound tariffs are another matter. The *2002 WTO Trade Policy Review* (WTO 2002a) reports that Pakistan has bound 90 percent of its agricultural tariff lines with a simple average of 97 percent. The gap between the average bound and average applied rates is nearly three times larger than the gap for manufactured products. Pakistani authorities argue that the gap permits necessary flexibility to deal with temporary imbalances. At the same time, the gap obviously introduces uncertainty for exporters.

Pakistan is actively pursuing bilateral negotiations that have involved, or will involve, the concession of preferential access for agricultural products. To date, only one FTA has been concluded, with Sri Lanka. A limited agreement with Iran and early harvest agreements with China and Malaysia may serve as preludes for true FTAs.[18] The latter

15. The *2002 WTO Trade Policy Review* states that no ad valorem equivalent was reported for those tariff lines. However, Pakistan tariffs on edible oil could reach as high as 40 percent.

16. According to the 2005/06 Import Policy Order, imports of wines and spirits (HS 2203–09) and brewing and distilling machinery are altogether prohibited in Pakistan, although the items are nevertheless subject to listed tariffs of 100 percent. Religious reasons are also cited in the case of the prohibition of imports of pork; however, listed tariff rates are much lower for pork products—around 25 percent.

17. However, wheat faces other charges such as regulatory duties. For the current year the regulatory duty for wheat imports was established at 415 rupees per 40 kilograms.

18. The early harvest agreement between Pakistan and China includes reciprocal duty-free treatment for a few agricultural products, mostly fruits and vegetables (HS chapters 7 and 8). The early harvest agreement between Pakistan and Malaysia reduces tariffs on palm nuts but not on palm oil.

Table 2.10 Pakistan's highest tariff peaks and specific tariffs in agriculture, 2005

HS 4-digit category	Description	Average tariff	Number of tariff lines[a]
Peaks above 25 percent			
2203	Beer made from malt	100	1
2204	Wine of fresh grapes, including fortified wines	100	4
2205	Vermouth and other wine flavored with plants or other substances	100	2
2206	Fermented beverages and mixtures nesoi	100	1
2207	Undenatured ethyl alcohol of more than 80 percent volume	75	2
2208	Undenatured ethyl alcohol of less than 80 percent volume	100	7
Specific tariffs			
1404	Vegetable products nesoi—betel leaves	Rs.150/Kg	1
1507	Soybean oil and its fractions	Rs. 9,625/ MT	2
1508	Groundnut oil and its fractions	Rs. 13,725/MT	2
1509	Olive oil and its fractions	Rs. 9,625/ MT	4
1510	Other oils and their fractions	Rs. 10,200/MT	1
1511	Palm oil and its fractions	Rs. 9,840/ MT	5
1512	Sunflower seed, safflower, or cotton seed oil and their fractions	Rs. 16,225/MT	4
1513	Coconut or babassu oil and their fractions	Rs. 10,150/ MT	4
1514	Rape, colza, or mustard oil and their fractions	Rs. 13,525/MT	4
1515	Other fixed vegetable fats and oils and their fractions	Rs. 11,925/ MT	8
1516	Animal or vegetable fats and oils and their fractions	Rs. 10,200/MT	3
1517	Margarine; edible mixtures of animal or vegetable fats or oils	Rs. 10,800/MT	2
1518	Animal or vegetable fats and oils and their fractions, nesoi	Rs. 10,800/MT	1

MT = metric tons
nesoi = not elsewhere specified or included
Rs. = Pakistan rupees

a. Number of tariff lines with high peaks (above 25 percent) or specific tariffs.

Source: Pakistan Central Board of Revenue (2005a).

Table 2.11 Top US agricultural exports to Pakistan
(millions of US dollars and percent)

HS 8-digit category	Description	2004 Exports	2004 Share	2005 tariff (percent)
HS 5201	**Raw cotton** (not carded or combed)	181	0.64	5.0[a]
5201.00.10	Cotton, staple length under 28.58 mm	135	0.48	5.0
5201.00.20	Other cotton, staple length < 34.9 mm	20	0.07	5.0
5201.00.90	Other cotton, staple length > 34.9 mm	16	0.06	5.0
5201.00.10	Raw cotton, staple length under 25.4 mm	10	0.03	5.0
HS 10	**Cereals**	64	0.23	7.1[b]
1001.90.20	White wheat	54	0.19	10.0
1005.10.00	Yellow corn	10	0.03	5.0
HS 15	**Oils and fats**	26	0.09	14.1[b]
1515.90.80	Other vegetable fats and oils	16	0.06	Rs.10,800/ton
1502.00.00	Animal fat, inedible tallow	8	0.03	10.0
1507.10.00	Soybean oil, crude	2	0.01	Rs. 9,050/ton
	Other commodities	13	0.05	n.a.
	Total	283	1.00	7.8[c]

n.a. = not applicable
Rs. = Pakistan rupees

a. Simple average of all tariff lines for the corresponding HS category.
b. Excludes lines with specific tariffs.
c. Trade-weighted average for US exports based on values reported in this table. For tariff lines with specific duties we assumed an ad valorem equivalent equal to the highest ad valorem duty applied by Pakistan in agricultural products (25 percent). For other commodities, we assumed a value equivalent to Pakistan's MFN average tariff for agricultural products (15.6 percent).

Sources: USITC (2005a, 2005b); Pakistan Central Board of Revenue (2005a).

two agreements provide substantial preferential access for a number of highly protected products such as vegetables and fruits.

In recent years, Pakistan and India have also taken steps to normalize trading relations and increase bilateral trade. India has granted Pakistan most favored nation (MFN) status unilaterally. Pakistan has not reciprocated, but has allowed increased imports, some of which (live animals,

garlic, onions, potatoes, and tomatoes) enjoy duty-free access.[19] In December 2004, both countries agreed to normalize trade relations in the context of the South Asian Free Trade Area (SAFTA) initiative. A strong SAFTA could lead to interregional specialization in agricultural products (e.g., cotton, rice, sugars, fruits and vegetables, and processed foods), and would surely alter Pakistan's import patterns for the better.

The government of Pakistan also restricts certain exports as a way of managing the price level for key products, including agricultural inputs used in manufactured exports. Export restrictions currently in force target cotton and wheat, while hides face export taxes. Restrictions on wheat exports aim in principle to ensure food security, as wheat is a central staple of the population. However, in recent years, Pakistan has become an exporter of wheat products. Cotton exports are regulated on the basis of types and grades. In addition to the export taxes on hides, exports of livestock must meet certain procedures and conditions. Previous US bilateral FTAs have typically addressed export controls and taxes and state trading organizations with a view to curtailing their role.

The Trading Corporation of Pakistan (TCP) is responsible for stabilizing the prices of certain commodities (e.g., cotton and sugarcane) at the lower end in the local market, although other government bodies also attempt to fix prices (e.g., provincial governments have a role in pricing sugar cane). TCP interventions are announced on the basis of minimum prices to provide a "fair return to growers" (Akhatar 2005). However, the TCP's role in actual procurement varies from commodity to commodity. For example, the TCP's 2001–02 and 2004–05 interventions in the cotton market failed to sustain the price announced by the government, but still had a positive impact on market sentiment (Orden et al. 2006). The TCP may also leverage its power as a buyer to ensure the production of contamination-free cotton. TCP authorities view a stable cotton market as a precondition to increased production of better grades and staple lengths, which may eventually translate into greater foreign earnings from cotton exports.

The TCP also plays a role in the imports of other sensitive commodities (e.g., sugar and wheat) by encouraging production through the operation of procurement depots that buy and sell at administered prices.[20] Through these depots, the government intervenes in the market and holds large wheat stocks. At moments of low stock, the TCP may import

19. Appendix G of the Import Policy Order 2004/2005 lists all importable items from India. Notable exclusions in agriculture are all meats (HS 2), fish (HS 3), dairy items (HS 4), fresh fruits (HS 8), and most processed foods (HS 19–24).

20. USDA GAIN Report PK5017 mentions that the government increased its procurement price to reach a target of 22 million tons of production.

wheat from the United States or Australia.[21] The government also sets minimum procurement prices and quality checks for basmati rice.

Reports by different US agencies raise other specific concerns about the Pakistani trade regime. A US Trade Representative report makes claims of misconduct in customs valuation procedures (USTR 2005a). The US Department of Agriculture (USDA) mentions that the difficulty of collecting sales and income taxes from domestic firms, contrasted with the ease of imposing them on imports, makes these taxes "tantamount to placing a differential tax on imports."

United States

Agriculture remains the most highly protected sector in the United States. Certain products enjoy exceptional levels of protection through high tariffs, TRQs, and other instruments, such as antidumping measures and safeguards. Foreign reports also frequently cite US export subsidies for agricultural products.

High US tariffs and strict TRQs are compounded by the application of specific tariffs on more than 700 agricultural tariff lines (table 2.12). According to the *2004 WTO Trade Policy Review* (WTO 2004a), the US simple average applied MFN tariff in 2002, including ad valorem equivalents, was 5.2 percent on all merchandise but 9.8 percent on agricultural products. Tariff dispersion is very high in selected agricultural chapters and tariff escalation is clearly a feature for certain agricultural products. US tariff peaks are evident on agricultural products that undergo a greater extent of transformation; table 2.13 shows that some of the highest US tariff peaks are found on tobacco, peanuts, sugars and sugar confectionery, dairy products, and food products (HS 18–21). Phaseout schedules in US bilateral FTAs prolong the incidence of tariff escalation, because many of the highest tariff peaks enjoy the longest phaseout periods. Pakistani officials have a record of attacking tariff escalation, and in a US-Pakistan negotiation they will raise specific grievances, such as the high tariffs on dates.[22]

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21. US producers have complained that the TCP's tender specifications placed US farmers at a disadvantage vis-à-vis Australian competitors. In a recent trip to the United States, the chair of the TCP pledged to review these specifications ("Pakistan Officials in US on Wheat Trade Visit," Kansas Wheat Commission News Archive, www.kswheat.com [accessed July 2006]).

22. Pakistani views on tariff escalation are laid out in the statement discussing an early EU proposal on agriculture in WTO Doha negotiations (WTO document G/AG/NG/W/90). The ad valorem equivalent for US MFN tariffs on imports of fresh or dried dates is about 4 percent on average and does not exceed 8 percent. The US MFN tariff on prepared or preserved dates, however, is 22.4 percent. In the US-Australia FTA, most tariffs on fresh dates were phased out either immediately or over four years. But preserved dates will only reach duty-free treatment 18 years after the agreement entered into force. The pattern is seen in other US FTAs but the differential margins in the phaseout schedules are narrower (e.g., five years in the US-Morocco FTA).

Table 2.12 US applied MFN tariffs for agricultural products, 2002

HS chapter	Product description	Number of lines		Simple average tariff (percent)[a]	Standard deviation (percent)
		Ad valorem	Non ad valorem		
01	Live animals	20	8	1.1	2.0
02	Meat, edible offal	54	45	6.1	8.1
04	Dairy products	125	126	12.4	5.0
05	Animal products nes	20	1	0.6	1.4
06	Live trees, plants	20	8	2.9	2.5
07	Edible vegetables	78	89	9.0	7.4
08	Edible fruits, nuts	55	63	5.3	7.7
09	Coffee, tea, spices	40	7	0.7	1.7
10	Cereals	7	14	2.2	4.1
11	Milling products	19	19	4.2	4.2
12	Oilseed	37	24	8.2	34.0
13	Lac, gums, resins	14	1	0.7	1.3
14	Vegetable plaiting	11	2	1.1	1.6
15	Fats, animal and vegetable	37	31	3.6	5.3
16	Meat, fish, preparations	81	9	4.2	5.5
17	Sugars	32	34	6.4	2.9
18	Cocoa and cocoa preparations	44	34	5.8	3.6
19	Cereal, flour, starch	52	18	9.0	5.9
20	Vegetable, fruit, preparations	106	77	11.1	21.5
21	Miscellaneous edible preparations	50	39	7.8	5.4
22	Beverages, vinegar	37	36	1.5	4.8
23	Residues, wastes	24	13	1.8	2.7
24	Tobacco	27	29	90.7	156.3
41[b]	Raw hides and skins	122	n.a.	2.4	1.6
43[b]	Furskins	22	n.a.	2.3	2.1
50[b]	Silk	13	n.a.	1.5	1.6
51[b]	Wool, animal hair	73	26	6.1	8.0
52[b]	Cotton	221	12	9.0	3.7
	Totals and averages	1,441	765	9.8	9.4

MFN = most favored nation
n.a. = not available

a. Includes ad valorem equivalents.
b. All lines considered, including agricultural and nonagricultural products.

Table 2.13 US tariff peaks in agriculture, 2002

HS chapter	Product description	Number of tariff lines above 15 percent	Average peak[a] (percent)
52	Cotton (HS 5201–5203 only)	3	34.5
24	Tobacco and manufactured tobacco substitutes	14	187.5
23	Residues and prepared animal feed	1	17.0
22	Beverages, spirits, and vinegar	7	25.3
21	Miscellaneous edible preparations	23	33.8
20	Preparations of vegetables, fruit, nuts, or other	24	36.2
19	Preparations of cereals, flour, starch, or milk	24	32.2
18	Cocoa and cocoa preparations	16	31.7
17	Sugar and sugar confectionery	12	49.0
16	Preparations of meat, fish, crustaceans, or other	5	36.5
15	Animal or vegetable fats, oils, and waxes	3	18.7
12	Oilseeds and oleaginous fruits and other	2	147.8
8	Edible fruit and nuts; peel of citrus fruit or melons	7	23.8
7	Edible vegetables and certain roots and tubers	16	22.1
4	Dairy items	117	35.6
	Of which:		
	Cheese	83	33.4
	Milk and cream	14	30.9
	Other dairy	20	47.8
3	Fish, crustaceans, mollusks, and other	2	15.0
2	Meat and edible meat offal	7	25.0

a. Average of all tariff lines above 15 percent within 4-digit category, based on ad valorem equivalents.

Note: Tariff peaks are defined as tariffs above 15 percent on an ad valorem equivalent basis.

Source: USITC (2005a, 2005b).

Certain Pakistani agricultural exports, particularly spices, certain sugars, and processed foods, do however benefit from generalized system of preferences (GSP) duty-free access. About 30 to 40 percent of Pakistan's agricultural exports to the United States entered through the GSP between 1999 and 2003. Apart from GSP benefits, other Pakistani exports, such as curry and certain vegetable saps, also enjoy duty-free MFN access to the United States. Overall, just over 60 percent of existing Pakistani agricultural exports already enjoy duty-free access to the US market.

US tariffs remain an immediate obstacle for existing exports of Pakistani rice (specific tariffs have an ad valorem equivalent (AVE) as high as 11 percent) and dates (table 2.4). These products and tobacco are the largest contributors to the US Treasury among Pakistan's limited agricultural exports.

Rice accounts for nearly 50 percent of Pakistan's total agricultural exports to the world, but the United States remains an elusive market: In 2004, less than 2 percent of Pakistan's exports of rice were destined to the United States, mostly to supply ethnic communities. Securing preferential market access for rice exports will be an important objective for Pakistan in its negotiation with the United States, but other concerns, such as the ongoing dispute over the patenting of the basmati name, will arise as well.[23]

US tariffs are also applied on imports of certain fresh and processed fruits such as cantaloupes, tangerines, oranges, apricots, and dried mangoes (although for Pakistan SPS barriers are probably more important in the case of fresh fruits). Tariff escalation is quite strong in both fruits and vegetables. Harvest periods in Pakistan for a few fruits and vegetables coincide with seasonal high tariffs in the United States; for example, watermelons are harvested in March through June, a period when the US tariff jumps from 9 to 17 percent. Many preparations based on fruits and vegetables (HS 20, excluding items based on peanuts) face two-digit tariffs and selective GSP access (typically granted to least-developed countries and not to Pakistan). High US tariffs also restrict US imports of fruit juices, jams, pastes, jellies, purées, and fruits and vegetables otherwise preserved.

The highest US tariffs on agricultural imports are generally levied under US Section 22 TRQs (table 2.14). Certain out-of-quota tariffs are prohibitive, such as those on tobacco (350 percent), peanuts (140 percent), peanut butter and paste (132 percent), and butter oil and substitutes (98 percent). Table 2.15 lists US TRQs. Pakistan has been granted special

23. Pakistan and US rice producers from Texas have an ongoing dispute over the patenting of "basmati." So far Pakistan is winning: The US Patent and Trademark Office ruled that US producers had not proven that their rice qualities were significantly different from "prior art" and hence rejected 13 out of 16 claims.

Table 2.14 US tariff-rate quotas, 2002 (tons unless otherwise stated)

Product description	Average out-of-quota tariff rate (percent)[a]	Bound import quota	Fill ratio (percent)[b]
Beef: Fresh, chilled, or frozen	26.4	696,621	83
Cream (hectolitres)	26.8	6,695	65
Evaporated/condensed milk	26.6	6,857	87
Nonfat dried milk	52.6	5,261	98
Dried whole milk	53.8	3,321	96
Dried whey/buttermilk	6.8	296	22
Butter	59.5	6,977	98
Butter oil and substitutes	98.0	6,080	100
Dairy mixtures	37.0	4,105	100
Blue cheese	39.0	2,911	97
Cheddar cheese	30.5	13,256	98
American-type cheese	58.4	3,523	99
Edam and Gouda cheese	50.3	6,816	98
Italian-type cheese	48.1	13,481	99
Swiss/Emmenthal cheese	42.4	34,475	83
Gruyere cheese	46.7	7,855	86
Other cheese	35.7	48,628	99
Lowfat cheese	32.9	5,475	65
Peanuts	139.8	52,906	100
Chocolate crumbs	15.1	26,168	79
Infant formula containing oligosaccharides	64.8	100	100
Place-packed stuffed olives	2.0	2,700	31
Green olives, other	2.7	550	69
Green whole olives	4.3	4,400	19
Mandarin oranges (Satsuma)	0.4	40,000	100
Peanut butter and paste[c]	131.8	20,000	78
Ice cream (hectolitres)	30.4	5,668	57
Raw cane sugar	48.8	1,117,000	81
Other cane or beet sugars or syrups	49.8	22,000	151
Other mixtures over 10 percent sugar	19.6	64,709	99

(table continues next page)

Table 2.14 US tariff peaks in agriculture, 2002 *(continued)*

Product description	Average out-of-quota tariff rate (percent)[a]	Bound import quota	Fill ratio (percent)[b]
Sweetened cocoa powder	18.8	2,313	15
Mixes and doughs	25.8	5,398	100
Mixed condiments and seasonings	13.1	689	45
Tobacco	350.0	150,700	75
Long staple cotton[d]	3.0	40,100	13
Cotton, processed but not spun[d]	29.0	3	100

a. Average based on ad valorem rates or on ad valorem equivalents provided by the authorities.
b. Calculated as the ratio of actual import volumes to the bound import quota.
c. Pakistan and other countries listed on US note 6 to the 2005 US Tariff Schedule are jointly allocated 8 percent of the bound import quota.
d. The bound import quotas have been increased in recent years. India and Pakistan jointly benefit from 35 and 3 percent of the 2005 bound quotas on staple cotton and processed but not spun cotton respectively. The bound values for these tariff-rate quotas are nearly 2.6 million and 1 million respectively.

Note: Table lists tariffs with 2002 fill ratios above 10 percent. Quotas with 2002 fill ratios below 10 percent applied to dried cream, low-fat chocolate, green olives, animal feed containing milk, and four types of cotton.

access under the US TRQs on peanuts and cotton, although the TRQ on peanuts might not be important as this product is not a major export of Pakistan; likewise, the TRQs on raw cotton might not be at issue since Pakistan itself restricts exports of cotton, on the basis of types and grades, to favor domestic producers. Additionally, US TRQs have not prevented Pakistani out-of-quota exports of cotton waste (HS 5202.99) to the United States.

Pakistan counts as a large producer of sugar cane and is a net exporter of sugars and molasses, including to the United States. In 2004 Pakistan's sugar exports to the United States amounted to less than $10 million (table 2.4), which is far below its exports to the United Kingdom. The United States applies low tariffs on molasses, and the majority of Pakistani sugar-related exports to the United States enter through the GSP program. Still, US TRQs affect some exports of sugar confectionery (HS 1704) and sugar-based products. Pakistan's total exports of molasses and confectionery to the world have increased (both in value and quantity) in recent years, reaching nearly $100 million combined. Pakistan is also a large producer of tobacco leaves, but current exports to the world were barely $10 million in 2004, and exports to the United States, where tobacco is a sensitive and highly protected product, are negligible.

Table 2.15 FTA maximum phaseout terms for selected agricultural products

Product	NAFTA: United States–Mexico	United States–Australia	United States–Bahrain	CAFTA-DR[a]	United States–Chile	United States–Morocco	United States–Jordan
Beef	Mexico: IMM US: IMM Except Mexico: Beef offal	Australia: IMM US: TRQ → 18y WTO TRQ and preferential TRQ SFG >> 18y (US)	Bahrain: IMM US: TRQ → 10y	CAFTA-6: Tariffs → 15y US: TRQs → 15y Except DR: TRQs → 15y	Chile: TRQ → 4y US: TRQ → 4y	Morocco: TRQs >> 18y US: TRQ → 15y	Jordan: Tariffs → 10y US: Tariffs → 10y
Poultry	Mexico: TRQ → 10y US: IMM	Australia: Zero US: Tariffs → 4y	Bahrain: IMM US: Tariffs → 5y	CAFTA-6: TRQ → 20y US: Zero SFG (CAFTA-6)	Chile: TRQ → 10y US: TRQ → 10y SFG (Chile)	Morocco: TRQ → 25y US: Tariffs → 10y SFG (Morocco)	Jordan: Tariffs → 10y US: Tariffs → 5y
Turkey	Mexico: TRQ → 10y US: IMM	Australia: Zero US: Tariffs → 4y	Bahrain: IMM US: Tariffs → 5y	CAFTA-6: Tariffs → 10y US: Zero	Chile: TRQ → 10y US: TRQ → 10y SFG (US, Chile)	Morocco: TRQ → 19y US: Tariffs → 10y SFG (Morocco)	Jordan: Tariffs → 10y US: Tariffs → 10y
Pork	Mexico: TRQ → 10y US: IMM SFG (Mexico)	Australia: Zero US: IMM	Bahrain: IMM[b] US: IMM	CAFTA-6: TRQ → 15y US: IMM SFG (CAFTA-6)	Chile: IMM US: IMM	n.a.	Jordan: Tariffs → 10y US: IMM
Corn	Mexico: TRQ → 15y US: IMM	Australia: Zero US: IMM	Bahrain: Zero US: IMM	CAFTA-6: TRQs >> 15y US: Zero SFG (CAFTA-6)	Chile: Tariffs → 4y US: IMM	Morocco: Tariffs → 5y US: IMM	Jordan: IMM US: IMM
Soybeans, meal, and flour	Mexico: Tariffs → 10y US: IMM	Australia: IMM US: IMM	Bahrain: Zero US: IMM	CAFTA-6: IMM US: Zero	Chile: IMM US: IMM	Morocco: Tariffs → 5y US: IMM	Jordan: Tariffs → 10y US: IMM
Soybean oils	Mexico: Tariffs → 10y US: Tariffs → 4y	Australia: IMM US: Tariffs → 10y	Bahrain: IMM US: Tariffs → 10y	CAFTA-6: Tariffs → 15y US: Zero SFG: (CAFTA-6)	Chile: Tariffs → 12y US: Tariffs → 12y	Morocco: Tariffs → 10y US: Tariffs → 10y	Jordan: Tariffs → 10y US: Tariffs → 5y

(table continues next page)

Table 2.15 FTA maximum phaseout terms for selected agricultural products *(continued)*

Product	NAFTA: United States–Mexico	United States–Australia	United States–Bahrain	CAFTA–DR	United States–Chile	United States–Morocco	United States–Jordan
Wheat	Mexico: Tariffs → 10y US: Tariffs → 10y	Australia: Zero US: IMM	Bahrain: Zero US: IMM	CAFTA-6: Zero US: Zero Except CAFTA-6: Wheat flour tariffs → 15y	Chile: IMM US: IMM Chile: Price band →12y Wheat flour tariffs → 12y SFG (Chile)	Morocco: TRQs >> 15y US: IMM	Jordan: IMM US: IMM
Rice	Mexico: Tariffs → 10y US: Tariffs → 10y	Australia: Zero US: IMM Except parboiled rice (US) tariffs → 4y	Bahrain: Zero US: IMM	CAFTA-6: TRQ →18-20y US: Zero SFG (CAFTA-6)	Chile: Tariffs → 12y US: IMM SFG (Chile)	Morocco: Tariffs → 10y US: IMM	Jordan: IMM US: Tariffs → 5y
Other grains	Mexico: TRQ → 10y US: IMM	Australia: Zero US: IMM	Bahrain: IMM US: IMM	CAFTA-6: Tariffs → 15y US: Zero	Chile: IMM US: IMM	Morocco: Tariffs → 15 y US: IMM	Jordan: Tariffs → 4y US: IMM
Nuts	Mexico: IMM US: IMM	Australia: Zero US: Tariffs → 4y	Bahrain: IMM US: IMM Except US: almonds Tariffs → 10y	CAFTA-6: Tariffs → 10y US: Zero	Chile: IMM US: Tariffs → 4y	Morocco: Tariffs → 5y US: Tariffs → 10y Except Morocco: TRQ almonds (15y) SFG (Morocco)	Jordan: Tariffs → 10y US: Tariffs → 4y
Peanuts and peanut butter	Mexico: Zero US: TRQ → 15y	Australia: IMM US: TRQ → 18y	Bahrain: Zero US: TRQ → 10y	CAFTA-6: IMM US: TRQ → 15y Except Guatemala and Nicaragua Tariffs → 5-10y SFG (US)	Chile: Tariffs → 8y US: Tariffs → 12y	Morocco: Tariffs → 10y US: TRQ → 15y	Jordan: Tariffs → 10y US: TRQ → 10y
Raw cotton	Mexico: Tariffs → 10y US: TRQ → 10y	Australia: Zero US: TRQ → 18y	Bahrain: IMM US: TRQ → 10y	CAFTA-6: IMM US: Tariffs → 15y	Chile: IMM US: Tariffs → 12y	Morocco: IMM US: TRQ → 15y	US: TRQ → 10y

Milk and creams	Mexico: TRQ → 10y US: TRQ → 10y	Australia: IMM US: TRQ >> 18y, Same tariffs	Bahrain: IMM US: TRQ → 10y	CAFTA-6: TRQ → 20y US: TRQ → 20y SFG (all parties)	Chile: Tariffs → 8y US: TRQ → 12y	Morocco: Tariffs → 15y US: TRQ → 15y	Jordan: Tariffs → 10y US: TRQ → 10y
Cheese	Mexico: TRQ → 10y US: TRQ → 10y	Australia: IMM US: TRQ >> 18y, Same tariffs	Bahrain: IMM US: TRQ → 10y	CAFTA-6: TRQ → 20y US: TRQ → 20y SFG (all parties)	Chile: Tariffs → 4y US: TRQ → 12y	Morocco: Tariffs → 10y US: TRQ → 15y	Jordan: Tariffs → 5y US: TRQ → 10y
Butter	Mexico: n.a. US: n.a.	Australia: IMM US: TRQ >> 18y, Same tariffs	Bahrain: IMM US: TRQ → 10y	CAFTA-6: TRQ → 20y US: TRQ → 20y SFG (all parties)	Chile: Tariffs → 4y US: TRQ → 12y	Morocco: Tariffs → 8y US: TRQ → 15y	Jordan: IMM US: TRQ → 10y
Fruits	Mexico: Tariffs → 10y US: TRQs → 10y Except Mexico: TRQ apples SFG (US, Mexico)	Australia: Zero US: Tariffs → 18y SFG (US)	Bahrain: IMM US: Tariffs → 10y	CAFTA-6: Tariffs → 15y US: Zero	Chile: IMM US: Tariffs → 12y SFG (US)	Morocco: Tariffs → 10y US: Tariffs → 18y Except Morocco: TRQ apples SFG (US)	Jordan: Tariffs → 10y US: Tariffs → 10y
Fruit juices	Mexico: TRQ → 15y US: TRQ → 15y	Australia: IMM US: Tariffs → 18y Exceptions (US) SFG (US)	Bahrain: IMM US: Tariffs → 10y	CAFTA-6: Tariffs → 15y US: Zero	Chile:IMM US: Tariffs → 12y Exceptions (US) SFG (US)	Morocco: Tariffs → 10y US: Tariffs → 15y SFG (US)	Jordan: Tariffs → 10y US: Tariffs → 4y
Vegetables	Mexico: Tariffs → 10y US: TRQs → 10y Except Mexico: TRQ potatoes SFG (US, Mexico)	Australia: Zero US: Tariffs → 18y Except US: TRQ avocados SFG (US)	Bahrain: IMM US: Tariffs → 10y	CAFTA-6: Tariffs → 15y US: Zero Except Costa Rica TRQs >> 20y (onions, potatoes)	Chile: Tariffs → 12y US: Tariffs → 12y Except US: TRQ avocados SFG (US)	Morocco: Tariffs → 15y US: Tariffs → 18y Except US: TRQ onions, garlic, tomato products (15y) SFG (US, Morocco)	Jordan: Tariffs → 10y US: Tariffs → 10y
Sugar and sugar products	Mexico: TRQ → 15y US: TRQ → 15y	Australia: IMM US: No change	Bahrain: IMM US: TRQ → 10y	CAFTA-6: TRQ → 15y US: TRQ >> 15y	Chile: Tariffs → 12y US: TRQ → 12y	Morocco: Tariffs → 18y US: TRQ → 15y	Jordan: Tariffs → 10y US: TRQ → 10y

(table continues next page)

Table 2.15 FTA maximum phaseout terms for selected agricultural products *(continued)*

Product	NAFTA: United States–Mexico	United States–Australia	United States–Bahrain	CAFTA-DR	United States–Chile	United States–Morocco	United States–Jordan
Tobacco	Mexico: Tariffs → 10y US: Tariffs → 10y	Australia: Zero US: TRQ → 18y	Bahrain: Tariffs US: TRQ → 10y	CAFTA-6: Tariffs → 15y US: TRQ → 15y	Chile: IMM US: TRQ → 12y	Morocco: Tariffs → 10y US: TRQ → 15y	Jordan: Excluded US: Excluded
Distilled spirits and beer	Mexico: Tariffs → 8y US: Tariffs → 10y	Australia: IMM US: Tariffs → 18y	Bahrain: Tariffs → 10y US: Tariffs → 5y	CAFTA-6: Tariffs → 10y US: Zero	Chile: Tariffs → 2y US: Tariffs → 12y	Morocco: Tariffs → 15y US: Tariffs → 15y	US: Tariffs → 10y
Wine	Mexico: Tariffs → 10y US: Tariffs → 10y	Australia: IMM US: Tariffs→ 11y	Bahrain: Tariffs → 10y US: Tariffs → 5y	CAFTA-6: Tariffs → 5y US: Zero	Chile: Tariffs → 12y US: Tariffs → 12y	Morocco: Tariffs → 10y US: Tariffs → 11y	US: Tariffs → 10y

CAFTA-DR = Central American Free Trade Agreement–Dominican Republic
Except = Product exception to the phaseout.
IMM = Immediate duty-free treatment
n.a. = not available
Same T = In-quota tariff will remain at its pre-FTA rate.
Same TRQ = Tariff-rate quota will remain at its pre-FTA level.
SFG = Country retains right to invoke special safeguards on this product.
Tariffs → 8y = Tariffs to be phased out in 8 years.
TRQs → 4y/5y/10y/15y/18y/20y = Tariff rate quotas will be eliminated in 4, 5, 10, 15, 18, 20 years.
TRQ, SFG, Tariffs >> 15y/18y/20y = TRQs (or special safeguards or tariffs) will outlive the 15-year/18-year/20-year phaseout period.
Zero = Zero duty before the FTA.

a. US "zero" duty for CAFTA products reflects preferences granted in US unilateral programs.
b. Bahrain will continue to prohibit the importation of live swines provided that such prohibition is not inconsistent with the terms of this agreement or the WTO agreement.

Note: This table does not reflect the "standard phaseout" treatment of each commodity but rather identifies the maximum phaseout allowed by the United States or any of its partners.

Pakistan's agricultural exports have not been targeted by US antidumping or safeguard measures in recent years, although other countries have voiced concern over US licensing systems, invoice requirements, customs fees, and other charges. More recently, foreign governments have objected to higher transaction costs and delays associated with the Homeland Security Act of 2002.

With the noteworthy exceptions of the Mexican and Chilean FTA pacts, most US bilateral FTAs do not promise full elimination of agricultural barriers. In recent FTA negotiations with developing countries, the United States has granted and requested notable exceptions to the free trade benchmark. For example, Morocco's TRQs on certain US beef, wheat and certain pasta products, and poultry will generally extend beyond 20 years, and will last indefinitely for some specific tariff lines. Similarly, the Central American Free Trade Agreement–Dominican Republic (CAFTA-DR) includes virtually permanent exceptions to free trade on sugar and ethanol for imports by the United States, fresh potatoes and onions for imports by Costa Rica, and white corn for imports by the other Central American countries. Table 2.15 illustrates some of the maximum phaseouts allowed in selected US FTAs. However, it should be emphasized that the average US preferential agricultural tariffs, both in unilateral preference schemes and in bilateral FTAs, are significantly lower than the MFN rates (table 2.16).

Pakistan already benefits from preferential access to the US market through the GSP. However, GSP margins of preference for agricultural products are narrower than those in bilateral FTAs.[24] A few simple averages help illustrate this point. In 2002, for agriculture only, the simple average US MFN tariff stood at 9.6 percent, while the figure for GSP was 8.4 percent, and the figure for the North American Free Trade Agreement (US-Mexico) was 2.7 percent.

As developing countries—including Pakistan—have abandoned policies that deliberately imposed an antiagricultural bias in their economies, they have become more aware of the harmful impact of Organization for Economic Cooperation and Development (OECD) subsidy programs. Such programs, especially those maintained by the United States and the European Union, have become a justified target not only for developing countries but also for NGOs and the world community at large. US, EU, and Chinese support policies jointly depress world prices for many commodities produced in Pakistan, most importantly cotton, followed by corn, rice, and wheat. Agricultural subsidy programs thus constitute an important irritant in relations between the United States and Pakistan (see box 2.1 on page 74). In previous FTAs, however, the United States has not accepted terms that might limit its agricultural subsidy programs,

24. GSP rates are also less stable, as they are subject to renewal as well as compliance with labor standards and other requirements.

Table 2.16 US average MFN and preferential tariffs by partner country or group, 2002 (percent)

Country/group	All products	Agriculture	Nonagriculture[a]
Canada	0.7	4.3	0.0
Mexico	0.6	2.7	0.2
Jordan	2.7	6.2	2.1
Israel	0.7	4.4	0.0
AGOA[b]	2.4	6.0	1.8
ATPDEA	2.6	6.0	1.9
CBERA	2.4	5.9	1.8
CBTPA	2.3	5.9	1.6
LDC	2.7	6.2	2.1
GSP	3.7	8.4	2.8
MFN	5.1	9.8	4.2

AGOA = Africa Growth and Opportunity Act
ATPDEA = Andean Trade Promotion and Drug Eradication Act
CBERA = Caribbean Basin Economic Recovery Act
CBTPA = Caribbean Basin Trade Partnership Act of 2000
GSP = generalized system of preferences
LDC = less developed countries
MFN = most favored nation

a. Excludes petroleum products.
b. The calculations were made for LDC AGOA beneficiaries, as they constitute the majority of beneficiaries.

Note: If a tariff line is not eligible for the preferential program, the rate used in the calculation of averages is the GSP or MFN rate.

Source: WTO (2004a).

apart from provisions on export subsidies, and it seems most unlikely that a US-Pakistan FTA would depart from this pattern.

While US trade officials recognize the need to reduce US agricultural subsidies, they also contend that subsidies are best handled in the framework of the WTO Doha Round talks. US negotiators stress the need to reach a balanced outcome—which is possible only in the context of the multilateral Doha Round—and they recall that Uruguay Round commitments allowed comparatively high ceilings on European and Japanese subsidy programs. Hence, the United States has proposed a 60 percent cut in its bound ceiling for domestic subsidies, provided that the European Union and Japan correspond with higher cuts of about 83 percent. This negotiating stance gives the United States a rationale for excluding subsidies from the bilateral FTAs.

Table 2.17 US production, consumption, and support of the agricultural sector, 2004

Indicator	Billions of US dollars
Total value of production (at farm gate)	225.4
Total value of agricultural exports[a]	61.4
Total value of agricultural imports[a]	54.0
Total support estimate	108.7
	(48)[b]
Producer support estimate	46.5
	(21)
Of which, market price supports	16.2
	(5)
General services support estimate	34.1
	(15)
Transfers to consumers from taxpayers	28.0
	(12)

a. 2003 cost, insurance, and freight (c.i.f.) import values.
b. Percent share of production in parentheses.

Source: OECD PSE/CSE database, 2004.

With respect to subsidies, the OECD (2003) concludes, "Agricultural policy in the United States is characterized by levels of support below the OECD average." The OECD also notes a long-term tendency toward reduced support payments. However, support under the Farm Act of 2002 is higher, and the extent of market orientation is lower, than when the Farm Act of 1996 was in force.

The producer support estimate (PSE) indicators measure the price-raising effect of border barriers as well as government subsidies. After two years of substantial decline, the PSE increased sharply in 2004 to a level of about $46 billion (mainly because of higher direct subsidies), but still below the record levels of 1999 and 2000 (table 2.17).

The US government's export subsidy programs are frequently mentioned in foreign reports. However, in 2002, the latest figures reported by the WTO, the United States distributed only $32 million, much lower than the $594 million cap agreed under the WTO agreement. Reported export subsidy figures, however, do not include US export finance, insurance, and guarantee programs, which also play a role in promoting exports. US agricultural exports to Pakistan have obtained, and still qualify for, support under some of these programs.[25] According to the *2004 WTO Trade*

25. According to the USDA, allocations of guaranteed export credit under the GSM-102 program amounted to $92 million for Pakistan in 2004. The total value of officially supported export credits for agricultural shipments was $3.4 billion in 2002.

Policy Review (WTO 2004a, 111), "Government-guaranteed export financing confers an export advantage, because the interest rate charged does not reflect the actual risk of the transaction, but rather the credit rating of the underlying guarantee."

Sanitary and Phytosanitary Measures

SPS measures are sometimes viewed as behind-the-border trade barriers. While not necessarily imposed with protectionist intent, SPS standards can become effective barriers to exports for countries, such as Pakistan, that lack the capacity to ensure compliance. The *2004 WTO Trade Policy Review* (WTO 2004a, 47), for example, cites "actions targeted to safeguard consumer health [as] one of the most frequent reasons behind most US quantitative restriction and controls on trade." The *2002 WTO Trade Policy Review* (WTO 2002a) mentions that some Pakistani measures have likewise led to "occasional discrimination" against foreign products.

Approaches to SPS Issues in Other FTAs

SPS issues have received secondary attention in US FTA negotiations with developing countries.[26] The United States has concentrated on outstanding SPS issues rather than raising new issues related to rights and obligations that go beyond the WTO SPS agreement. By contrast, US partners, particularly those that already benefit from duty-free access under a unilateral preferential scheme, often put a higher priority on SPS issues.

Negotiators often deal with outstanding SPS issues before submitting the pact for legislative approval. The US-Chile FTA and CAFTA-DR present valuable precedents of progress in removing barriers in this area that allow for an optimistic assessment of the potential accomplishments of a US-Pakistan FTA. Certain institutional issues were tackled during CAFTA-DR negotiations, and the United States pledged technical assistance from the relevant US agencies. That scenario could be repeated, especially since Pakistan has a record of requesting technical cooperation with respect to the application of WTO SPS measures, as well as to dealing with specific issues such as fruit fly and aflatoxin as SPS problems affecting key Pakistani agricultural exports, namely fruits (citrus and mango) and rice respectively.[27]

26. However, a major stumbling block to CAFTA's implementation is whether Central American countries will accept USDA certification of meat products to satisfy local SPS standards.

27. Two irradiation plants were established in November 2005. Governmental agencies are designing a strategy for the dairy sector.

Studies by the International Trade Center (2001) and US Commercial Service (2001) claim that the lack of modern food processing, preservation and distribution systems, and the lack of grading and inspection services constitute serious obstacles to the marketing of Pakistan's poultry, milk, fruits, and vegetables. These deficiencies damage more than a quarter of total fruit production. Progress is under way. The 2003–04 trade policy of Pakistan announced programs for fruit and vegetable treatment and processing plants (apples, potatoes, onions, and dates), and the establishment of a national certification program for organic products. Foreign cooperation has facilitated access to food processing (vapor treatment plants) and packaging technology.

Outstanding SPS Issues for the US-Pakistan FTA

US agencies do not currently identify specific concerns about Pakistani SPS measures, and Pakistan has notified very few SPS measures to the WTO Sanitary and Phytosanitary Committee. From a US perspective, the most recent bilateral SPS issue of relevance was successfully resolved in 2002, when Pakistan eliminated SPS-related barriers that limited US exports of apples and cotton (USDA 2002a). US exports of cotton to Pakistan subsequently boomed.

Pakistan import bans on beef and poultry from countries that reported infections of BSE (or avian influenza) do no affect imports from the United States. However, recognition of US inspection systems for fruits, meats and dairy items exported to Pakistan will be an important US interest. Another area that could attract US interest is labeling requirements.

Products derived from biotechnology do not face hurdles in Pakistan. Genetically modified (GM) soybean and soybean oil are currently imported into Pakistan, and the USDA (2005) does not report specific biotechnology-related trade barriers. Pakistan currently does not grow biotech crops (James 2005), but it expects to increase its reliance on GM seeds.

No US SPS measure notified to the WTO has attracted a response from Pakistan. Still, cargo rejection reports show that some Pakistan agricultural exports fail to meet US requirements. Pakistan's agricultural exports have been rejected (among other reasons) for failure to comply with labeling requirements; salmonella and filthy conditions; and the use of color additives or pesticides prohibited in the United States.[28] Rejected products included citrus, mango, rice, and processed foods such as fruit juices and biscuits.

28. Neither the United States nor the European Union systematically tracks the volume or value of rejected cargo. The value estimated by Jaffe and Henson (2005) is low, but these authors also argue that border rejections represent only a small part of the constraints on trade associated with food safety and agricultural health measures.

In April 2005 the United States expanded import eligibility for certain fruits and vegetables. Pakistan was not listed among the countries that benefited from the legislation. The legislation applied principles of regionalization to zones free of fruit flies and established treatment conditions that would serve to qualify certain imports. Similar issues should be of interest to Pakistan. As of December 2005, the USDA Animal and Plant Health Inspection Service (APHIS) was conducting pest-risk assessments on mango and tangerine imports from Pakistan. The trade policy speech of 2003–04 announced a number of policy measures aimed at promoting the export of fresh fruits and vegetables, including the establishment of a national certification for organic products. But while exports of fruits have expanded rapidly since 1990, surpassing $100 million in 2004, exports of vegetables have not shown much improvement.

Recommendations

In previous FTAs with developing countries, the United States has recognized the special sensitivity of agriculture and strived for a balance between development needs and free trade principles. A US-Pakistan FTA will undoubtedly follow the same pattern. Properly managed adjustment, with long phaseout periods for sensitive products, should be feasible. Our recommendations follow.

For Sensitive Products

- A US-Pakistan FTA should expand market access for Pakistani refined sugar and confectionery producers, on roughly similar conditions as granted under CAFTA-DR to Costa Rica, the Dominican Republic, or Honduras. Pakistan may establish a reciprocal duty-free TRQ for US sugar, high fructose corn syrup (HFCS), and confectionery.
- Pakistan should grant duty-free TRQ access for US poultry meats. After an 18-year transition period, all imports should be free. Wheat and corn should qualify for linear tariff elimination within 10 years, and parallel elimination of other charges. However, during the transition period the TCP should retain its ability to set procurement prices and restrict exports of these sensitive commodities. The United States should eliminate immediately its tariffs on these products.
- With regards to the dairy products, US producers will want to establish the "right precedent" for other negotiations and Pakistan will want to protect sensitive items such as milk and butter. The United States and Pakistan should establish large initial duty-free TRQs, with a linear expansion and free trade at the end of a 15-year transition period.

- Beyond the dairy complex, standard US negotiating approach involves TRQs on raw cotton and tobacco. Peanuts, dried onions or tomato paste—products that occasionally qualify for TRQs—should instead qualify for 10-year linear phaseouts. Pakistan should provide immediate duty-free access on raw cotton and commit to a full deregulation of the market within a reasonable period. As highlighted in box 2.1, cotton is an important cash crop and has important implications in poverty reduction.[29] Pakistan should eliminate tariffs on tobacco over 15 years. It may reciprocate on other products.
- US requests for extending TRQ protection for its sensitive products should be balanced with Pakistan's requests for extended protection for vegetable oils. Pakistan should grant significant initial preferences (e.g., initial 50 percent tariff cut), particularly on soybean oils.

Other Products

- While the list of sensitive items is by no means exhaustive, both countries should strive to eliminate their remaining tariffs within 10 years. Vegetables, fruits and nuts, and spices are areas of considerable interest to Pakistan, with different sensitivities on both sides. With few exceptions, the United States should eliminate tariffs on fruits, vegetables, and spices immediately. Pakistan should reciprocate, but it may request 10-year phaseout periods for some processed items (e.g., fresh fruits, jams, juices, and prepared vegetables), but US beef should qualify for immediate duty-free access in Pakistan.
- Pakistan should eliminate tariff peaks established for religious reasons but retain the right to establish regulatory measures that are consistent with the WTO agreement.
- For all other products, regulatory duties and other customs charges should be reviewed and streamlined.

SPS Issues

- The United States should accelerate regulatory changes to allow the importation of fruits and vegetables from Pakistan. Meanwhile, Pakistan should recognize USDA certification for animal products, including beef, poultry products, and dairy items.
- The United States should extend to Pakistan targeted technical assistance to upgrade its domestic SPS regulatory framework. The CAFTA-DR framework should provide the model.

29. Tariffs should not be an obstacle since Pakistan has liberalized cotton imports unilaterally. Tackling the role of the TCP will be more difficult.

Box 2.1 US cotton subsidies

Unlike many agricultural products, cotton generally faces low tariff barriers; therefore, most of the gains from liberalization for cotton producers are crucially related to the elimination of subsidies. EU, US, and Chinese cotton producers receive the bulk of world cotton subsidies. Mid-range estimates suggest that worldwide subsidies and other barriers drive down world cotton prices by 10 to 20 percent.[1] There is however considerable debate as to each country's role in distorting world cotton prices. Estimates depend on the assumptions built into each model. Some models conclude that US subsidies, by virtue of being the largest in absolute dollar terms, are particularly damaging. Other models assume fragmented world markets and conclude that EU cotton subsidies—the highest in the world per unit of cotton production—more directly affect producers in poor African countries.

In September 2004 a WTO panel determined that certain US support policies for cotton were inconsistent with US WTO obligations and that they adversely affect the world price of cotton.[2] Furthermore, the panel rejected the US categorization of certain subsidy programs as "minimally trade-distorting." The *US-Brazil Upland Cotton* dispute was closely followed in Islamabad, and Pakistan participated as a third party in the dispute. World cotton prices affect the supply decisions of Pakistan's textile industry, which increasingly relies on US cotton. The mills push back low world cotton prices to Pakistani farmers, particularly sharecroppers and cotton pickers, with adverse implications for the government's poverty reduction efforts and price support mechanisms.[3]

Anderson and Valenzuela (2006) found that Pakistan's cotton production and exports could increase 5 and 60 percent respectively as a result of a successful conclusion of the WTO Doha Round and full US compliance with the WTO panel. Orden et al. (2006) estimate that a 20 percent increase in real cotton prices would lift almost two million Pakistanis out of poverty and reduce the poverty rate among Pakistan's sharecropper households that produce cotton by 40 to 60 percent.[4] The findings in these two reports illustrate some of the real benefits awaiting a successful conclusion of the WTO Doha Round, keeping in mind of course that other market forces—including world demand for cotton and synthetic fibers, and the rupee/dollar exchange rate—play a larger role in price determination.[5]

The *Upland* cotton case reminded US congress members that inaction on subsidies will come at a price: poor prospects for the WTO Doha Round and strong prospects of further litigation in Geneva. Uruguay, for example, is already considering the establishment of a panel to review the impact of US subsidy programs on rice. Hence, the US Congress is currently under pressure to reassess the terms of many subsidy programs, and eliminate those that cause "serious prejudice" to other WTO members (Schnepf 2005).[6]

(box continues on next page)

Box 2.1 *(continued)*

The United States has stated its commitment to comply with the ruling on the *Upland* cotton case. Administrative changes on export credit guarantee programs were announced in June 2005, and a week later the United States proposed legislation relating to the export credit guarantee and step 2 programs. In February 2006 the US Congress repealed two parts of the Step 2 program. Ensuring full compliance with the ruling will demand further congressional action in 2006, but the largest repercussions of the case will be seen when the 2007 farm bill is drafted. Brazilian authorities, however, have expressed doubts about the United States' full compliance with the ruling.

[1] Orden et al. (2006) conduct a literature review of studies that estimate the impact of subsidies on world cotton prices.

[2] These findings apply to subsidy programs contingent on market prices for the years 1999–2002. However, the panel reported no numeric estimate of the impact.

[3] Note that US and Pakistani cotton participate in differentiated markets due to dissimilar qualities. Cotlook "A" and "B" cotton price indexes have moved in tandem but price differentials have expanded in recent years. However, Gillson et al. (2004) list Pakistan among the group of countries that stand to gain from full elimination of cotton subsidies.

[4] The overall impact for Pakistan's agriculture could be much larger than suggested by those estimates. According to Food and Agriculture Organization estimates, 7 million rural Pakistani households were involved in cotton production in 2001. However, Anderson and Valenzuela (2006) calculate a negative net welfare effect for Pakistan as a whole from the elimination of cotton subsidies.

[5] Likewise other factors could contribute to improving the situation of poor cotton farmers in Pakistan. The introduction (and local adaptation) of genetically modified cotton—increasingly a preferred choice of American, Australian, Chinese, and Indian cotton farmers but still not available in Pakistan—is one prominent example. Aksoy and Beghin (2004) report that the majority of benefits from growing Bt cotton in China went to farmers; and while these findings are not replicated by similar studies in the other producing countries, Anderson and Valenzuela (2006) find large welfare gains for Pakistan as a whole from adoption of genetically modified cotton.

[6] These include mostly wheat, corn, barley, cotton, rice, soybeans, and peanuts.

Source: Baily and Lawrence (2004).