

# VIS

Credit Rating Company Limited

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## RICE SECTOR REPORT

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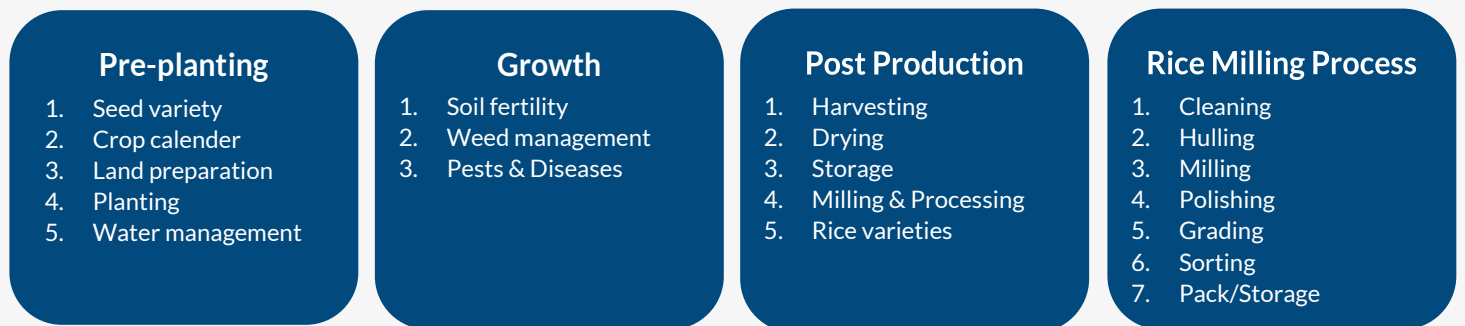
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## INTRODUCTION

Rice, a staple cereal grain for over half the world’s population, is a primary energy source crucial for ensuring food security. The rice sector significantly contributes to the economies of many countries, providing employment opportunities and supporting rural livelihoods as it is cultivated in more than 100 countries around the world especially Asia.

The rice sector holds significant importance in Pakistan’s agricultural economy as it is a vital export commodity, contributing to the country’s GDP and foreign exchange earnings. Globally, Pakistan is one of the top rice producing countries, cultivating three types of rice varieties, Basmati, Medium-long grain and Bold grain.

Basmati rice is a premium, long-grain variety, famous around the world, particularly known for its aroma, flavour and elongated grain. Medium-long grain rice, Indica is an IRRI rice variety known for its slender, flat and long-short grain which shatters easily. Globally it is in high demand due to its higher yields than Basmati and adaptability to diverse growing conditions. Lastly, the bold grain, Japonica is a cold tolerant variety. The grains are short, roundish and shatter easily.



The rice production process involves several stages beginning with the preparation of the field for planting. At the growth stage, soil fertility, weed, pests and disease management are important factors to ensure optimum crop health. It takes approximately 105-150 days from sowing to harvest before it is ready for the rice milling process. At this stage the husk, bran and germ are removed to produce white rice, it may be parboiled or processed further.

## ECONOMIC PERSPECTIVE

### GLOBAL

The global economy in 2024 presents a picture of sluggish recovery, with underlying vulnerabilities. Growth projections hover around 3.2% for 2024 and 2025, reflective of a continuation of subdued trends compared to historical averages. This slow progress is further exacerbated by uneven performance across regions, with developed economies expected to experience a slight uptick while emerging markets face a potential moderation in growth. Inflation remains a pressing concern, though forecasts anticipate a gradual decline throughout the remaining year and into 2025. However, the threat of rising food and energy prices due to geopolitical tensions continues to pose a challenge. The ongoing impact of climate change further adds a layer to the complexity of the situation. Despite these challenges, the global economy has demonstrated surprising resilience. The possibility of a "soft landing" that avoids a recession remains on the table.

However, continued vigilance and international cooperation on issues like trade, climate change, and debt management will be essential for navigating these headwinds and achieving sustainable growth in the long-term.

## PAKISTAN

Pakistan's economy exhibited a mix of growth and persistent obstacles at the start of FY 2024. Despite a 5.97% GDP expansion in FY 2022, fueled by strong agricultural, industrial, and service sectors, growth contracted sharply to 0.2% in FY 2023. This volatility underscores underlying vulnerabilities, particularly high fiscal deficits, rising debt, and dwindling foreign exchange reserves, which heighten the economy's sensitivity to external pressures like fluctuating global commodity prices. Inflation remains a concern, squeezing household budgets with rising food and energy costs. However, the International Monetary Fund (IMF) approved the Stand-By Arrangement (SBA) program in Jul'23 and reached a staff level agreement (SLA) on a new 37-month \$7 billion extended fund facility (EFF) on July 12, 2024. Steadfast implementation of the program—including through continued fiscal restraint, energy tariff adjustments, and the continued high policy rate at 17.5% following a recent 200bps rate cut on September 13, 2024—enabled new official external inflows, allowing a softening of import management measures, and some recovery in confidence. Looking ahead, the World Bank anticipates subdued economic activity in the near term, with growth projections of 1.8% for FY 2024. Long-term success hinges on tackling external imbalances, controlling inflation, and fostering investment in key sectors to achieve sustainable economic expansion.

## GLOBAL PERSPECTIVE

The global rice market value is estimated to grow from USD 365.2 billion in 2023 to USD 376.5 billion in 2024, with a projected compound annual growth rate (CAGR) of 3% during 2024-2029. This expansion is anticipated to reach USD 436.5 billion by 2029, driven by factors such as rising demand, technological advancements and increasing rice prices.

Global milled rice production is projected to increase from 530.1 million metric tonnes (MMT) in the 2024 trading year (TY) to 534.9 MMT in TY 2025. This growth is driven by an expansion in harvested area and improved yields. Meanwhile, global consumption is expected to rise from 520 MMT in TY 2024 to 523.4 MMT in TY 2025.

Production (MMT)					
Rank	Country	TY 2023	TY 2024	TY 2025 - Forecast	% Share
	Global	526	530	535	100%
1	China	143	142	142	27%
2	India	136	135	137	26%
3	Bangladesh	39	39	40	7%
4	Indonesia	35	35	34	6%
5	Vietnam	28	28	28	5%
6	Thailand	22	22	22	4%
7	Myanmar	17	17	17	3%
8	Philippines	13	13	13	2%
9	Pakistan	7	10	10	2%
10	Brazil	7	7	7	1%

## MAJOR RICE PLAYERS

Asia dominates the global rice market, accounting for nearly 90% of both production and consumption. China and India together consume over 50% of the world's rice. Globally, an average of 167 million hectares of land was harvested for rice production during TY 2020-2025 period, yielding an average of 4.6 MMT/Ha. India and China have consistently led in terms of harvested area, occupying approximately 28% and 18% of the global total, respectively, during TY 2022-2024.

Global rice production grew by 0.9% in TY 2024, primarily due to a 35.6% year-on-year surge in Pakistan's output. Conversely, consumption decreased by 0.4%, largely due to reduced demand from China, Japan and Myanmar. China's rice consumption has been decreasing since TY 2023, primarily due to a combination of factors, including shrinking population and a shift in dietary preferences. This trend is projected to continue in TY 2025.

India has been the leading exporter throughout TY 2020-2024, representing an average of 35% share of the global rice export market while the positions between Thailand and Vietnam fluctuated, with Vietnam occasionally taking the lead over Thailand by a margin of just 1% and vice versa.

Rice TY Exports rebounded in TY 2024, increasing by 3.6% to 55.2 MMT after a decline of 6.2% in TY 2023. However, exports are projected to decrease in TY 2025. The rise during TY 2024 was mainly due to Pakistan, the United States and Myanmar. United States' exports witnessed an increase as their production volume grew by 35% to 6.9 MMT from 5.1 MMT in TY 2023, due to California's harvested acreage rebounding after heavy rains ended the drought. Myanmar's exports rose because production volume grew by 1.8% to 17.1 MMT from 16.8 MMT in TY 2023.

TY Imports after a decline of 7.9% to 51.3 MMT in TY 2023, rose by 2.5% to 52.6 MMT in TY 2024. However, it is forecasted to decrease in TY 2025. The increase in TY 2024 was primarily attributable to higher imports from Philippines, Iraq, Ivory Coast and Senegal offsetting relatively lower imports from China and Vietnam.

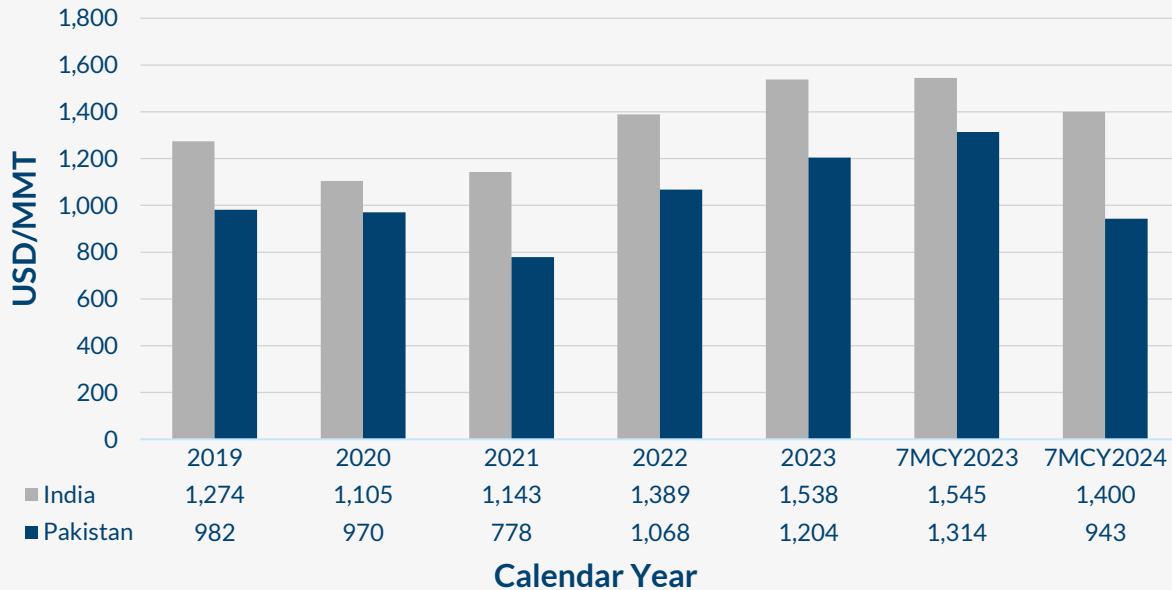
During the period from TY 2020 to 2024, the Philippines emerged as the largest importer of rice, driven by insufficient domestic production to meet local demand. It was followed by Vietnam. In TY 2024, while domestic production and harvested acreage declined, China experienced a decrease in rice imports. This was partly due to a limited number of Vietnamese enterprises being licensed to export rice to China, which is Vietnam's second-largest rice market.

Looking ahead, the Philippines' domestic consumption is forecasted to grow by 4.2% in TY 2025 to 17.3 MMT increasing from 16.6 MMT in TY 2024.

The global average consumption per capita increased by 3.3% over TY 2020-2023, rising from 63 kg/capita in TY 2020 to 65 kg/capita in TY 2023. This growth was primarily due to higher per capita consumption in India and Philippines. India experienced an 8.5% rise in per capita consumption in TY 2022, followed by a 2.9% increase in TY 2023. In the Philippines, the consumption rose by 3% in TY 2023.

### PRICE ANALYSIS

#### Basmati Rice Prices



Source: FAO

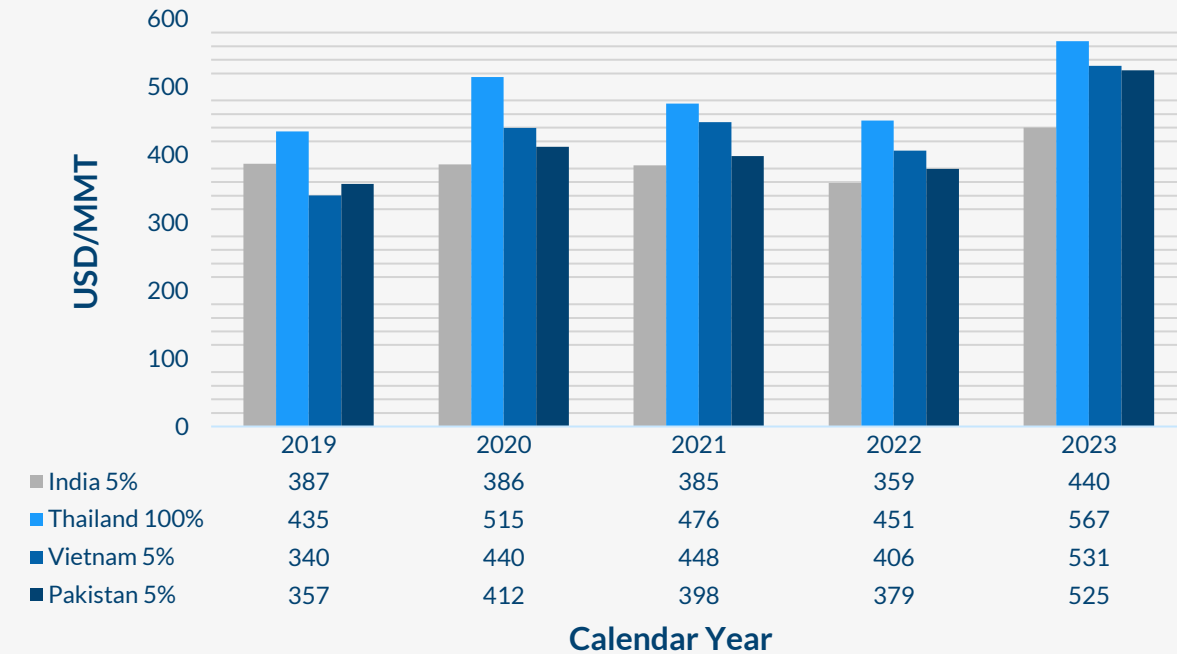
Basmati rice is mainly grown in India and Pakistan and is highly valued in the international market especially in the Middle East and the United States.

During CY 2022-2023 the export prices were relatively higher than previous years because of tight supply of Basmati rice due to the floods in 2022. During the 7MAY2024, the average Pakistani Basmati export prices dropped by 28% compared to the same period last year (SPLY) as can be seen in the graph above. This is because the supply of Basmati rice rebounded to higher than pre-flood quantities with, an increase of 30% in exported quantity (2024: 0.8 MMT 2023: 0.6 MMT).

On the other hand, India occasionally restricts exports of Basmati rice to control domestic inflation and ensure food security. The average Indian Basmati export price dropped by 9% during 7MAY2024 relative to the SPLY. In 2023, India imposed a minimum export price of USD 950/MT, if the prices drop further, this could strain the farmers profit margins.

Overall, Pakistan is the second largest Basmati exporter behind India offering competitive pricing however, if Pakistan focuses on meeting international standards of quality it may obtain a higher Basmati market share. Although India charges a premium price for its Basmati rice variety, the export restrictions placed occasionally from 2022 have led to a spike in prices in the international market along with importing countries shifting to Pakistani Basmati rice.

### Indica - IRRI Rice Variety Prices



Source: FAO

Indica rice is widely grown in tropical and sub-tropical regions which is highly sought after in Africa, Middle East and Southeast Asia. Globally, the top exporters are India, Thailand, Vietnam and Pakistan.

During 2019-2023 overall, India’s pricing has been competitive due to its large-scale production and support from the government. However, recently, the government-imposed export bans and restrictions which led to an increase in market prices and is likely to continue in 2024.

Thailand’s rice has been priced at a premium level due to its superior quality, however, the strength of the Thai Baht can make the rice more expensive in the global market, which could lead to losing their market share in 2024.

Vietnamese rice has been competitively priced over the years as it offers a lower price in comparison to India and Thailand. The government has supported the sector by stabilizing rice prices through export regulations and agreements with importing countries.

Lastly, Pakistan, though offers good quality, offers a mid-range pricing as, it faces challenges in maintaining competitive prices. Furthermore, the price is likely to fluctuate due to exchange rate movements.

### DEMAND DRIVERS

Rice demand is driven primarily by population changes. As of August 2024, the global population stands at 8.1 billion which is projected to increase to 9.7 billion by 2050, with a notable increase in Asia and Africa, which will naturally lead to an increase in demand for rice. At the same time, consumer preferences will impact the production strategies of a specific type of rice.

Another crucial factor is pricing, affecting both farmers and consumers. Rice prices affect consumer behavior and demand patterns. Moreover, exchange rates affect a country’s purchasing power, especially as most trade is denominated in USD, therefore, strong currency fluctuations impact rice prices affecting global demand.

Rice is sensitive to climate conditions as it is highly sensitive to variations in temperature, rainfall and other environmental factors which directly influence growth and yield. Any disruption in supply impacts prices of rice affecting the purchasing power of consumers and thereby demand.

Global conflicts influence production and supply chains affecting availability and price. Such geopolitical tensions can have significant consequences especially for those countries that are heavily reliant on rice imports for food security.

Government policies and regulations influence demand e.g. Minimum Export Price (MEP) or Minimum Support Price (MSP) and duties on rice exports. Governments regulate markets to balance domestic supply of rice alongside international trade. Such policies can encourage or limit trade, thereby driving demand.

International trade is heavily reliant on trade routes and logistics which can influence demand e.g. the Red Sea attack. These hurdles impact the supply chain influencing accessibility and cost of rice, affecting global trade dynamics.

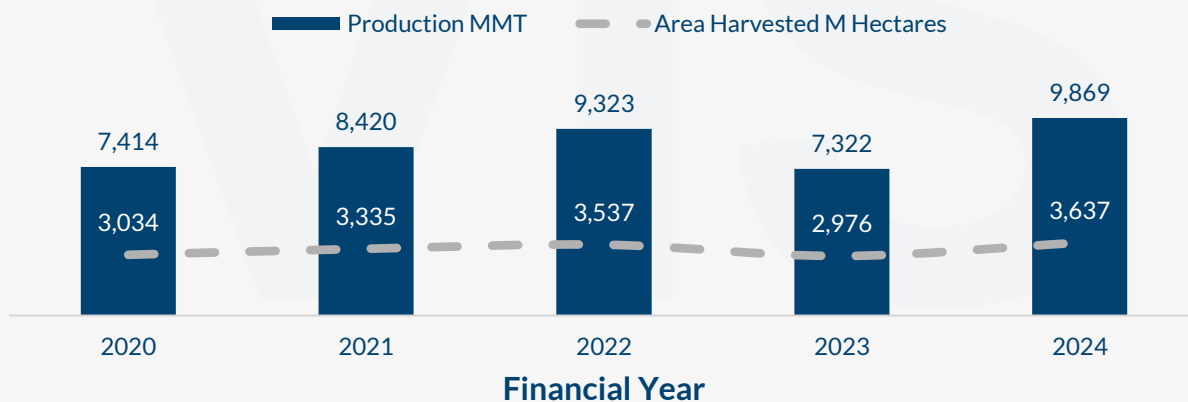
## LOCAL PERSPECTIVE

The agricultural sector contributed 24% towards the GDP and 37% towards employment. Rice sector’s share in the GDP stood at 0.6% (FY 2023: 0.4%) and added 2.5% (FY 2023: 1.9%) value to the agricultural sector. The agricultural sector witnessed robust growth of 6.25% in FY 2024, which was mainly driven by a surge in important crops of 16.82%, comprising cotton, sugarcane, rice, maize and wheat.

Rice is a kharif season crop which is planted from May-July and harvested generally during October-December. During 2023, heavy monsoon rains led to unprecedented floods which coincided with the rice harvesting cycle. The floods inundated large areas of agricultural land leading to lower yields.

However, during FY 2024, the area harvested increased by 22.2% to 3.6m hectares (FY 2023: 3m hectares) as the inundated agricultural land became available for harvesting. Rice production grew significantly to 9.9 MMT (FY 2023: 7.3 MMT) leading to higher yields of 2.7 MT/hectare in comparison to 2.5 MT/hectare in FY 2023.

### Rice Production & Area Harvested



Source: Economic Survey, 2023-24



The provincial rice production is concentrated in Punjab and Sindh, with Balochistan and Khyber Pakhtunkhwa (KPK) having smaller contributions. In FY 2020-2023, on average, Punjab’s contribution towards the total production was 65%, Sindh 29%, Balochistan 4% and KPK 2%. Punjab specializes in the production of the famous aromatic Basmati rice whereas, Sindh’s specialty is IRRI rice varieties.

### EXPORTS

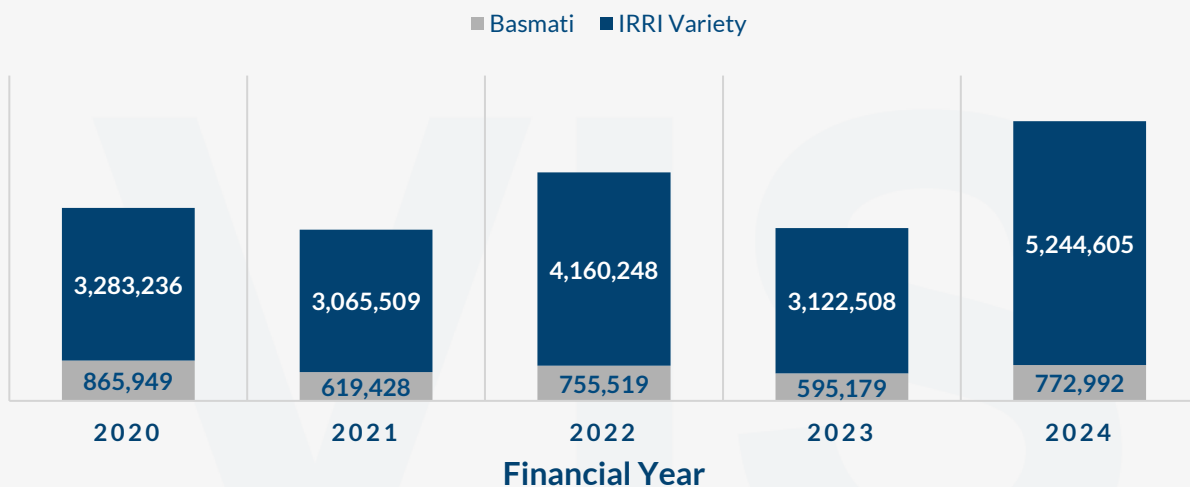
Pakistan ranks 4th in exports globally after India, Thailand and Vietnam setting a historic milestone of USD 3.9 billion (Rs. 828 billion) in exports during FY 2024 mainly due to India’s ban on non-basmati white rice exports; an increase of 83% from USD 2.1 billion during FY 2023. The ban was implemented in 2023 and continued in 2024 in order to regulate local prices amid rising food inflation, thereby ensuring domestic food security. This led to a shortage of rice in the international market, prompting buyers to switch from Indian imported rice to Vietnamese, Thai and Pakistani imports.

Pakistani rice exports were stagnant for several years, averaging 3.9 MMT (2013-2023). However, in FY 2024, export quantity grew by 62%, reaching 6 MMT (FY 2023: 3.7 MMT). IRRI varieties led the exports, accounting for 87%, while Basmati varieties contributed approximately 13%.

In FY 2024 IRRI varieties grew by 68% y/y to 5.2 MMT from 3.1 MMT in FY 2023, generating USD 3 billion. On the other hand, Basmati exports recorded a growth of 30% y/y to 0.8 MMT from 0.6 MMT in FY 2023, valued at USD 0.9 billion. Going forward, exports are projected to reach USD 5 billion by 2027.

In FY 2023, the main destination of Basmati exports was the Middle East while Kenya being the main importer of IRRI variety.

### Rice Export Quantity MT

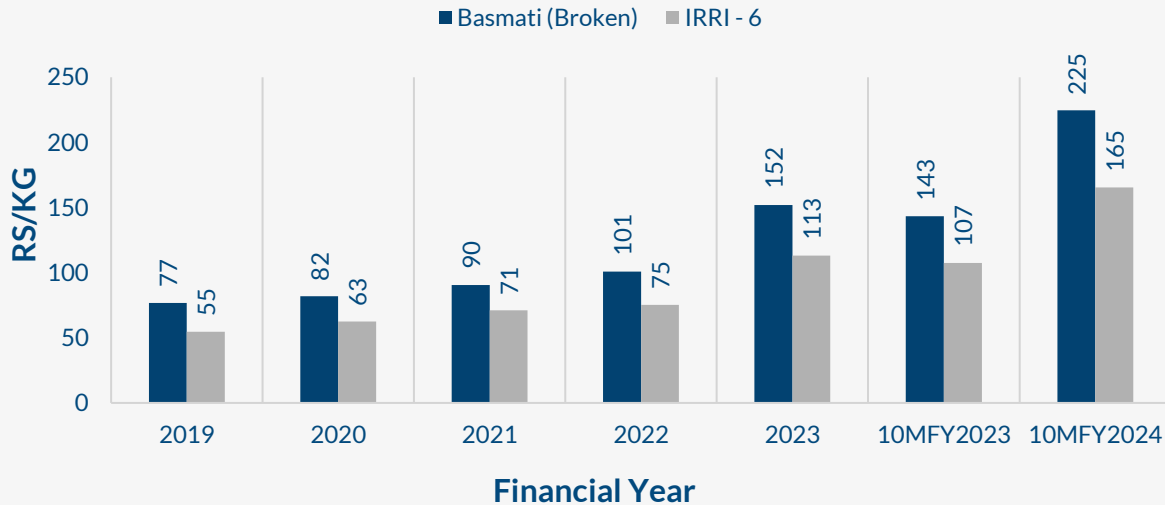


Source: PBS

Pakistan currently exports IRRI varieties mainly to Indonesia, Senegal, Mali, Ivory Coast and Kenya and premium Basmati rice to the Middle East and EU. Logistically, Pakistan’s proximity is to the Middle East, Europe and Africa providing it with freight advantages.

## PRICE ANALYSIS

### Local Prices



Source: Economic Survey, 2023-24

Basmati rice commands a higher price than IRRI rice variety owing to its superior quality and demand. On the other hand, IRRI rice variety is a cost-effective option for domestic consumption which is less affected by global market conditions.

The massive floods of 2022 significantly impacted rice production, leading to a 22% decline. This, in turn, drove up local prices by 51% and contributed to a substantial increase in the prices of both rice varieties in FY 2023.

Basmati rice prices surged by 57% during the 10MFY2024 compared to the SPLY mainly due to supply constraints. Given that Pakistan and India were the leading Basmati exporters, the tightening of supply put upward pressure on local prices.

IRRI rice variety prices rose by 54% during 10MFY2024 compared to the SPLY owing to global supply shortage. This prompted international buyers to seek alternative suppliers, resulting in Pakistan to fill this gap and achieve a new export milestone. However, the increased exports led to a reduction in domestic supply, putting upward pressure on local prices.

Overall, global commodity prices have been increasing along with a rise in local inflation y/y resulting in a rise in essential food items including rice.

## ESG SENSITIVITY

### Greenhouse Gas Emissions

Rice cultivation significantly contributes to greenhouse gas emissions because of the traditional practice of continuous flood irrigation, which emits considerable amount of methane that is released into the atmosphere, exacerbating global

warming. Pakistan's rice production is projected to increase in TY 2025. However, this is mainly due to an improvement in yields rather than an increase in harvested area, therefore, rise in emissions should be limited.

### **Groundwater Extraction**

Many farmers have switched to solar powered tube wells allowing them to pump more groundwater without incurring high energy costs, the excessive use of this resource can offset the environmental benefits of solar power.

### **Labour-Intensive**

Rice is a labour-intensive sector, especially during the harvest season. Issues related to fair wages and working conditions are a significant matter which could impact the sector. Moreover, rice is the livelihood of the rural communities, therefore, any shift in government regulations can have a powerful effect on the community.

## **SECTOR DYNAMICS**

Global market dynamics such as price, supply and demand have impacted and will continue to affect the local rice sector. Pakistan was able to set a new export milestone. However, Pakistan needs to expand into new markets and maintain their competitiveness through favourable trade policies, tariffs, political relations and marketing efforts to sustain their current export milestone particularly after India lifts their export ban.

Also, an efficient supply chain is critical in maintaining rice quality and reducing post-harvest losses. It is necessary to streamline transportation and handling of rice to ensure timely delivery and reducing costs associated with spoilage, delays and rejections.

Furthermore, continued investment in research and development to innovate new technologies and practices tailored to the rice sectors needs will be paramount. This includes advancements in mechanization, precision agriculture, biotechnology, and digital farming solutions to enhance productivity, resource efficiency and resilience to climate change.

## **SECTOR ISSUES**

### **WATER SCARCITY**

Rice cultivation is on the rise putting a strain on the already water-scarce status of Pakistan as rice is a water intensive crop. Available surface water for irrigation is diminishing as over time dams have lost their storage capacity due to sediment accumulation. As a result, farmers rely on groundwater to meet their irrigation needs. However, groundwater is being extracted at an unsustainable rate causing the water table levels to drop, consequently, farmers dig deeper to access water which may be more expensive as more energy is used.

Furthermore, farmers usually would grow one crop per season, but the recent trend is to grow two crops in one Kharif season, possible because of new short-duration varieties which mature in approximately less than 90 days, resulting in higher demand for water.

## CLIMATE CHANGE

Climate change has led to unpredictable natural disasters such as the floods in 2022, which adversely affected rice crops. Excessive irrigation due to flooding led to waterlogged soil, hampering the growth and quality of rice plants and resulting in reduced harvests.

The unpredictable weather also impacts the planting and harvesting schedules of farmers leading to lower productivity and thereby economic losses. Lastly, lower rice production raises food security concerns as rice is a staple food in Pakistan.

## QUALITY CONTROL

Quality control of rice is important to ensure it is suitable for domestic consumption along with fulfilling international export standards. Rice is an important export commodity to European countries where there are stringent regulations safeguarding health. Recently, shipments were rejected due to food safety issues as pesticide residues were detected in rice shipments as they did not comply with the maximum residue limits set by the EU.

Farmers lack the knowledge about the correct dosage of agrochemicals and the pre-harvest interval time required between the last pesticide application and crop harvest. Farmers either use a higher quantity of pesticides than recommended or apply them close to harvest time leading to elevated pesticide residue levels in the harvested crop.

## MARKET PRICE VOLATILITY AND TRADE RISKS

Sector is exposed to market price volatility and trade risks, influenced by factors such as global demand and supply dynamics, currency fluctuations, trade policies, and geopolitical tensions. Sudden changes in market prices or disruptions in trade relations with key export markets can affect the sector's export earnings, profitability, and competitiveness, leading to income losses for farmers and stakeholders.

## POLICY AND REGULATORY RISKS

Uncertainty or inconsistency in policy implementation, including issues related to taxation, tariffs, and trade barriers, can create challenges for rice growers, processors, and exporters, impacting their business operations, investment decisions, and long-term sustainability.

## SECTOR OUTLOOK

The outlook for Pakistan's rice sector is faced by both challenges and opportunities. The industry plays a vital role in the agricultural sector and the overall economy yet the dwindling water resources and the lack of quality control pose a challenge for the sector. India has occasionally placed restrictions on its rice exports which positively impacted Pakistan during FY 2024 by providing Pakistan the opportunity to tap into new markets, improving their share of rice exports, and helping reduce trade deficit. However, going forward, once India lifts these restrictions, this could have an adverse impact on Pakistan's rice exports. Looking ahead, construction of dams and improvement in the current irrigation system will provide resilience to adverse climatic events, ensuring a steady supply of this vital commodity. Additionally, improvements in quality control and technological innovations will drive the growth of this sector. Overall, while the sector remains vital for Pakistan's agriculture, its growth will depend on addressing these issues and adapting to the global market conditions.

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## RESEARCH & PUBLICATIONS

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