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**Report Name:** Grain and Feed Annual

**Country:** Pakistan

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**Prepared By:** Asmat Raza

**Approved By:** Christopher Rittgers

**Report Highlights:**

Despite a slight reduction in planted area, 2023/2024 wheat production is forecast to reach 27.0 million tons, two percent higher than last year. With consumption growth expected to outstrip the increase in production, 2023/24 wheat imports are forecast to reach 2.6 million tons. Following the flood-damaged crop last year, rice production is forecast to rebound to 8.8 million tons. This will boost the domestic surplus, and rice exports are projected at 4.5 million tons. Continued good returns are expected to increase corn area and yields, and corn output is forecast to increase about 6 percent to 10.5 million tons in 2023/24.

## **Executive Summary**

Despite a slight reduction in planted area, 2023/2024 wheat production is forecast at 27.0 million tons, two percent higher than 2022/23. Favorable weather conditions and better availability of irrigation water have increased wheat yield expectations. Consumption is forecast to grow 3 percent in 2023/24. High inflation has made it difficult for consumers to afford milk and meat, reversing the trend of more protein and less carbohydrate in the diet. As a result, consumption of wheat flour-based products is rebounding.

The anticipated increase in flour-based product consumption will outstrip the forecast increase in wheat production. To cover the expected domestic shortfall, 2023/24 wheat imports are forecast at 2.6 million tons.

Based on Pakistan's official purchases and imports through February 2022, the 2022/23 wheat import estimate is 2.6 million tons. Russia supplied about 70 percent of the 2022/23 wheat imports.

Due to both an increase in area and an expected return to near trend yields following the flood-damaged 2022/23 crop, marketing year (November/October) 2023/24 rice production is forecast to increase significantly to 8.8 million tons. Likewise, the anticipated rejuvenation in exportable supplies is forecast to result in 2023/24 rice exports reaching 4.5 million tons.

Due to lower exportable supplies caused by the flood-damaged crop, an erosion in export competitiveness, and a fluctuating currency making sales difficult, the 2022/23 rice export estimate is lowered to 3.2 million tons.

Good growing conditions, and positive returns vis-à-vis other cropping options, is resulting in producers intending to increase corn area in 2023/24. As a result of the increase in area, combined with an expected slight increase in yield, corn output in 2023/2024 (July/June) is forecast to reach 10.5 million tons.

Driven by the increased domestic production, corn exports are expected to continue in 2023/24.

## **Wheat:**

### **Production:**

Despite a slight reduction in planted area, 2023/2024 wheat production is forecast at 27.0 million tons, two percent higher than 2022/23. Due to favorable weather conditions and better availability of irrigation water, 2023/24 wheat crop yields are expected to improve, leading to an overall increase in production. Unlike the 2022/23 crop, which was adversely impacted by an unusual heat wave in February and March, growing conditions during the grain filling stage this year have been good.

After last year's floods, there were concerns that the planted area for 2023/2024 would decline significantly due to lack of seeds and the inability of farmers to prepare their land because flood waters had not yet subsided (especially in Sindh). Many small farmers who store their planting seeds on-farm lost the seeds during the floods. However, government, private sector, and aid organizations coordinated with wheat farmers to provide inputs and other assistance to ensure timely cultivation of the 2023/24 wheat crop.

Cumulative fertilizer nutrient offtake during the 2022/23 winter planting season (October-January) was 4.6 percent lower compared to last year. Phosphate and potash use decreased 25.5 and 69.9 percent, respectively, while nitrogen offtake was 3.9 percent higher.

The growing conditions were generally good, with adequate rainfall during key crop development stages in January and February. The growing conditions and sufficient moisture should boost yields higher than otherwise indicated by the lower fertilizer usage rates. An expected rebound in soil fertility after the floods will also help to increase yields. No serious pest outbreaks have been reported, including no reports of locust infestations in this year’s crop. There is 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 insignificant this year. Crop harvest will begin in earnest in early April 2022 and continue through May.

In addition to the post-flood 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 8.9 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 rain fed areas wheat is grown at the same time as maize and millet. Wheat sowing occurs October/December.

There is no uniform government wheat support price this year. The federal and Punjab provincial governments increased the wheat support price for the 2023/24 crop to Rs. 3,900 per 40 kilograms (\$346 per metric ton), while Sindh government set the price at Rs. 4,000 per 40 kilograms (\$354 per metric tons). Last year there was a uniform support price of Rs. 1,950 per 40 kilograms (\$290 per metric ton).

Wheat production area by province is shown in Table 1.

**Table 1: Wheat Area by Province 2022/23**

Province	Area (Million Hectares)	Percentage of Total Area
Punjab	6.47	73
Sindh	1.19	13
KPK	0.78	8
Baluchistan	0.42	4
Total	8.86	100

**Consumption:**

Consumption in 2023/24 is forecast at 30.2 million tons, which is an annual growth rate of 3 percent. High inflation has reversed the consumer trend of substituting more protein for carbohydrates in the diet.

Growth in consumption of wheat flour-based products is increasing as incomes dwindle and consumers find it difficult to afford milk and meat. 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 30.2 million tons, only five percent will be used in the feed industry.

**Trade:**

Considering the production and consumption expectations, imports during 2023/24 are forecast at 2.6 million tons. The Ministry of Commerce’s Trading Corporation of Pakistan (TCP) does the wheat purchases through public tenders.

Based on Pakistan’s official purchases and imports through February 2022, the 2022/23 wheat import estimate is 2.6 million tons. In 2022/23, around 70 percent of wheat imports have come from Russia. 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 won’t import wheat from there due to the suspension of trade relations between the two countries.

Generally, Pakistan does not start to import wheat until August, after there is solid information on the size of the domestic crop and supply situation. However, last year TCP began tenders for wheat in May, just at the end of harvest season. Depending on prevailing volatility in international markets, and the situation regarding Black Sea wheat availability, to secure supplies, TCP may decide to begin tendering as early as April for August delivery.

All wheat imports enter duty free. The policy of duty-free wheat imports will remain as long as TCP must import to meet domestic demand.

**Table 2: Pakistan Wheat Imports 2022/23 (in metric tons)**

Months	Quantity
July	211,597
August	410,918
September	234,298
October	123,344
November	0
December	391,423
January	447,560
February	553,408
<b>Total</b>	<b>2,372,548</b>

Source: Pakistan Bureau of Statistics

While no official data exists, approximately 500,000 to 600,000 tons wheat-equivalent is estimated to be exported to neighboring Afghanistan each year. This cross-border trade gains pace whenever Pakistan’s domestic wheat prices are lower than the world market prices, which was the case during most of 2022.

**Stocks:**

Given production, import, and consumption expectations, ending stocks in 2023/24 are forecast to remain around 2.6 million tons, which is just over one month's domestic needs. The government's stated policy is to prioritize maintaining sufficient stocks to ensure food security. Even though the government faces a shortage of foreign exchange to finance imports, their food security priorities indicate they will continue to import wheat to ensure sufficient stocks.

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 2023 is expected to be around 6.0 million tons, boosting public stock levels to around 10 million tons 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 (see prices above) and then sells it to flour mills at the fixed government price. It is a costly policy, with the price that the government sells to the 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 prices and to maintain food security.

**Table 3: Wheat-Production, Supply, and Distribution. (May/April) (1,000 HA) (1,000 MT)**

Wheat Market Year Begins Pakistan	2021/2022		2022/2023		2023/2024	
	May 2021		May 2022		May 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	9,168	9,168	9,000	9,000	0	8,860
Beginning Stocks (1000 MT)	3,056	3,056	4,530	4,530	0	3,730
Production (1000 MT)	27,464	27,464	26,400	26,400	0	27,000
MY Imports (1000 MT)	2,210	2,210	3,000	2,600	0	2,600
TY Imports (1000 MT)	2,210	2,210	3,000	2,600	0	2,600
Total Supply (1000 MT)	32,730	32,730	33,930	33,530	0	33,330
MY Exports (1000 MT)	500	500	300	600	0	500
TY Exports (1000 MT)	500	500	300	600	0	500
Feed and Residual (1000 MT)	1,200	1,200	1,700	1,700	0	1,900
FSI Consumption (1000 MT)	26,500	26,500	27,500	27,500	0	28,300
Total Consumption (1000 MT)	27,700	27,700	29,200	29,200	0	30,200
Ending Stocks (1000 MT)	4,530	4,530	4,430	3,730	0	2,630
Total Distribution (1000 MT)	32,730	32,730	33,930	33,530	0	33,330
Yield (MT/HA)	2.9956	2.9956	2.9333	2.9333	0	3.0474

TY = Trade Year; TY 2022/2023 = July 2022/June 2023

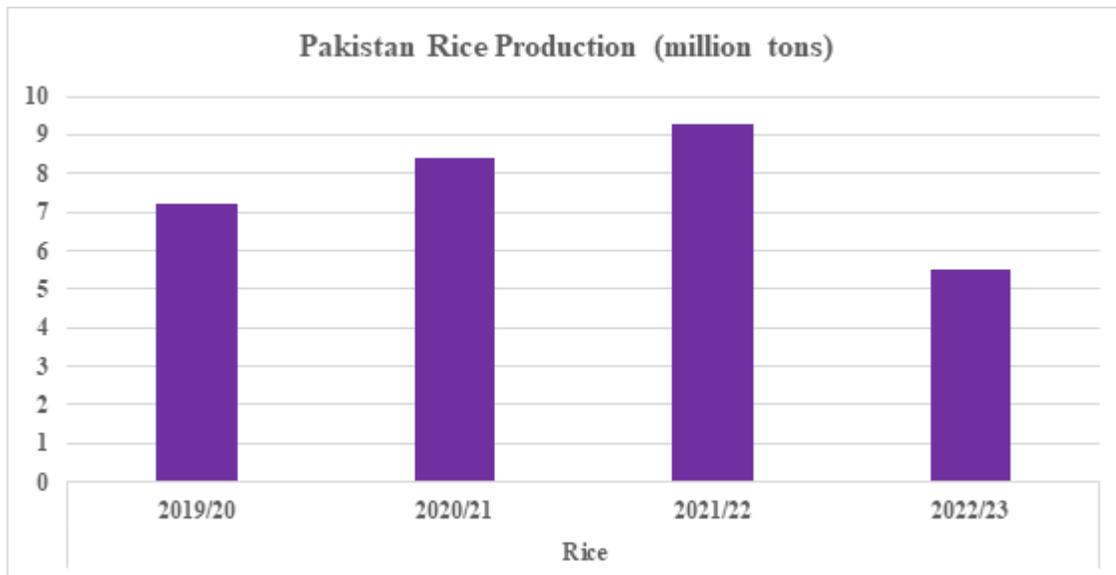
## Rice, Milled:

### Production:

Due to both an increase in area and an expected return to near trend yields following the flood-damaged 2022/23 crop, marketing year (November/October) 2023/24 rice production is forecast to increase significantly to 8.8 million tons. This production forecast is 60 percent higher than the last year's flood diminished crop, but still 5 percent less than the record 2021/22 production. Last year's floods disrupted the trend of annual increases in rice production. Private seed companies continue to introduce new higher yielding hybrid rice varieties leading to increased production. Government extension departments are also active in introducing improved agronomic practices. Due to better yields, long grain hybrids continue to gain acceptance among farmers, especially in Sindh. Rice hybrids in Sindh are planted on about 80 percent of total area. Nonetheless, fluctuating temperatures, high input costs, and uncertain irrigation water continue to pose a threat to domestic rice output.

The 2022/23 production estimate is adjusted to 5.5 million tons to reflect recently released government data. This is Pakistan's lowest level of rice production since 2010/11.

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 4: 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, Sheikhpura, 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 2023/24 is forecast to reach 4.0 million tons. 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 tons of high percentage broken rice is used in poultry and animal feed annually.

### Trade:

With expectations for a rebound in production and exportable supplies, exports in 2023/2024 are projected at 4.5 million tons.

Due to the lower 2022/23 exportable surplus, relatively uncompetitive prices, and a fluctuating currency causing difficulties in ascertaining export prices, the 2022/23 rice export estimate is lowered to 3.2 million tons. This projected rice export number would be Pakistan's lowest since 2008/09. Through the first four months of the 2022/23 local marketing year, Pakistan exported around 1.5 million tons, compared to 1.8 million tons exported last year (Table 5). For the rest of the marketing year, dwindling stocks are expected to exacerbate the declining export pace.

Even though the flood-related Basmati crop losses were relatively minor compared to the coarse grain crop losses, the 2022/23 Basmati export performance has also declined. During the first four months of the current marketing year, Basmati exports were 181,477 tons, while other variety exports were 1,334,089 tons. Basmati's share in total exports was only 14 percent, much less than the usual 20 percent. Pakistan's Basmati rice's export competitiveness has eroded vis-à-vis that of India's due to the logistical disruptions in the aftermath of the floods and the overall higher prices.

China continues to be the fastest growing export market for Pakistan, with around one million tons shipped during 2022. The other main rice export markets are 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.

**Table 5: Pakistan Rice Exports** (in metric tons)

<b>Months</b>	<b>2021/22</b>	<b>2022/23</b>
November	473,143	418,207
December	496,208	315,539
January	434,282	228,412
February	458,322	553,408
<b>Total</b>	<b>1,861,955</b>	<b>1,515,566</b>

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 rice varietal research and development, extension services, and promoting Pakistan branded Basmati in overseas markets.

<b>Table 6: Rice-Production, Supply, and Distribution. (Nov/Oct) (1,000 HA) (1,000 MT)</b>						
<b>Rice, Milled</b>	<b>2021/2022</b>		<b>2022/2023</b>		<b>2023/2024</b>	
<b>Market Year Begins</b>	<b>Nov 2021</b>		<b>Nov 2022</b>		<b>Nov 2023</b>	
<b>Pakistan</b>	<b>USDA Official</b>	<b>New Post</b>	<b>USDA Official</b>	<b>New Post</b>	<b>USDA Official</b>	<b>New Post</b>
<b>Area Harvested (1000 HA)</b>	3,537	3,537	3,000	3,000	0	3,500
<b>Beginning Stocks (1000 MT)</b>	1,889	1,889	2,650	2,650	0	1,057
<b>Milled Production (1000 MT)</b>	9,323	9,323	6,600	5,500	0	8,800
<b>Rough Production (1000 MT)</b>	13,986	13,986	9,901	8,251	0	13,201
<b>Milling Rate (.9999) (1000 MT)</b>	6,666	6,666	6,666	6,666	0	6,666
<b>MY Imports (1000 MT)</b>	5	5	7	7	0	5
<b>TY Imports (1000 MT)</b>	5	5	7	7	0	5
<b>Total Supply (1000 MT)</b>	11,217	11,217	9,257	8,157	0	9,862
<b>MY Exports (1000 MT)</b>	4,817	4,817	3,800	3,200	0	4,500
<b>TY Exports (1000 MT)</b>	4,525	4,525	3,800	3,200	0	4,500
<b>Consumption and Residual (1000 MT)</b>	3,750	3,750	3,800	3,900	0	4,000
<b>Ending Stocks (1000 MT)</b>	2,650	2,650	1,657	1,057	0	1,362
<b>Total Distribution (1000 MT)</b>	11,217	11,217	9,257	8,157	0	9,862
<b>Yield (Rough) (MT/HA)</b>	3.9542	3.9542	3.3003	2.7503	0	3.7717
TY = Trade Year; TY 2022/2023 = January 2023 - December 2023						

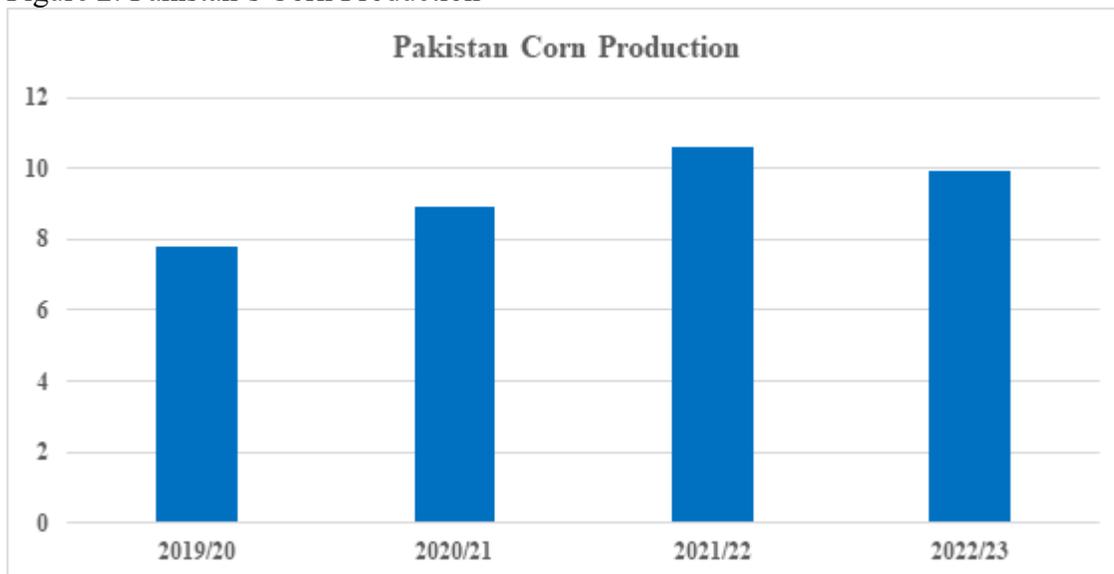
## Corn:

### Production:

Due to continued good returns relative to other crops, corn output in 2023/2024 (July/June) is forecast to grow 6 percent to 10.5 million tons. Area is growing as producers continue to favor corn relative to other crops, particularly cotton and sugar cane. Use of imported U.S. seed corn continues to drive higher yields. During the last five years, corn production increased from 5.9 to around 10 million tons (Figure 2).

The 2022/223 production estimate is revised upward to 9.9 million tons to reflect recently released official data. Of the summer crops planted, corn output was the least affected by last summer's floods. Most of the major corn production areas were located outside the areas where the major flooding occurred. Still, there were some corn producing areas where the crop suffered damage, as reflected in the decline in 2022/23 yields.

Figure 2: Pakistan's Corn Production



### Consumption:

Driven by growing demand for corn in poultry feed rations and the expanding dairy sector, corn consumption in 2023/24 is forecast to grow to 10.2 million tons. 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 million tons output capacity.

### Trade:

Driven by growing output providing an exportable surplus, exports in 2023/24 are projected at 400,000 tons. However, the poultry sector is lobbying for the government to take action to curb corn exports. On the other hand, the Cereal Association of Pakistan is requesting the authorities not to restrict corn exports.

The minimal imports are all seed corn. There is a thirty percent regulatory duty and ten percent customs duty on imported corn, shielding domestic producers from imports. Moreover, genetically engineered (GE) corn imports are not allowed.

**Policy:**

Except for the protectionist trade policy mentioned above, there is very little government involvement in the corn sector. GE corn is not approved for cultivation nor can be imported for feed/processing. 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 7: -Corn-Production, Supply, and Distribution. (July/June) (1,000 HA) (1,000 MT)**

Corn Market Year Begins Pakistan	2021/2022		2022/2023		2023/2024	
	Jul 2021		Jul 2022		Jul 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1,653	1,653	1,600	1,600	0	1,630
Beginning Stocks (1000 MT)	1,548	1,548	1,528	1,528	0	889
Production (1000 MT)	10,635	10,635	9,200	9,931	0	10,500
MY Imports (1000 MT)	29	29	25	30	0	25
TY Imports (1000 MT)	35	35	25	20	0	20
Total Supply (1000 MT)	12,212	12,212	10,753	11,489	0	11,414
MY Exports (1000 MT)	784	784	350	500	0	400
TY Exports (1000 MT)	770	770	250	450	0	350
Feed and Residual (1000 MT)	7,500	7,500	7,300	7,600	0	7,700
FSI Consumption (1000 MT)	2,400	2,400	2,100	2,500	0	2,500
Total Consumption (1000 MT)	9,900	9,900	9,400	10,100	0	10,200
Ending Stocks (1000 MT)	1,528	1,528	1,003	889	0	814
Total Distribution (1000 MT)	12,212	12,212	10,753	11,489	0	11,414
Yield (MT/HA)	6.4338	6.4338	5.75	6.2069	0	6.4417

TY = Trade Year; TY 2022/2023 = October 2022 - September 2023

**Attachments:**

No Attachments