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Pakistan

Grain and Feed Annual

Pakistan Grain and Feed Annual

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Report Highlights:

Pakistan's soon-to-be harvested 2018/19 wheat crop is forecast at 26.3 million metric tons, down slightly from last year's record. Wheat exports are expected to reach 1.0 million metric tons in both 2017/18 and 2018/19 with the aid of a generous export subsidy. Continued improvement in yields points to a near-record 2018/19 rice harvest of 7.4 million metric tons and exports are forecast at 4.0 million metric tons, unchanged from the current marketing year. Pakistan's corn production continues to grow as farmers adopt hybrid seeds; 2018/19 production is forecast at a record 6.3 million metric tons.

Commodities:
Wheat

Production:

Wheat is one of the four main (the others being rice, cotton, and sugarcane) agricultural crops in Pakistan, with 80 percent of farmers growing it on an area of around 9.0 million hectares (close to 40 percent of the country's total cultivated land) during the winter or "Rabi" season. Marketing year (MY) 2018/19 wheat production is forecast at 26.3 million metric tons, one percent lower than the record production from a year ago. Area decreased marginally as some farmers switched to sugarcane and sunflower particularly in Punjab. Overall fertilizer offtake was down 11 percent from a year ago during planting, but jumped dramatically during January, suggesting that farmers were working to top dress their crops. Weather conditions have generally been favorable, though some late season rains cold lead to lodging, a factor that is included in this forecast. The Government maintained the wheat support price for the MY 2018/19 crop at last year's level of Rs.1,300 per 40 kilogram ($310 per metric ton). Wheat production area by province is shown in Table 1.

Table 1: Wheat Area by Province MY 2018/19

Province	**Area (Million Hectares)**	**Percentage of Total Area**
Punjab	6.62	73.9
Sindh	1.18	13.2
KPK	0.76	8.5
Baluchistan	0.39	4.4
Total	8.95	100

About two-thirds of the country's water for irrigation is sourced from snow and glacier melts, with the balance supplied by seasonal monsoon rains. Stored water for irrigation is held mainly in two large reservoirs, Tarbela and Mangla, for use during the summer and during the Rabi/winter growing season. Since the completion of the nation's irrigation system in the 1970s, demand for water has increased by more than 50 percent, while storage capacity has decreased by about one-third due to silting. These water supply challenges, if not addressed, could affect wheat production in the future. Farmers typically supplement surface irrigation by pumping ground water. 85 percent of Pakistan's wheat production is dependent upon irrigated water.

The effect of water shortages is traditionally more severe in the Sindh province than in Punjab. Many parts of Sindh's ground water are alkaline and not fit for irrigation, thereby necessitating a greater reliance on canal water.

Consumption:

Wheat is Pakistan's dietary staple. Pakistan has a variety of traditional flat breads, often prepared in a traditional clay oven called a tandoor. The tandoori style of cooking is common throughout rural and urban Pakistan. Wheat flour currently contributes 72 percent of Pakistan's daily caloric intake with per capita wheat consumption of around 124 kg per year, one of the highest in the world. MY 2018/19 consumption is forecast at 25.3 million metric tons. As incomes increase and a stronger middle class emerges, consumers are gradually shifting towards more dairy, meat, and other higher-value food products in their diet. Over the long term, this shift to a more balanced diet has the potential to limit the pace of growth in wheat consumption. Given the degree to which the wheat support price lifts market prices, Pakistan's wheat will continue to be significantly more expensive than in the international market. During 2017, domestic wheat prices remained stable and price of the price wheat flour in December 2017 was almost the same as in December 2016. Out of the total demand of 25.3 million metric tons, only five percent will be used in the feed industry, and the remaining 95 percent will be used for planting and human consumption.

Pakistan's wheat milling industry is privately owned. There are about 1,000 flour mills in Pakistan, which meet the consumption needs of about 40 percent of the population, with the balance met by on-farm consumption. The disbursement of government-owned wheat to flour mills is managed in an effort to ensure that sufficient wheat is available throughout the year.

In urban areas and among affluent consumers, consumer preference is shifting from higher whole grain to lower extraction flour and traditional flat bread to western-style, loaf bread. Traditional home-ground flour is also losing favor to commercially milled flour. Specialized products like cereals suited to the changing life styles in the urban areas are also gaining interest among consumers.

Trade:

Pakistan has authorized a sizeable export subsidy to facilitate exports of wheat. The federal and provincial governments will offset the price of up to 2.0 million metric tons (1.5 million from the Province of Punjab and 500,000 metric tons from the Province of Sindh) of wheat exports with a subsidy of up to $159 per metric ton. The generous subsidy, which is in effect through June 30, 2018, could result in public expenditures of up to $320 million if the full amount is exported at the full subsidy.

Pakistan's MY 2017/18 wheat exports are estimated as follows -- 300,000 metric tons of flour (equivalent to 300,000 tons of wheat as a result of a 100 percent extraction rate) to Afghanistan (200,000 of which will benefit from the subsidy) and 700,000 tons of subsidized exports to other destinations prior to the conclusion of the marketing year. Non-subsidized exports to Afghanistan continue to decline due to lower-priced competition from other suppliers and increased regulatory vigilance along the border.

Exports during 2018/19 are also expected to reach 1.0 million metric tons, reflecting an additional 900,000 tons of subsidized exports (100,000 tons of flour to Afghanistan) plus a small amount of non-subsidized flour exports to Afghanistan. At this stage it appears unlikely that the

entire 2.0 million tons of wheat eligible for a subsidy will be exported given that the subsidy is only available through June 30.

Pakistan supports the domestic wheat price with a generous support price of $310 per metric ton. While the government only procures about a quarter of the crop (half remains in villages and a quarter enters the "open" market directly) the high procurement price effectively boosts the price of domestic wheat well above prevailing international prices, effectively halting unsubsidized exports to all but neighboring Afghanistan and occasional regional government-to-government sales. The domestic market is insulated from imports by a 60 percent "regulatory duty." The tariff is well below Pakistan's bound tariff rate (the maximum tariff rate Pakistan can establish) for wheat of 150 percent. Consequently, Pakistan is not likely to import any significant quantity of wheat.

Stocks:

Respective MY 2018/19 and MY 2017/18 ending stocks are estimated at the two highest levels on record. Stocks would have been notably higher if the government had not decided to subsidize exports of up to 2.0 million metric tons of wheat. Wheat is procured and maintained through provincial food departments and the federal agency known as the Pakistan Agricultural Storage and Services Corporation (PASSCO). In 2017, the GOP procured 6.1 million metric tons of wheat from the local harvest, pushing government-held stocks to a record 10.8 million metric tons at the conclusion of the 2017 harvest. Rising stock levels are largely the result of rising annual procurements in the face of flat offtake levels. It is not entirely clear why the government has increased procurement levels in recent years, but government purchases give a guaranteed return to the farmers who are able to sell to the government and provide a strong incentive for farmers to continue producing wheat during the Rabi (winter season), thereby supporting Pakistan's goal of self-sufficiency in wheat. However, as global wheat prices have declined, the pursuit of wheat self-sufficiency through support prices has become increasingly costly.

2018 procurement is again expected to reach 6 million metric tons, boosting public stock levels to around 11 million tons shortly after the start of the marketing year. The GOP has come under pressure from international and domestic sectors to end its wheat procurement operations and let the markets and the private sector handle the efficient allocation of resources.

Policy:

Pakistan maintains a largely government controlled wheat marketing system and the government considers wheat as the key strategic commodity. The federal government sets a minimum guaranteed support price or procurement price and an issue price for wheat sold to flour mills. Through provincial food departments, the GOP procures wheat from farmers at the support price and then releases wheat to the flour mills at the government fixed issue price. The issue price is set at a rate that captures some of the cost of buying and storing the wheat, but there are significant implicit costs that are not fully captured. Wheat prices and the movement of wheat are controlled at the provincial and district levels. Grain stocks are procured and maintained by the provinces.

Farmers in Pakistan retain about 60 percent of their wheat production for seed, and village and household food consumption. For wheat that is marketed, the government is the main buyer of farmers' wheat, with actual volumes of government procurement often reaching 25 to 30 percent of total production, driven by both food security and market intervention objectives. The remaining 15 percent of the harvest is purchased by the private sector. While food security is an important concern in Pakistan, high volumes of state wheat procurement make it harder to attract private sector trade and investment in the postharvest supply chain.

Production, Supply and Demand Data Statistics:

Wheat	**2016/2017**		**2017/2018**		**2018/2019**	
Market Begin Year	**May 2016**		**May 2017**		**May 2018**	
Pakistan	**USDA Official**	**New Post**	**USDA Official**	**New Post**	**USDA Official**	**New Post**
Area Harvested	9224	9200	9050	9050	0	8950
Beginning Stocks	3815	3815	4351	4365	0	4895
Production	25633	25600	26500	26600	0	26300
MY Imports	3	50	30	30	0	30
TY Imports	3	50	30	30	0	30
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	29451	29465	30881	30995	0	31225
MY Exports	600	600	1200	1000	0	1000
TY Exports	600	600	1200	600	0	900
Feed and Residual	800	800	1000	1100	0	1200
FSI Consumption	23700	23700	24000	24000	0	24100
Total Consumption	24500	24500	25000	25100	0	25300
Ending Stocks	4351	4365	4681	4895	0	4925
Total Distribution	29451	29465	30881	30995	0	31225
Yield	2.7789	2.7826	2.9282	2.9392	0	2.9385
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:
Rice, Milled

Production:

Rice is Pakistan's third largest crop in terms of area sown, after wheat and cotton. About 10 percent of Pakistan's total agricultural area is under rice during the summer or "Kharif" season. Pakistan is a leading producer and exporter of Basmati and IRRI rice (white long grain rice). Rice ranks second among the staple food grain crops in Pakistan and exports are a major source of foreign exchange earnings. Pakistan has two major rice-producing provinces, namely Punjab and Sindh. Both provinces account for nearly 90 percent of total rice production. Punjab, due to its agro-climatic and soil conditions, produces 100 percent of the Basmati rice in the country. Pakistan's "Kalar" bowl area, a local term that refers to a type of soil suitable for Basmati production, is famous for producing Basmati rice and is located between the Ravi and Chenab rivers in Punjab. IRRI rice is grown in both Punjab and Sindh.

MY 2017/18 production is now estimated at a record 7.5 million metric tons up 300,000 tons from the previous estimate, in accordance with the latest government of Pakistan data. MY 2018/19 rice production is forecast at an aggressive 7.4 million metric tons, reflecting expectations of continued strong yields. Rice yields have grown steadily over the past decade as higher yielding basmati varieties and long grain hybrids have gained increasing acceptance among farmers. Hybrids have done especially well in Sindh where they account for 50 percent of planting, up from 35 percent just a few years ago. Better agronomic practices, more aggressive spraying, and resistant seed varieties have helped to reduce the incidence of bacterial leaf blight in recent years. More frequent flooding since 2010 has deposited nutrient rich soil in key growing areas, helping to further boost yields.

Rice Growing areas of Pakistan are broadly classified into the following four zones;

Zone I	Northern high mountainous areas of Khyber Pakhtunkhwa (Swat and Khagan) with sub-humid climate, average rainfall of 750-1000 mm
Zone II	Lies between the Ravi and Chenab rivers in the central Punjab. Sub-humid, sub-tropical climate with average rainfall of 400-700mm. This is the famous premium zone and Basmati rice is exclusively produced in this zone along the Kalar tract consisting of Sailkot, Sheikhupura, Narowal, Gujranwala, Hafizabad and Lahore Districts
Zone III	West bank of Indus river in upper Sindh and Balochistan. Larkana, Jacobabad (Sindh), Nasirabad and Jaffarabad (Balochistan). High temperature and sub-tropical climate with average rainfall of 100 mm make it best suited for long grain rice.
Zone IV	Indus delta basin in Lower Sindh (Badin and Thatta Districts). Its climate is arid tropical and is suited for coarse varieties.

Consumption:

MY 2018/19 consumption is forecast at 3.5 million metric tons as compared to current year's revised consumption of 3.4 million metric tons. The increase in consumption is due to increase in population in accordance with the latest census. Unlike many other Asian countries, rice is not considered a staple food crop in Pakistan. Traditionally, 40 to 45 percent of the crop is used for local consumption, with the balance exported. Pakistanis, in general, prefer the higher priced Basmati rice if they can afford it, if not they consume long grain IRRI rice, but wheat is the favored staple. According to trade sources an estimated 200,000 tons of 40-100 percent broken rice is used in poultry and animal feed annually.

Trade:

Pakistan, in the current marketing year, has so far exported 1.4 million metric tons of rice compared to 1.2 million metric tons during the same period a year ago. MY 2017/18 rice exports are projected at 4.0 million metric tons, an increase of 200,000 tons from the current USDA estimate. A recent 10 percent devaluation in the rupee is expected to support exports in the coming months. Currently the price for Pakistani 5% broken rice is hovering around $410 per metric ton FOB Karachi. MY 2018/19 exports are projected at 4.0 million metric tons. Vietnam, Thailand and India are the main competitors of Pakistani rice. Pakistan's rice exports during the current marketing year are provided below in Table 2, this data may be subject to eventual revision. Pakistan imposes a tariff of 10 percent on rice imports.

Table 2: Pakistan Rice Exports MY 2017/18 (Nov/October)

Months	**MY 16/17**	**MY 17/18**
November	438,399	435,688
December	391,161	478,062
January	390,690	489,052
Total	**1,220,250**	1,402,802

Source: Pakistan Bureau of Statistics

Rice is a major Pakistani export to the United States. During 2017 Pakistan's rice exports to the United States remained stable and were valued at $26.5 million as compared to $26.7 million in 2016.

Policy:

Rice trade in Pakistan is carried out by the private sector with little or no intervention from the government. Since the publicly-run Rice Export Corporation of Pakistan was disbanded during 90's, Pakistan's rice traders have responded well to market liberalization and over the years have become major players in the world rice trade. The milling industry made significant investments in state-of-the-art processing machinery, but Pakistan exports most of its rice in bulk with no modern packaging and branding. Export companies could be doing more to develop brands and a more significant presence in foreign markets. However, the export industry is comprised of a large number of relatively small firms that are often family-run and accustomed to traditional trading practices. However, that is changing and Pakistan's rice exporters are becoming increasingly active advocates for their industry and their trade interests. With time, the industry is expected to adopt more strategic and brand-based approaches to rice exporting.

Production, Supply and Demand Data Statistics:

Rice, Milled	**2016/2017**	**2017/2018**	**2018/2019**

Market Begin Year	Nov 2016		Nov 2017		Nov 2018	
Pakistan	**USDA Official**	**New Post**	**USDA Official**	**New Post**	**USDA Official**	**New Post**
Area Harvested	2687	2700	2700	2800	0	2800
Beginning Stocks	1122	1122	1282	1282	0	1382
Milled Production	6850	6850	7200	7500	0	7400
Rough Production	10276	10276	10801	11251	0	11101
Milling Rate (.9999)	6666	6666	6666	6666	0	6666
MY Imports	10	10	0	0	0	0
TY Imports	10	10	0	0	0	0
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	7982	7982	8482	8782	0	8782
MY Exports	3600	3600	3800	4000	0	4000
TY Exports	3600	3600	3800	3800	0	3800
Consumption and Residual	3100	3100	3300	3400	0	3500
Ending Stocks	1282	1282	1382	1382	0	1282
Total Distribution	7982	7982	8482	8782	0	8782
Yield (Rough)	3.8243	3.8059	4.0004	4.0182	0	3.9646
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:
Corn

Production:

Corn is fast becoming a major crop in Pakistan and is the third most important cereal after wheat and rice. Though corn is mostly known as a Rabi (winter) crop it is normally cultivated twice a year in Punjab and once a year in Khyber Pakhtunkhwa (KPK). The first cultivation season is known as spring (winter) season that normally starts in the middle of December in Punjab. The summer season begins in September and lasts till the start of December in both Punjab and KPK. The two provinces account for 99 percent of production. Yields are lower in Punjab due to the high temperatures, but conditions in KPK are optimal in the fall. Approximately 65 percent of the maize in Pakistan has access to irrigation; the remainder is farmed under rain-fed conditions.

MY 2018/2019 production is forecast at a record 6.3 million tons three percent higher than the revised production of 6.1 million tons for the current marketing year. The increasing adoption of hybrid corn seed, both imported and domestically produced, which now accounts for 65 percent of planted area, is rapidly driving yields higher to meet demand from the poultry and livestock

sectors. While it is unusual to forecast a record crop, the growing popularity of hybrids is expected to boost yields again. An estimated 50,000 hectares are used to produce corn silage.

Table 3: Trends in Area Production and Yield of Maize in Pakistan

Years	Area (000 Ha)	Production (000 Tons)	Yield (Kg/ha)
2001-02	941.6	1,664.4	1,768
2002-03	935.5	1,737.1	1,857
2003-04	947.1	1,897.4	2,003
2004-05	981.8	2,797.0	2,849
2005-06	1,042.0	3,109.6	2,984
2006-07	1,016.9	3,088.4	3,037
2007-08	1,051.7	3,604.7	3,427
2008-09	1,052.1	3,593.0	3,415
2009-10	935.1	3,261.5	3,488
2010-11	974.2	3,707.0	3,805
2011-12	1,087.3	4,338.3	3,990
2012-13	1,059.05	4,220.1	3,984
2013-14	1,168.5	4,944.2	4,231
2014-15	1,142.6	4,937.1	4,323
2015-16	1191.2	5,270.9	4,424

Source: Agricultural Statistics of Pakistan

Consumption:

The poultry industry is the main buyer of corn, utilizing almost 65 percent of the production in poultry feed. Wet milling consumes about 15 percent and 10 percent is used to make dairy feed concentrate while the remaining production is used for human consumption in the form of bread made from the flour and, to a lesser extent, planting seed purposes. The poultry sector is one of the most modern and vibrant segments of Pakistani agriculture. There are approximately 165 feed mills for poultry feed in the country with an installed capacity of ten million metric tons of feed.

Trade:

The Government of Pakistan imposes a thirty percent regulatory duty and ten percent customs duty on the import of corn, shielding producers from imports. The Pakistan Poultry Association has reportedly sought a tariff reduction, but without results thus far. The duty has resulted in no corn imports, in spite of the fact that Pakistan's domestic corn prices are much higher than international prices. The domestic price of corn at present is around $259 per ton, while according to trade sources the price of imported corn C&F Karachi stands at around $195 per ton. The feed industry has experimented with imported sorghum and distiller dried grains as an alternative to corn, both attract lower tariffs and taxes than can corn.

Policy:

Corn trade in Pakistan is carried out by the private sector with little or no intervention from the government. The government does not fix the procurement price for the commodity and is not involved in its procurement and marketing. Government efforts in corn are limited to some research and extension activities to increase the productivity of the crop.

The growth in corn has been led by the demand in the poultry and dairy feed sectors. Realizing the potential for immense growth, seed companies have led the way towards introducing hybrid corn varieties in Pakistan. The sales of corn hybrid seed vary according to seasons as 60 percent of total sales are realized in spring and 40 percent in autumn. The seed companies provide a comprehensive package to farmers including technology transfer and extension services. The field teams of the private seed companies have been pivotal in establishing corn as one of the rapidly growing grain crops in Pakistan. Corn farmers benefit from fertilizer, water, and power subsidies, a common fillip for most farmers in Pakistan

Production, Supply and Demand Data Statistics:

Corn	**2016/2017**		**2017/2018**		**2018/2019**	
Market Begin Year	**Jul 2016**		**Jul 2017**		**Jul 2018**	
Pakistan	**USDA Official**	**New Post**	**USDA Official**	**New Post**	**USDA Official**	**New Post**
Area Harvested	1348	1348	1300	1300	0	1320
Beginning Stocks	1455	1455	1674	1255	0	955
Production	6000	6100	6000	6100	0	6300
MY Imports	19	0	20	0	0	0
TY Imports	25	0	20	0	0	0
TY Imp. from U.S.	11	0	0	0	0	0
Total Supply	7474	7555	7694	7355	0	7255
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	4000	4800	4500	4900	0	4900
FSI Consumption	1800	1500	1500	1500	0	1500
Total Consumption	5800	6300	6000	6400	0	6400
Ending Stocks	1674	1255	1694	955	0	855
Total Distribution	7474	7555	7694	7355	0	7255
Yield	4.451	4.5252	4.6154	4.6923	0	4.7727

Attachment	**Attachment Link**
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