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Prepared By: Asmat Raza

Approved By: Christopher Rittgers

Report Highlights:

Due to lower area and yields, wheat production in 2022/23 is forecast at 26.4 million metric tons (MMT), four percent lower than last year. To make up for the expected domestic shortfall, in 2022/23 wheat imports are forecast at 1.5 MMT. Rice production is forecast at record 9 MMT, which will drive exports to a projected 5 MMT. Benefitting from imported U.S. seed, corn production is forecast to reach another production record of 8.9 million tons in 2022/23.

Executive Summary

Due to lower area and reduced fertilizer application, marketing year (May/April) (MY) 2022/23 wheat production is forecast at 26.4 million metric tons (MMT), four percent lower than last year. To make up for the expected domestic shortfall, 2022/23 wheat imports are forecast at 1.5 MMT. Only a moderate increase in wheat-based product consumption is forecast as diets gradually shift to more protein and less carbohydrate. The 2021/22 wheat import estimate is unchanged at 2.0 MMT, with most wheat imports sourced from Ukraine.

The MY (November/October) 2022/23 rice production is forecast at a record 9 MMT. Rice exports for 2021/22 and 2022/2023 are projected at 4.5 and 5 MMT, respectively. Rice continues to be one of Pakistan's leading exports. Corn production in MY (July/June) 2022/2023 is forecast at 8.9 MMT, and 2021/22 production estimate is revised upward to 8.3 MMT. Both the forecast and revised estimate reflect record production and a continuous trend for increased corn yields and production. Corn demand from the poultry sector and the expanding dairy sector continues to drive increased use and underpins the growth in production.

Wheat:

Production:

Due to expectations for a two percent decline in harvested area and slightly less average yield, wheat production in 2022/2023 is forecast at 26.4 MMT, about 3.6 percent lower than 2021/22. Area and yield expectations are lower as farmers faced both shortages and higher priced inputs at planting and during crop development. Unavailability and/or high prices of nitrogen fertilizer led to an estimated 8 percent reduction in urea fertilizer application. However, growing conditions were generally good, with adequate rainfall during key crop development stages in January and February. The good growing and adequate moisture conditions should boost yields higher than otherwise indicated by the lower fertilizer usage rates. Furthermore, no serious pest outbreaks have been reported, including an absence of locust attacks in the crop this year. Reports from the region indicate low incidence of locusts along traditional local pathways, implying low risk of locust infestations through the end of harvest. While the wheat crop has traditionally been susceptible to rust, the increased use of rust resistant varieties limits the risk, and the disease is reportedly an insignificant factor this year. Crop harvest will begin in earnest in early April 2022 and continue through May.

In addition to the input problems specific to this year's crop development, several perennial and persistent challenges hinder increases in wheat productivity, including: 1) increasingly variable temperature and moisture patterns; 2) a trend for higher temperatures during March, the key grain filling stage, and rainfall during harvest months of May and June; 3) lack of improved variety development; 4) continued use of flood irrigation; 5) intermittent irrigation water shortages; and 6) persistently high energy costs to run irrigation pumps.

Nonetheless, wheat continues to be one of Pakistan's four main agricultural crops, along with rice, cotton, and sugarcane. In terms of its contribution to food security and area grown, wheat is Pakistan's most important crop. The 9 million hectares of wheat area is about 40 percent of total field crop land. In irrigated areas, wheat is planted after cotton, rice, and sugarcane, while in rainfed areas wheat is grown at the same time as maize and millet. Wheat sowing occurs October/December.

The government increased the wheat support price for the 2022/23 crop to Rupees Rs. 1950 per 40 kilograms ($290 per metric ton) from last year's level of 1800 per 40 kilograms ($281 per metric ton). Wheat production area by province is shown in Table 1.

Table 1: Wheat Area by Province MY 2022/23

Province	**Area (Million Hectares)**	**Percentage of Total Area**
Punjab	6.61	73
Sindh	1.20	13
KPK	0.78	9
Baluchistan	0.46	5
Total	9.05	100

Consumption:

Consumption in 2022/23 is forecast at 27.6 MMT, which is an annual growth rate of 1.5 percent, just below population growth. Growth in consumption of wheat flour based products is slowing as incomes rise and consumers shift to higher protein consumption. Nonetheless, wheat continues to be the main staple, accounting for 72 percent of Pakistan's daily caloric intake with per capita consumption of around 124 kilograms (kg) per year, one of the highest in the world. Out of the total demand of 27.6 MMT, only five percent will be used in the feed industry.

In line with overall higher global prices, and driven by the increase in the government wheat procurement price, in 2021, domestic wheat flour prices increased about twenty percent.

Trade:

Given the aforementioned production expectations, imports during 2022/23 are forecast at 1.5 MMT. Most of the imports are done by the Ministry of Commerce's Trading Corporation of Pakistan (TCP),

with purchases executed through public tenders. In 2021/22, the bulk of the wheat imports came from the Black Sea region; the ongoing instability in that region will cause TCP to change purchasing patterns in 2022, and potentially create an opportunity for U.S. wheat. Pakistan has not imported U.S. wheat during the last decade due to prices and freight costs. While neighboring India has an exportable surplus, Pakistan is unlikely to import wheat from there due to the suspension of trade relations between the two countries. Pakistan traditionally does not start importing wheat until August, after there is full knowledge of the domestic crop and overall supply situation. However, due to prevailing volatility in international markets, and uncertainty regarding Black Sea wheat availability, to secure supplies, TCP may decide to tender as early as April for August-Oct delivery.

The government's June 2020 decision to suspend the 60 percent duty on wheat imports still applies. Consequently, all wheat imports enter duty free. The policy of duty-free wheat imports is likely to remain in place until the government is confident that local wheat production is sufficient to meet domestic demand.

Table 2: Pakistan Wheat Imports MY 2021/22 (in metric tons)

Months	Quantity
May	0
June	0
July	0
August	57,000
September	281,036
October	393,715
November	226,185
December	337,425
January	405,509
Total	**1,700,870**

Source: Pakistan Bureau of Statistics

While no official data exists, approximately 600,000 tons wheat-equivalent is estimated to be exported to neighboring Afghanistan each year.

Stocks:

Given production, import, and consumption expectations, ending stocks in 2022/23 are forecast to remain slightly over 4 MMT, which is just under two months' domestic needs. Despite some costly experiences in maintaining government stocks in previous years, the past two years of domestic production shortfalls, supply chain disruptions, and price volatility, have again caused the government to revisit their stock-holding policy. The government is now emphasizing maintaining sufficient strategic reserves to ensure food security in case of any future supply shocks. The government is unlikely to allow buffer stocks to fall below 3 MMT.

The government maintains stocks through both domestic procurement and imports. The guaranteed government support price, through which local wheat is bought, offers farmers a secure and continued incentive to grow wheat; thereby, supporting both self-sufficiency and stock maintenance policies. Domestic wheat procurement in 2022 is expected to be around 6.0 MMT, boosting public stock levels to over 10 MMT shortly after the start of the marketing year.

Policy:

The government intervenes heavily in wheat production, marketing, and trade to ensure its position as one of Pakistan's most important crops and to maintain wheat's position as a strategic commodity critical to food security. The pillars of government intervention are a minimum guaranteed support price and a mandated selling price for flour mills. At the province level, the government buys wheat from farmers at the support price and then sells it to flour mills at the fixed government price. It is a costly policy, with the price that the government receives from mills not covering all the associated procurement, handling, and storage costs. In any given year, the government purchases about 25 percent of production, 15 percent is marketed via private sector channels, and 60 percent of domestic production is for at-home use. The government purchases are used as reserve stocks to sell into the market as necessary to dampen price and to retain for food security.

Table 3: Wheat-Production, Supply, and Distribution. (May/April) (1,000 HA) (1,000 MT)						
	2020/2021		2021/2022		2022/2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	8,825	8,825	9,200	9,200	0	9,000
Beginning Stocks	991	991	2,854	2,854	0	4,454
Production	24,946	24,946	27,000	27,400	0	26,400
MY Imports	3,617	3,617	2,000	2,000	0	1,500
TY Imports	3,617	3,617	2,000	2,000	0	1,500
Total Supply	29,554	29,554	31,854	32,254	0	32,354
MY Exports	500	500	500	600	0	600
TY Exports	500	500	500	600	0	600
Feed and Residual	1,000	1,000	1,200	1,200	0	1,200
FSI Consumption	25,200	25,200	26,000	26,000	0	26,400
Total Consumption	26,200	26,200	27,200	27,200	0	27,600
Ending Stocks	2,854	2,854	4,154	4,454	0	4,154
Total Distribution	29,554	29,554	31,854	32,254	0	32,354
Yield (MT/HA)	2.83	2.83	2.93	2.99	0	2.93
TY = Trade Year; TY 2022/2023 = July 2022/June 2023						

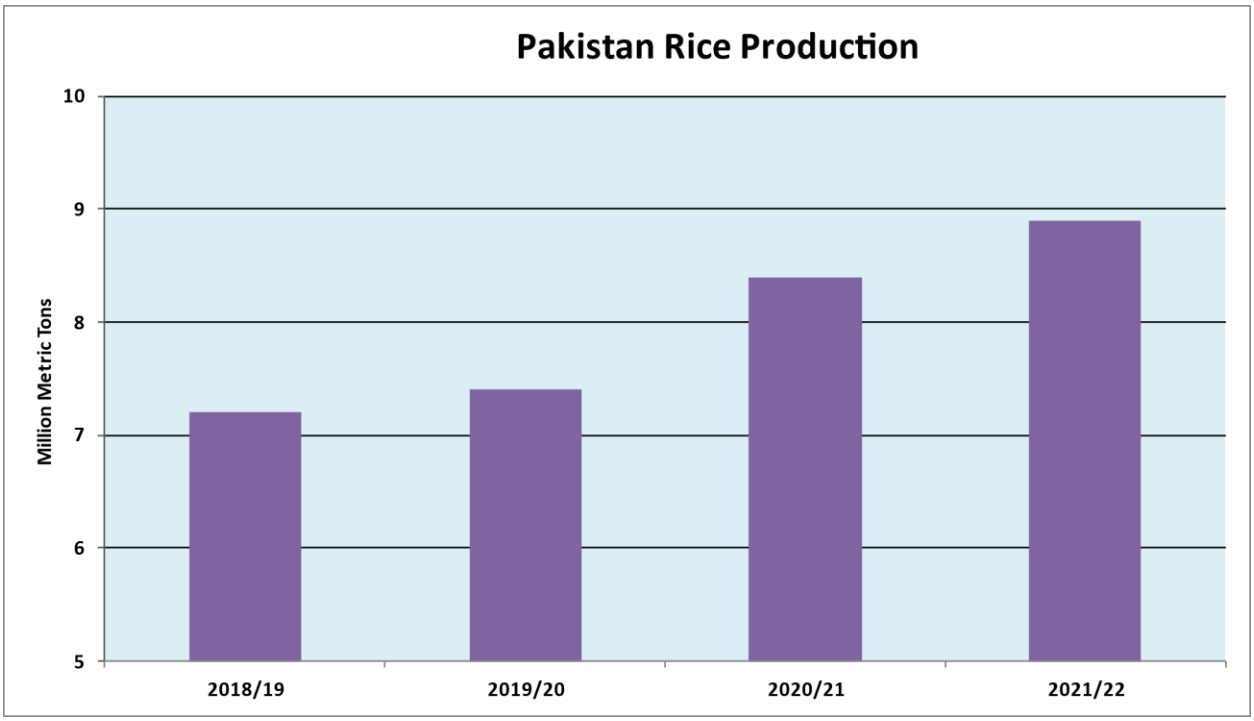
Rice, Milled:

Production:

Due to a slight increase in yield, but existing area, the MY (November/October) 2022/23 rice production is forecast at record 9 MMT. Continuous introduction of new higher yielding hybrid rice varieties, improved agronomic practices, and expectations for normal rainfall leads to the higher yield projections.

During the last few years, long grain hybrids have gained increasing acceptance among farmers. Hybrids have done especially well in Sindh where they now account for 75 percent of planting, up from 35 percent just a few years ago. As a result of the improved practices and new varieties, during the last four years Pakistan's rice production has increased from 7.2 to 8.9 MMT (Figure1). Despite the record production, fluctuating temperatures, high input costs, and uncertain irrigation water continue to pose a threat to domestic rice output.

Figure1: Pakistan's Rice Production



Rice Growing Zones:

The rice growing areas of Pakistan are broadly classified into the four zones shown in Table 3.

Table 3: Rice Growing Zones of Pakistan

Zone I 10 % of total rice production.	Northern high mountainous areas of Khyber Pakhtunkhwa (Swat and Khagan) with sub-humid climate, average rainfall of 750-1000 millimeters (mm).
Zone II 55%	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 25%	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 10 %	Indus delta basin in Lower Sindh (Badin and Thatta Districts). Climate is arid tropical and is suited for coarse varieties.

Consumption:

In line with population growth, rice consumption in 2022/23 is forecast to reach 4.1 MMT. Per capita rice consumption of 18 kilograms per year is relatively low, reflecting the fact that flour based products are the dominant carbohydrate consumed. An estimated 200,000 MT of high percentage broken rice is used in poultry and animal feed annually.

Trade:

With expectations for a growing exportable surplus, exports in 2022/2023 are projected at 5 MMT. Through the first three months of the 2021/22 local marketing year, the export pace was 13 percent above the previous year (Table 4), and the 2021/22 export forecast has been increased to 4.5 million tons. Pakistan's main rice export markets are China, Kenya, United Arab Emirates, Afghanistan, and Saudi Arabia. Pakistan's non-basmati rice is largely exported to African countries, where it faces competition mainly from India in terms of crop availability and pricing. Basmati exports are still hovering a little over 1 MMT, just over 20 percent of total. In the past year, continuing devaluation of the Pakistani rupee against dollar has helped Pakistani rice's competitiveness in world markets.

Table 4: Pakistan Rice Exports (in metric tons)

Months	**MY 20/21**	**MY 21/22**
November	458,104	473,143
December	459,714	496,208
January	324,254	434,282
Total	**1,242,072**	**1,403,633**

Source: Pakistan Bureau of Statistics

Policy:

Farmers and SMEs in the sector are eligible to receive government supported credit programs. In addition, the State Bank of Pakistan (SBP) provides loans to traders under an Export Financing Scheme (EFS). There is a 10 percent duty on rice imports. The only other major government involvement in the rice sector is R&D on rice varieties, extension services, and promoting Pakistan branded basmati in overseas markets.

Table 3: Rice-Production, Supply, and Distribution. (Nov/Oct) (1,000 HA) (1,000 MT)						
	2020/2021		2021/2022		2022/2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	3,381	3,381	3,400	3,400	0	3,400
Beginning Stocks	1,149	1,149	1,898	1,898	0	2,298
Milled Production	8,419	8,419	8,700	8,900	0	9,000
Rough Production	12,630	12,630	13,051	13,351	0	13,501
Milling Rate (.9999)	6666	6666	6666	6666	0	6666
MY Imports	7	7	5	0	0	0
TY Imports	7	7	5	0	0	0
Total Supply	9,575	9,575	10,603	10,798	0	11,298
MY Exports	3,877	3,877	4,150	4,500	0	5,000
TY Exports	3,928	3,928	4,150	4,500	0	5,000
Consumption and Residual	3,800	3,800	4,100	4,000	0	4,100
Ending Stocks	1,898	1,898	2,353	2,298	0	2,198
Total Distribution	9,575	9,575	10,603	10,798	0	11,298
Yield (Rough) (MT/HA)	3.74	3.74	3.84	3.93	0	3.97
TY = Trade Year; TY 2022/2023 = January 2023 - December 2023						

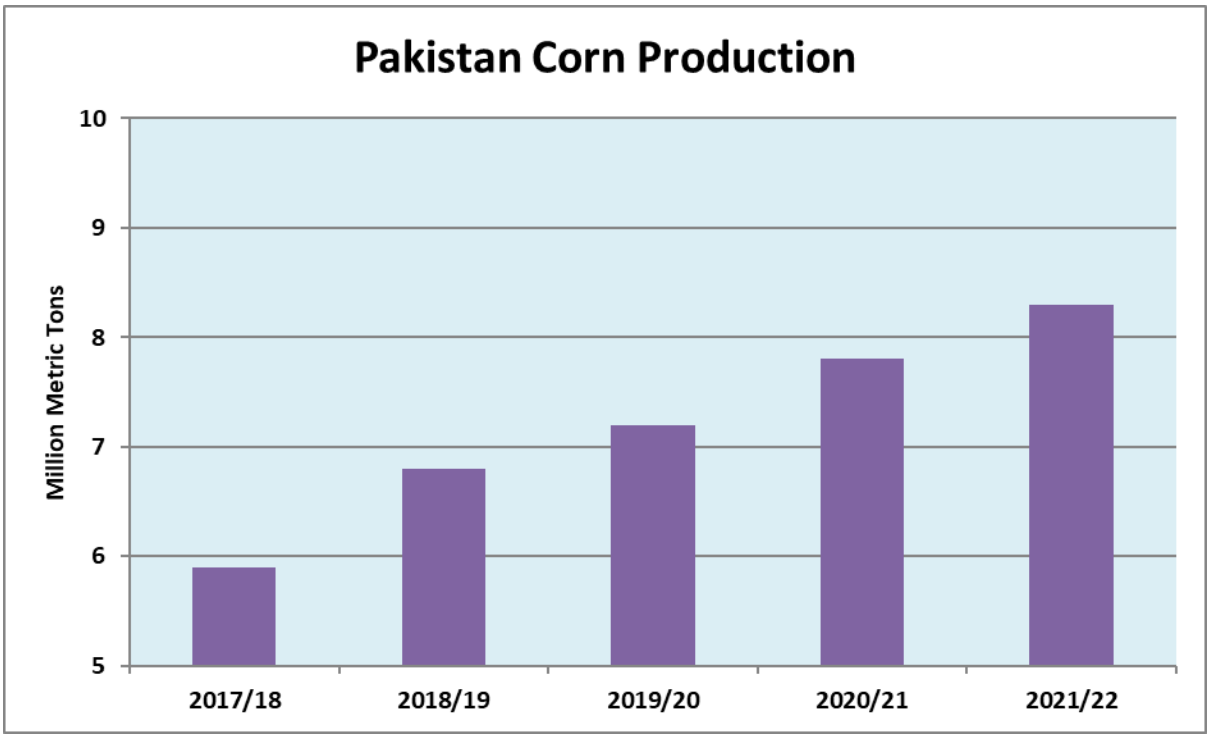
Corn

Production:

Continuing to set annual production records, corn output in 2022/2023 (July/June) is forecast at 8.9 MMT, while the MY 2021/22 production estimate is revised upward to 8.3 MMT in accordance with

official data. Both the forecast and revised estimate reflect record production levels. Use of imported U.S. seed corn continues to drive higher yields to meet demand from the poultry and livestock sectors. Area is growing due to corn's profitability vis-à-vis competing crops, particularly cotton. During the last five years, corn production increased from 5.9 to 8.3 MMT (Figure 2).

Figure 2: Pakistan's Corn Production



Consumption:

Driven by growing demand for corn in feed rations from the poultry and expanding dairy sector, corn consumption in 2022/23 is forecast to grow 4.4 percent, reaching 7 MMT. Poultry feed accounts for about 65 percent of corn use, while wet milling and dairy feed comprise about 15 and 10 percent, respectively. The remainder is corn milled for flour for human consumption. The main products of wet milling are industrial starches, liquid glucose and dextrose. There are approximately 180 feed mills producing poultry feed with a 10 MMT output capacity.

Trade:

The minimal imports are all seed corn, and exports are insignificant. There is a thirty percent regulatory duty and ten percent customs duty on imported corn, shielding domestic producers from imports.

Policy:

Except for the protectionist trade policy mentioned above, there is very little government involvement in the corn sector. Bioengineered corn is not approved for cultivation. Private sector activity drives growth in the industry. This activity includes: 1) firm demand from the entirely private sector-led poultry and expanding dairy sector; and 2) seed corn companies offering productive hybrid seed corn and extension services.

Table 4: Corn-Production, Supply, and Distribution. (Jul/Jun) (1,000 HA) (1,000 MT)						
	2020/2021		2021/2022		2022/2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1,385	1,385	1,400	1,400	0	1,500
Beginning Stock	1,427	1,427	1,461	1,461	0	1,031
Production	7,800	7,800	7,600	8,300	0	8,900
MY Imports	27	27	25	30	0	30
TY Imports	29	29	25	20	0	20
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	9,254	9,254	9,086	9,791	0	9,961
MY Exports	93	93	350	60	0	60
TY Exports	322	322	100	50	0	60
Feed and Residual	5,900	5,900	5,900	6,700	0	7,000
FSI Consumption	1,800	1,800	1,800	2,000	0	2,100
Total Consumption	7,700	7,700	7,700	8,700	0	9,100
Ending Stocks	1,461	1,461	1,036	1,031	0	801
Total Distribution	9,254	9,254	9,086	9,791	0	9,961
Yield (MT/HA)	5.63	5.63	5.43	5.92	0	5.93
TY = Trade Year; TY 2022/2023 = October 2022 - September 2023						

Attachments:

No Attachments