

Wheat Market Dynamics: Policy Solutions for Affordable Staple Food

Wheat Policy Framework for Pakistan



Conduct a Comprehensive Consumption Survey

- To assess precise national requirement and reduce excessive imports, conduct a survey at the national level to measures per capita wheat consumption across different regions. This survey should account for variations in dietary habits and provide data-driven insights for targeted policy interventions.



Promote Electronic Warehouse Receipt Systems

- Increase awareness and incentivize the adoption of electronic warehouse receipt systems to improve small farmers' access to credit. This will enable farmers to leverage their produce as collateral, enhancing financial inclusion and liquidity in the agricultural sector.



Expand Crop Insurance Schemes

- Implement crop insurance programs with incentives that protect farmers against risks such as natural disasters, pest infestations, diseases, yield variability, market price volatility, and adverse weather conditions. This will provide a safety net for farmers, ensuring their resilience against unforeseen challenges.



Enhance Wheat Resilience and Nutrition through Research

- Promote research initiatives focused on developing climate-resilient and nutritionally enhanced wheat varieties. Collaborate with provincial agriculture departments to establish model farms that demonstrate successful practices. Additionally, develop smartphone applications for information dissemination in real-time to keep farmers informed.



Resilience against Food Security Threats

- Develop robust food security programs that include the creation of strategic reserves for wheat with robust monitoring and emergency response plans. These programs should be designed to mitigate the impact of global market fluctuations and geopolitical tensions, ensuring national food security.



Reform and Optimize Subsidy Programs

- Overhaul subsidy programs to ensure transparent and efficient distribution, prioritizing the most vulnerable farmers. This reform should aim to maximize resource utilization and minimize wastage, ensuring that subsidies reach those who need them most.



Trade Policy and Global Market Integration:

- Reassess export restrictions in light of the current global market conditions and Pakistan's competitors. Leverage strategic gains by improving export competitiveness, especially for surplus production in key commodities like wheat, to strengthen Pakistan's position in international markets.



Revise the National Food Security Policy (NFSP) 2018

- Revise the NFSP to address emerging threats and explicitly define the roles of provincial authorities while Establishing a National Food Security Council to enhance coordination and streamline implementation. In addition, integrate a robust system for monitoring and forecasting wheat market dynamics to proactively manage supply and demand.



Extend Short Term Soft Loans to Farmers

- Offer short-term interest rate relief for the upcoming wheat season, coupled with enhanced technical assistance and streamlined repayment procedures, to help farmers recover financially from the previous wheat market downturn.

1. Introduction

Wheat, a staple crop in Pakistan, holds a significant position in the country's agriculture and dietary needs. It accounts for more than 50% of the population's daily caloric intake (Dawn, 2024). However, annual per capita wheat consumption has declined significantly, dropping from 134 kg in 1979 to 84 kg in recent years (Raja et al., 2022; API, 2024). Figure 1 illustrates the global ranking of wheat production, highlighting Pakistan's notable position as the 7th largest wheat producer worldwide. The countries ahead of Pakistan include China, which leads the world in production, followed by the European Union, India, Russia, the USA, and Canada.

Figure 1 Wheat Production Rankings, 2024



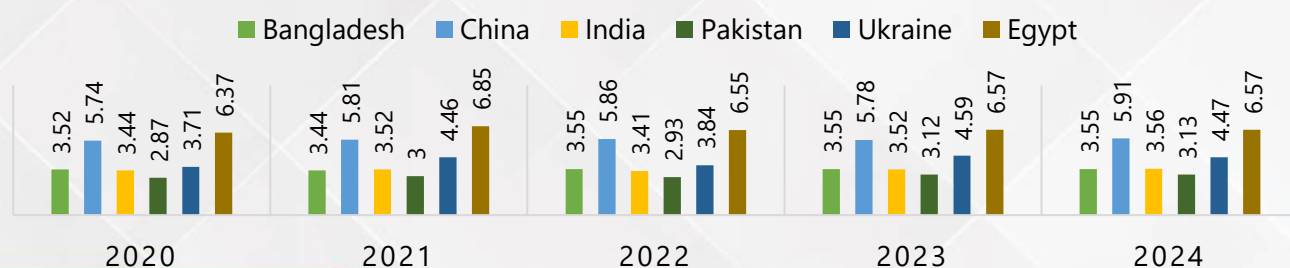
Source: USDA

2. Wheat Productivity Challenges

Pakistan, despite being a major wheat producer, struggles with low productivity. Over the past two decades, 137 wheat varieties have been released by various research institutions (PIDE, 2023), yet productivity (3.13 MT/ha) remains significantly lower compared to its peers: 13% less than Bangladesh (3.55 MT/ha), 14% less than India (3.56 MT/ha), 43% less than Ukraine (4.47 MT/ha), 89% less than China (5.91 MT/ha), and 110% less than Egypt (6.57 MT/ha). This low productivity results in higher wheat imports, straining foreign exchange reserves, increasing the trade deficit, and impacting food security with potential price hikes and poverty increases. The sector's inefficiency also hinders economic growth. Figure 2 below shows Pakistan's poor performance in wheat yield compared to other countries.

Figure 2 Wheat Yield Comparative Analysis

WHEAT YIELD (MT/HA) BY COUNTRY

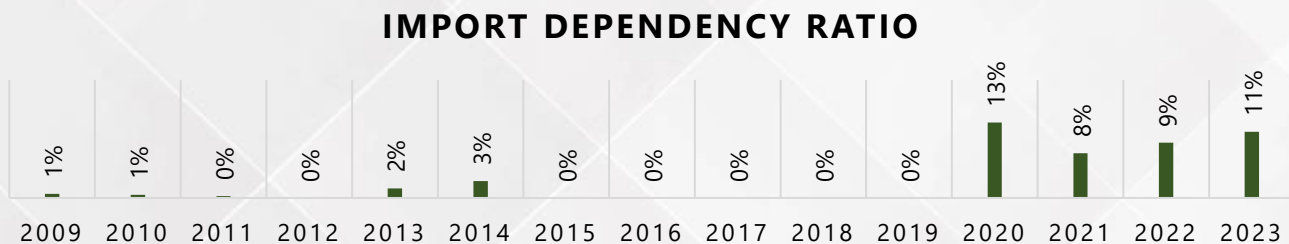


Source: USDA, Pakistan Economic Survey

3. Growing Import Dependency and Wheat Availability

In the past, Pakistan maintained self-sufficiency in wheat production and availability. However, in recent years, it has been becoming increasingly dependent on wheat imports, with the import dependency ratio varying between 8% to 13%, as shown in Figure 3. Moreover, Pakistan has often encountered critically low levels of federal reserves due to sluggish export growth, a widening trade deficit, and impending debt repayments. These factors have added complexity to the country's efforts to meet rising import requirements, notably for wheat.

Figure 3 Trend of Import Dependency Ratio

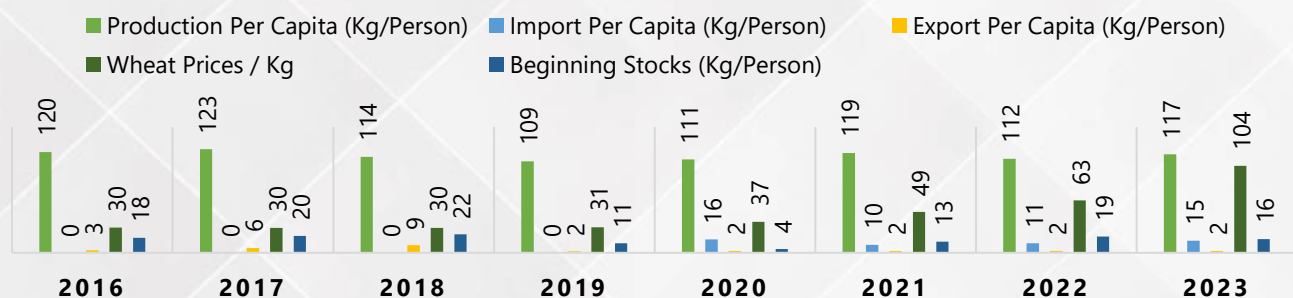


Source: USDA

Pakistan's increasing reliance on wheat imports, which has risen from 0% to 11%, calls for a thorough analysis. Despite per capita production increase and higher beginning stocks in 2023 compared to previous years, the elevated level of imports is alarming. The 15 kg per capita import figure seems disproportionately high given past wheat availability. Furthermore, the surge in wheat prices to an all-time high, despite adequate supply in 2023, highlights underlying complexities. This situation suggests that factors such as distribution inefficiencies, market speculation, wastage, economic policies, and potential hoarding may be contributing to the paradox of high imports coupled with rising prices.

Figure 4 Wheat Availability and Prices

WHEAT AVAILABILITY AND PRICES



Source: USDA, Wheat Policy

4. Wheat Dilemma of 2023-24 and International Wheat Market

In 2023-24, Pakistan's wheat production hit a record 31 million tons. However, the Trading Corporation of Pakistan (TCP) imported 3.4 million tons of wheat, overwhelming government storage, preventing PASSCO and provincial departments from buying wheat at the official price of Rs3,900 (Rs4,000 in Sindh). This led to farmers selling wheat for under Rs2,500 per 40 kg by May 2024, a 36% drop from 2022 levels (Tribune, 2023). While consumers benefited from lower prices, farmers faced financial difficulties due to reduced income amidst high costs for seeds, fertilizers, and machinery.

Current policies are creating an unsustainable environment for farmers, risking Pakistan's food security and economic stability. Recent geopolitical tensions, such as an Israeli strike on Iran, caused wheat futures to rise over 3% (BR, 2024). Additionally, export restrictions during the Russia-Ukraine war have made up 39% of Pakistan's imported calories, compared to 0.11% during COVID-19 and 9% in the 2008 food crisis. This underscores Pakistan's growing vulnerability to global instability and the impact of export restrictions on food prices.

Figure 5 Impact of Export Restrictions on Imported Calories – Pakistan



Source: Food and Fertilizer Export Restrictions Tracker, IFRI

5. Assessment of Domestic Wheat Requirement

Pakistan needs to reassess its wheat requirements to optimize the 27.8 billion rupee subsidy for 2024-25. With a population of 249.67 million, the estimated wheat consumption is 28.17 million tonnes (balance sheet method) or 28.71 million tonnes (M/o NFS&R). Including seed, feed, wastage, and reserves, the total domestic requirement is 31.99 million tonnes (balance sheet method) or 32.53 million tonnes (M/o NFS&R), leading to surpluses of 1.08 million tonnes and 0.54 million tonnes, respectively.

Table 1: Wheat Demand and Supply

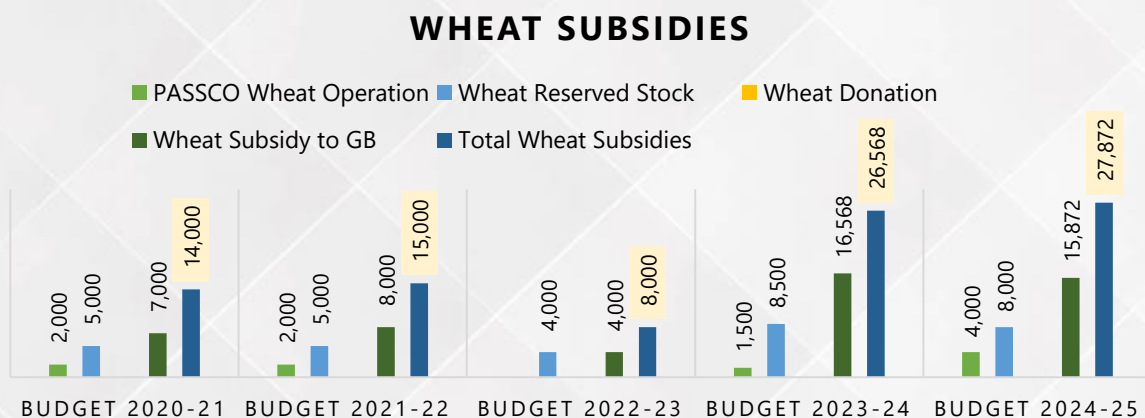
Requirement of Wheat	2023-24			2024-25 (P)		
	Agriculture Policy Institute	M/o NFS&R	HIES	Agriculture Policy Institute	M/o NFS&R	HIES
a. Per Capita Consumption Requirement	112.82 kg	115 kg	84 kg	112.82 kg	115 kg	84 kg
b. Population	249.67	249.67	249.67	254.64	254.64	254.64
c. Total Consumption Requirement (MMT) (c = a*b)	28.17	28.71	20.97	28.73	29.28	21.39
d. Allocation for seed, feed and wastage, 10% of total production (MMT)(d=h*0.10)	2.82	2.82	2.82	2.97	2.97	2.97
e. Reserves for Food Security (MMT)	1.00	1.00	1.00	1.00	1.00	1.00
f. Total Requirement (MMT) (f=c+d+e)	31.99	32.53	24.79	32.70	33.25	25.36
g. Beginning Stock (MMT)/ Carry Forward	4.89	4.89	4.89	4.19	4.19	4.19
h. Production (MMT)	28.18	28.18	28.18	31.44	31.44	31.44
i. Total Supply (MMT) (l = g+h)	33.07	33.07	33.07	35.63	35.63	35.63
k. Surplus Deficit (MMT) (k=i-f)	1.08	0.54	8.28	2.76	2.20	10.10

However, adopting HIES data, which estimates per capita wheat consumption at 84 kg annually, the total requirement is 24.97 million tonnes, indicating an 8.28 million tonnes surplus. For 2024-25, the projections of total wheat requirement using balance sheet method, estimates of M/o NFS&R, and HIES data are 32.70 million tonnes, 33.25 million tonnes, and 25.36 million tonnes resulting in surpluses of 2.76 million tonnes, 2.20 million tonnes and 10.10 million tonnes, respectively. Therefore, reevaluating requirements based on actual consumption data can lead to significant savings and more efficient resource use.

6. Comparative Overview of Agricultural Subsidy Programs

Pakistan is investing billions of rupees to secure wheat procurement and availability (see Figure 6). Similarly, other countries support their farmers significantly: for instance, in the European Union, farmers receive an average subsidy of 250 to 300 euros per acre, with no ceiling or payment limit (Dawn, 2024). In the United States, crop insurance is the largest farm subsidy, costing \$10 billion annually and covering 62% of premiums for 130 crops. This program primarily benefits farmers of corn, soybeans, wheat, and cotton, ensuring that most farmers profit from it (Cato, 2023). Moreover, India is expected to allocate about 4 trillion rupees (approximately \$48 billion) for food and fertilizer subsidies for the 2024-25 fiscal year (Reuters, 2024).

Figure 6 Wheat Subsidies in Million Rupees



Despite spending billions of rupees, Pakistan continues to face challenges such as price hikes and other issues. Ensuring food security, particularly in the wheat market, demands more than market reliance. Advanced economies demonstrate a balanced approach, providing production subsidies and financial aid to farmers in order to stabilize the domestic availability. To address these challenges effectively, Pakistan must revamp its subsidy management and planning, ensuring stable wheat availability in the long run.

7. Conclusion

Pakistan's wheat sector is grappling with significant challenges, despite marked increases in production and substantial government subsidies. Addressing the issues of low productivity, rising import dependency, and market inefficiencies requires a comprehensive policy overhaul. The current paradox of high imports amidst sufficient domestic production and escalating prices highlights the urgency for targeted reforms.

Key Findings:

The following key points highlights the critical findings of this policy brief.

- Pakistan's wheat productivity is markedly lower than that of key competitors—13% less than Bangladesh, 14% less than India, 43% less than Ukraine, 89% less than China, and 110% less than Egypt. Bridging this productivity gap through investments in technology and the adoption of better agricultural practices is essential.
- The import dependency ratio for wheat has increased from 0% to 11% in recent years. Despite a record production of 31 million tons during the 2023-24 season, the country still imported 3.4 million tons, reflecting inefficiencies in domestic supply chains and distribution networks.
- High wheat imports, combined with the current subsidy expenditure of 27.8 billion rupees for the 2024-25 fiscal year, are exacerbating trade and fiscal deficits, while also threatening food security. Implementing a more targeted subsidy approach and improving resource allocation could help alleviate these financial pressures.
- Estimates of Pakistan's domestic wheat requirement vary significantly: the balance sheet method suggests 31.99 million tons, the Ministry of National Food Security and Research (M/o NFS&R) estimates 32.53 million tons, while HIES data indicates a much lower requirement of 24.97 million tons. This 8.28 million ton surplus calls for a detailed examination of consumption patterns to better understand and manage wheat demand.
- Countries like the EU, the US, and India make substantial investments in agricultural subsidies—the EU provides 250 to 300 euros per acre, the US spends \$10 billion annually on crop insurance, and India allocates approximately \$48 billion for food and fertilizer subsidies. Pakistan should consider adopting similar strategies to stabilize its wheat market and enhance productivity.

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