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Report Highlights:

MY2020/21 wheat production is forecast at 25.7 Million Metric Tons (MMT), nearly six percent higher than the revised wheat production of 24.3 MMT a year ago. There have been reports of locust attacks from Punjab and Sindh, but the wheat crop is largely unaffected. Pakistan's MY 2019/20 wheat exports are estimated to be around 600,000 metric tons. MY 2019/20 rice production estimate is revised downward to 7.2 MMT in accordance with the official data. MY 2020/21 rice production is forecast at 7.4 MMT, reflecting expectations of strong yields. MY 2019/20 and 2020/2021 rice exports are projected at a steady 4.4 MMT. MY 2020/2021 corn production is forecast at 7 MMT while the MY 2019/2020 production estimate is revised upward to 6.9 MMT. The forecast and revised estimates reflect record production and the expectation of increased corn production and yields.

Commodities:

Wheat

Production:

Wheat is one of the four main agricultural crops in Pakistan (i.e., rice, cotton, and sugarcane), with 80 percent of farmers growing it on an area of around 9 million hectares (close to 40 percent of the country's total cultivated land) during the winter or "Rabi" season. Marketing year (MY) 2020/21 wheat production is forecast at 25.7 million metric tons (MMT) six percent higher than last year's revised wheat production of 24.3 MMT, mainly due to an increase in area and urea fertilizer offtake, conducive weather conditions, and appropriate rainfall during the growing season. Wheat planting area is four percent higher than last years. Overall urea fertilizer offtake registered a five percent increase over last year. Weather conditions have generally been favorable although some late season rains could lead to lodging, a factor that is included in this forecast. Incidents of wheat rust have reemerged since 2019 and there have been reports of rust in some areas again this year, although the damage so far has been limited and localized. The main reason that rust has not been able to cause extensive damage to the wheat crop, in spite of favorable conditions, is the use of rust resistant varieties, which were developed in partnership with the USDA funded wheat enhancement program.

There have been reports of locust attacks from Punjab and Sindh. The majority of the attacks occurred in desert areas, but swarms have also been reported in the Bahawalpur, Bahawalnagar and Rahim Yar Khan Districts of South Punjab as well as Dadu, Nawabshah and Sanghar districts in Sindh. The wheat crop is largely unaffected by the locust attacks and the swarms are mainly impacting oilseed crops like rapeseed/canola and fodder crops like Alfalfa. Although the effects of locust attacks on this year's wheat crop is minimal, it may be noted that these types of incidents in the winter is unprecedented and they are also migrating to new areas. Consequently, locust swarms will be a potential threat for future wheat crops.

The government increased the wheat support price for the MY 2020/21 crop to Rupees (Rs.) 1400 per 40 kilograms ($226 per metric ton) from last year's level of Rs.1300 per 40 kilograms ($210 per metric ton). Wheat production area by province is shown in Table 1.

Table 1: Wheat Area by Province MY 2020/20

Province	Area (Million Hectares)	Percentage of Total Area
Punjab	6.53	71.5
Sindh	1.46	16.0
KPK	0.76	8.4
Baluchistan	0.38	4.1
Total	9.13	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 the Rabi/winter growing seasons. 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. About 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 kilograms (kg) per year, one of the highest in the world. MY 2019/20 consumption is estimated at 25.5 MMT while MY 2020/21 consumption is forecast at 25.6 MMT. 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. In 2019, domestic wheat prices increased by twenty percent as compared to 2018 mainly due to tight

stock positions, speculation, and mismanagement by the government. Out of the total demand of 25.5 MMT, 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's MY 2019/20 wheat exports are now estimated to be around 600,000 tons. The wheat is mainly exported to Sri Lanka, Bangladesh, Gulf countries, Afghanistan, and some African countries. Due to depleting stocks and rise in prices, the government banned wheat exports in October 2019 and since then, Pakistan has not exported wheat. The Pakistan government announced that it would allow 300,000 tons of duty-free wheat imports until March 2020. As the harvest of the local wheat crops started in late February in some parts of Sindh, the imports during this current marketing year are not likely to exceed 100,000 tons.

Pakistan supports the domestic wheat industry with a guaranteed wheat price of $226 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 procurement price effectively sets the market price of wheat in Pakistan. The domestic market is insulated from imports by a 60 percent regulatory duty (temporarily waived this year in January till March). The tariff is well below Pakistan's bound tariff rate (the maximum tariff rate Pakistan can establish) for wheat of 150 percent.

Stocks:

Respective MY 2020/21 and MY 2019/20 ending stocks are estimated at around 1.68 and 1.78 MMT. Wheat is procured and maintained through provincial food departments and the federal agency known as the Pakistan Agricultural Storage and Services Corporation (PASSCO). 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 continued goal of wheat self-sufficiency. However, as global wheat prices have declined, wheat self-sufficiency through support prices has become increasingly costly.

Pakistan's 2020 domestic wheat procurement is expected to be around 8.2 MMT, boosting public stock levels to around ten MMT 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 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 fixed government 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, 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	2018/2019		2019/2020		2020/2021	
Market Begin Year	May 2018		May 2019		May 2020	
Pakistan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	8800	8800	8798	8798	0	9130
Beginning Stocks	4748	4748	2586	3486	0	1786
Production	25100	25100	25600	24300	0	25700
MY Imports	3	5	5	100	0	100
TY Imports	3	5	5	5	0	100
TY Imp. from U.S.	0	0	0	5	0	0
Total Supply	29851	29853	28191	27886	0	27586
MY Exports	1965	1000	500	600	0	300
TY Exports	1649	800	500	600	0	300
Feed and Residual	1200	1200	1200	1200	0	1200
FSI Consumption	24100	24100	24200	24300	0	24400
Total Consumption	25300	25300	25400	25500	0	25600
Ending Stocks	2586	3486	2291	1786	0	1686
Total Distribution	29851	29786	28191	27886	0	27586
Yield	2.8523	2.8523	2.9098	2.762	0	2.8149
(1000 HA) ,(1000 MT) ,(MT/HA)						

Rice, Milled

Production:

Rice is Pakistan's third largest crop, after wheat and cotton, in terms of area sown. About 10 percent of Pakistan's total agricultural area is under rice production 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 2019/20 production estimate is revised downward to 7.2 MMT, in accordance with the official data. This revised production is 100,000 tons less than the last year's production. Reports from the field suggest that unusual day and night temperature variations during September and October 2019 as the reason for this slight decline in production. MY 2020/21 rice production is forecast at 7.4 MMT, reflecting expectations of continued strong yields. The slight reduction in MY 2019/20 production is considered as an anomaly caused by unusual temperature variation. 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 60 percent of planting, up from 35 percent just a few years ago. Better agronomic practices, more aggressive spraying, and resistant seed varieties have helped 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 millimeters (mm)
Zone II	Lies between the Ravi and Chenab rivers in the central Punjab. Sub-humid, sub-tropical climate with average rainfall of 400-700 mm. 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). Climate is arid tropical and is suited for coarse varieties.

Consumption:

MY 2019/20 consumption is revised downward from 3.3 to 3 MMT mainly due to seven percent increase in the domestic price in 2019. Rice is not a staple diet in Pakistan and as an optional diet more sensitive to price fluctuations. Industry sources report that consumption has declined. Rising life styles especially in urban areas have also contributed to changes in consumption patterns as people tend to increase meat and dairy products in their diets.

MY 2020/21 consumption is forecast at 3.1 million metric tons. 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 1.2 MMT of rice compared to 1.3 MMT during the same period a year ago. Vietnam, Thailand, and India are the main export competitors for

Pakistani rice. MY 2019/20 and 2020/2021 rice exports are projected at a steady 4.4 MMT.

Impact of COVID-19 on Rice Exports

Unlike other rice exporting countries, Pakistan has not banned export of rice due to COVID-19. Currently, Pakistan is under a stay-at-home decree that is affecting transportation of commodities. Although the government has allowed transportation of commodities, exporters are still facing other issues like labor shortages and increased number of transportation checkpoints around the country. The rice industry has the capacity to increase exports and may capitalize on trading bans implemented by other countries. However, this scenario depends on the COVID -19 situation in Pakistan.

Pakistan's rice exports during the current marketing year are provided below in Table 2. This data may be subject to revisions. Pakistan imposes a tariff of 10 percent on rice imports.

Table 2: Pakistan Rice Exports MY 2019/20 (Nov/October)

Months	**MY 18/19**	**MY 19/20**
November	385,311	440,488
December	468,599	403,923
January	495,280	364,169
Total	**1,349,190**	**1,208,580**

Source: Pakistan Bureau of Statistics

Emerging Trends in Rice Exports

The share of basmati in overall exports matrix is increasing and this trend is likely to continue in this marketing year. Pakistan has a competitive advantage in the production of basmati rice and the government is eager to capitalize on this. The government is supporting research and development of higher yielding basmati rice varieties.

Exports to China are increasing due to the overall trade linkages of generated by the China Pakistan Economic Corridor (CPEC) agreement. Pakistani rice exporters are also taking advantage of the close geographical location to increase exports to the United Arab Emirates (UAE). The Rice Exporters Association of Pakistan (REAP) has sent special trade missions to the UAE and East Africa and expects exports to these markets to grow during the current marketing year. Rice exports to the European Union (EU) are likely to remain the same. Rice is a major Pakistani export to the United States. During 2019, Pakistan's rice exports to the United States increased by 15 percent and were valued at $38 million as compared to $31 million in 2018.

Policy:

Rice trade in Pakistan is carried out by the private sector with little or no intervention from the government. The government is encouraging REAP to be more proactive, thus, it has sent trade delegations to different countries. REAP planned to visit other countries, but these trips are on hold due to the current Covid-19 situation. The continuing devaluation of the Pakistani rupee against major currencies is making Pakistani rice more competitive in international markets.

The Pakistan government's role in the rice sector has largely been limited to research and development of rice varieties and providing extension services to farmers. The government is also working with REAP to increase the share of high valued Basmati in the overall rice export matrix. REAP has identified other Gulf and EU countries as potential new markets for basmati exports. Since the

publicly-run Rice Export Corporation of Pakistan was disbanded in the 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 form with no modern packaging and branding. At present, 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, this practice is changing and Pakistan's rice exporters are becoming increasingly vocal for their industry and their trade interests.

Production, Supply and Demand Data Statistics:

Rice, Milled	2018/2019		2019/2020		2020/2021	
Market Begin Year	Nov 2018		Nov 2019		Nov 2020	
Pakistan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	2880	2880	2900	3000	0	3000
Beginning Stocks	1424	1424	924	924	0	724
Milled Production	7300	7300	7500	7200	0	7400
Rough Production	10951	10951	11251	10801	0	11101
Milling Rate (.9999)	6666	6666	6666	6666	0	6666
MY Imports	0	0	0	0	0	0
TY Imports	0	0	0	0	0	0
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	8724	8724	8424	8124	0	8124
MY Exports	4500	4500	4400	4400	0	4400
TY Exports	4600	4600	4400	4400	0	4300
Consumption and Residual	3300	3300	3300	3000	0	3100
Ending Stocks	924	924	724	724	0	624
Total Distribution	8724	8724	8424	8124	0	8124
Yield (Rough)	3.8024	3.8024	3.8797	3.6003	0	3.7003
(1000 HA) ,(1000 MT) ,(MT/HA)						

Corn

Production:

Corn production in Pakistan has almost doubled in the last decade. Corn is fast becoming a major crop in Pakistan and is the third most important cereal after wheat and rice. If the present growth trend in corn production continues, it is likely to overtake rice production the next several years. Although 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 until 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 2020/2021 production is forecast at 7 MMT while MY 19/20 production estimate is revised upward to 6.9 MMT in accordance with the government data. Both the forecast and revised estimate reflect record production and depicts the momentum for increase in Pakistan corn production and yields. 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 is 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
2016-17	1348.2	6,134.0	4.55
2017-18	1230.2	5701	4.64
2018-19	1320	6100	4.62

Source: Agricultural Statistics of Pakistan

Consumption:

The rise in corn production is directly linked to the growth of the poultry industry. The poultry industry is the main buyer of Pakistan 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 180 feed mills producing poultry feed in the country with an installed capacity of 10 MMT of feed.

While the impact of this phenomenal growth on the rural economy and farmer livelihood is self-evident, its implications with respect to downstream industry and national food security is more profound and far reaching. Poultry, in recent years, has emerged as the most inexpensive and accessible animal protein for consumers, owing much to the abundant availability of maize grain.

Future Consumption Trends:

The poultry industry is likely to be the main driver for the continuous growth of corn crop in Pakistan. However, in three to five years, the consumption matrix is likely to shift more towards dairy and the aquaculture sectors. The dairy sector is rapidly developing in Pakistan with number of new commercial

dairy farms opening every year. There is also a utilization shift from local cow breeds to Holstein cows and consequently generating demand for higher quality feed requirements. Pakistan's nascent aquaculture sector is also projected to grow quickly and is expected to be another driver for increased corn demand in Pakistan.

Trade:

The Government of Pakistan imposes a thirty percent regulatory duty and ten percent customs duty on imported corn, shielding producers from imports. The Pakistan Poultry Association has reportedly sought a tariff reduction, but without success. The duty has resulted in no corn imports, in spite of the fact that Pakistan's domestic corn prices are higher than international prices. The feed industry has experimented with imported sorghum and distiller dried grains as an alternative to corn, both attract lower tariffs and taxes than 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. Going forward, sustainable growth of the maize crop will hinge on further increases in productivity and adoption of more innovative technologies that reduce costs.

Production, Supply and Demand Data Statistics:

Corn	2018/2019		2019/2020		2020/2021	
Market Begin Year	Jul 2018		Jul 2019		Jul 2020	
Pakistan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1320	1320	1330	1330	0	1385
Beginning Stocks	963	963	758	878	0	853
Production	6100	6100	6100	6900	0	7000
MY Imports	25	25	25	25	0	25
TY Imports	23	20	20	20	0	20
TY Imp. from U.S.	9	5	0	0	0	0
Total Supply	7088	7088	6883	7803	0	7878
MY Exports	30	10	50	50	0	50
TY Exports	45	10	50	50	0	50
Feed and Residual	4800	4700	4800	5300	0	5500
FSI Consumption	1500	1500	1500	1600	0	1600
Total Consumption	6300	6200	6300	6900	0	7100
Ending Stocks	758	878	533	853	0	728
Total Distribution	7088	7088	6883	7803	0	7878
Yield	4.6212	4.6212	4.5865	5.188	0	5.0542
(1000 HA) ,(1000 MT) ,(MT/HA)						

Attachments:

No Attachments