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PACE Policy Paper: Rationalization of Wheat Markets in Pakistan: Policy Options

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Rationalization of Wheat Markets in Pakistan: Policy Options

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EXECUTIVE SUMMARY

While wheat procurement policy is a central part of Pakistan’s agricultural policy, a brief description of its impact does not make for easy reading: it has a high budget cost, has led to a buildup of debt, distorts markets, provides little direct benefit to small farmers and productivity in Pakistan’s wheat sector continues to lag. Furthermore, as Pakistan has gradually moved to producing a wheat surplus, a trend that is likely to continue in the future, the current policy set is likely to become more unsustainable in the future, with the task of squaring the circle between supporting farm incomes, providing fair consumer prices and delivering food security becomes increasingly difficult without reform.

Most countries have phased out public sector procurement of food grains and its distribution because of (a) high cost and enormous losses; (b) distortion in the markets; and (d) challenges of governance and transparency including third party audit of stocks. Different approaches include establishing a national security reserve equivalent to 10-15% of national use of food grain such as in Bangladesh.¹

Wheat is an important crop in Pakistan with farmers growing it on a total of about 8.8 million hectares (40% of the country’s total cultivated land)², contributing 37% of total food energy intake. Wheat production has been hovering around 24-26 million tons per year with Punjab contributing about 75% (**Figure 1-B**). Wheat yields are around 30% lower than in other countries with comparable conditions (**Figure 1-A**), while the potential for irrigated wheat is about 6 tons/hectare compared to current yield of 2.5 to 3 tons/hectare.

Cereals are reducing their importance in household food basket in Pakistan. As cereal consumption has declined, consumers are shifting towards more dairy, meat, eggs, and other high value food products in their diet (**Figure 2**). The trend has been observed both in richest 20% and the poorest 20% (**Figure 3-A and 3-B**). Annual per capita consumption of wheat has declined from 134 kgs in 1979 to 87 kgs (**Figure 4-A, 4-B and Table 2**).⁵

It may be underlined here that wheat procurement policy is a bedrock of Pakistan’s approach to delivering food security, and wheat will continue to be a key economic, political and social focus. Stress testing the current policy mix under a variety of scenarios, including high and low production, and high and low prices, strongly suggests that the current set of wheat policy and market management tools will not be able to cope, with *ad hoc* policy interventions doing little to address the sector’s fundamental issues.

¹ Bangladesh is now maintaining a strategic reserve of 1.5 million tons of wheat and mostly rice.

² Economic Survey of Pakistan, Ministry of Finance, 2018-19

Therefore, taking on board the importance of ensuring Pakistan’s food security in all situations, this paper presents options to increase sustainability in the future. Initially, the paper provides a brief review of procurement’s aims and impact, before presenting several recommendations and three broad options for reform.

Ultimately, increasing productivity is needed to deliver fair wheat prices and support farm incomes. With a substantial lag in yields both compared to similar countries and the agroeconomic potential in Pakistan, the drivers of higher productivity need to be addressed, such as improved wheat seed quality, introducing newer technology and harnessing market forces.

Given the substantial buildup of debt by wheat procurement policy, which exceeded PKR 750 billion in 2019, any long-term sustainable solution for the sector will need to address this, with international experience showing that successful reforms are combined with debt forgiveness/retirement.

The first option evaluated is maintaining the status quo – keeping the current policy set – however, rising production, poor storage, inefficiencies and high costs mean that the policy’s objectives of supporting farm incomes, fair consumer prices and food security are essentially irreconcilable.

The second option assesses a gradual government withdrawal from procurement coupled with market liberalization. The aim of a gradual government withdrawal from procurement is to encourage the development of competition for wheat amongst private traders, millers and stockists. The government’s role would essentially be reduced to ensuring food security, as well as maintaining fair and transparent competition, and helping to raise agricultural productivity. Three main areas need to be addressed: i) building capacity for monitoring and analysis (as the markets evolve, the need for timely monitoring and analysis is even stronger, as evidenced in the recent issues where the government did not have data on millers’ stocking behavior, thus requiring a reinforcement at both Federal and Provincial level of analytical capacity); ii) addressing storage and financing the wheat harvest (current storage facilities are poor and inefficient, as procurement is reduced, farmers will need access to an efficient post-harvest financing mechanism); and iii) creating the right policy environment (presenting a series of measures and issues that need to be addressed to ensure a functioning and stable set of policy tools).

The government has previously stepped back from both rice and maize markets, with positive results, there is no reason to believe that it could not do so for wheat. The sensitivity of wheat is recognized, with the need for government to maintain a set of tools to ensure that any market situation can be addressed to guarantee the countries food security.

The aim of this option is to move towards a modern market-oriented wheat marketing system, post-harvest finance system for farmers (such as warehouse receipts) and a better developed export value chain to cope with market surpluses. Greater integration with world markets would reinforce the resilience component of food security as well as create opportunities for export development.

The third option assesses a government withdrawal from wheat procurement coupled with time limited compensatory cash transfers to small farmers. The paper further reviews the role of strategic wheat stocks and the principles of how a strategic grain reserve could be established.

CONTEXT

The developing countries took control of food production and pricing as they emerged from colonial control and introduced a system of procurement and distribution of food grains. In the South Asia context, Bangladesh, Pakistan and India all have had large scale government interventions in domestic rice and wheat markets (Table 1), originating from a common colonial heritage that can be traced back to policies of British India in response to the 1943 Great Bengal famine [Ahmed, Haggblade, and Chowdhury (2000); Rashid, Gulati, and Cummings (2008)]. Pakistan was no exception as its public wheat procurement program dates back to 1959 and continuing with varying degrees. Nevertheless, the governments around the world, with few exceptions, have moved away from this system of public sector grain procurement and preserving stocks as it became financially unsustainable and shifting to wheat strategic reserve³ which is considered as the supply of last resort.

Objectives of Strategic Reserves

The commonly cited objectives of maintaining strategic reserve are listed below:

- i) **Food Emergency** intended to guarantee availability of grains in situations of extreme weather or other disasters.
- ii) **Price Stabilization** intended to buy grains when prices are low to reduce supply and sell when prices are high to keep prices in check.
- iii) **Social Safety Nets Reserves** meant for regular distribution programs to address poverty and chronic food insecurity.

Size of the Strategic Reserve

There is no optimal level of strategic wheat reserves. Rashid and Lemma (2011) suggested that the size of reserves should assume “at least 95 percent of the food-insecure population need to be protected by providing a ration of 400 grams of cereal per capita per day for a period of four months, which is considered to be the necessary lead time to import and distribute the food to beneficiaries.”⁴ The World Bank (2012), however, suggested as follows:

³ Terms like “national food reserves”, “strategic reserves”, “emergency food reserves”, “buffer stocks”, “humanitarian stocks” and “intervention stocks” are used interchangeably. Food and Agriculture Organization (FAO) defines strategic reserve as “**stocks held or controlled by government on a long-term basis for certain future contingencies.**”

⁴ Using this standard, Pakistan needs a strategic reserve of 3.5-4.0 million MT based on 400 grams per day for 95% (73.62 million) of mild insecure (11.1%), moderate food insecure (7.6%) and severe food insecure (18.3%) population (totaling 77.5 million) for 120 days. Food insecure population is taken from National Nutrition Survey of 2018.

- i) **Determination of Strategic Reserve:** A country, while determining optimal level of strategic wheat reserve (a) must consider its degree of import dependency by examining current and projected wheat consumption and domestic production; (b) assess its relative vulnerability to supply disruptions⁵ and price shocks including the time frame these would last; and (c) risk tolerance.
- ii) **Location of Strategic Reserves:** Larson et al. (2011) proposes that strategic reserve must be located within borders of the country who owns the reserves as it keeps the wheat where it is needed in time of emergency. The optimal location for the strategic reserves for an import dependent country is at the point of entry into the country.
- iii) **Guiding Principles for Managing Strategic Reserves:** Murphy (2009) is of the view that each country must establish a set of guiding principles, such as, threshold domestic price that would trigger the draw-down, target reserve level, and the rate of reserve replenishment assuming first-in-first-out (FIFO) principle and management staff must be well aware of these guidelines. Selecting higher threshold domestic price turns the reserve into more of a safety net to be used in emergency rather than as a tool for price stabilization (Larson et al. 2011).
- iv) **Financing of Reserve Management:** Management of wheat reserves must be adequately financed.

Strategic Reserves Management System

While many argue for private sector management of such stocks, others suggest that private grain traders are driven by profit and thus have less incentive to maintain socially optimal levels of stocks (Murphy 2009, Wright and Williams 1991). However, once the strategic policy is established, the Government can endeavor for public-private-partnerships for management by paying private operators to manage logistics and storage operations for strategic stocks.

The US-based Institute for Agriculture and Trade Policy has also developed a list of desirable criteria for a coordinated food reserve system. It includes:

- (i) an accountable governance structure with an arms-length principle to ensure that management of the reserves is not politicized.
- (ii) The structure must be equipped with

⁵ Supply disruptions include logistical bottlenecks delaying delivery of supplies, accidents such as a dust explosion at a silo, and emergency situations and inaccessibility of new wheat imports.

- a. An Early Warning System (Pakistan is not part of the FAO-Agriculture Market Information System (AMIS). Integration of Pakistan with this system can help Pakistan immensely.
 - b. A Market Information System
 - c. An emergency intervention unit
 - d. A Food Security Fund
 - e. Food Markets, domestic and international Monitoring Platform
- (iii) Enough policy flexibility to respond to unusual events and to evolve as circumstances change, i.e. export and import.
 - (iv) A clear mandate and the requisite authority and means to fulfil that mandate.

WHEAT POLICY OF PAKISTAN

Pakistan has maintained a heavily controlled wheat sector. The government wheat policy (varied over time, see **Table 1**) attempts to balance the competing interests of producers and consumers while enhancing food security in terms of both availability and access to food. **On the supply side**, policy aims at increasing wheat productivity (yields) and output, supporting farmer income and reducing dependence on food imports. **On the consumption side**, the major policy goals are ensuring availability of wheat flour at affordable prices for consumers, particularly urban consumers and rural poor, and maintaining price stability.

To achieve these objectives, the federal and provincial governments employ various instruments: setting support price based on the cost of production and nominal land rental price; wheat procurement target annually; regulating international trade through regulatory tariffs;⁶ and maintenance of stocks for millers and

Box 1: Outcomes of Current Wheat Policy

Clearly, the present wheat procurement policy/system is not meeting any of the desired policy objectives and, therefore, is not a sustainable option. The productivity is still low as compared to countries with similar climatic conditions. Second, the policy benefits the banks, large farmers, millers and middlemen and penalizes the urban consumers and rural poor who are net purchasers/consumers of wheat/wheat flour. Third, the government's rationale to take responsibility of supplying wheat to flour mills is flawed and costly. Fourth, the system triggers huge financial loss/subsidy on recurring basis and lead to rising food account debt level. Fifth, the current system crowds out the private sector. Sixth, it poses serious governance challenges in terms of inefficiencies, adulteration, misappropriation and rent seeking. Seventh, the opportunity cost of tying up resources in wheat procurement is far too high as it not only captures fiscal space of the federal and provincial governments but also compromises development spending.

⁶ Government effectively choked off wheat liberalization, occurred in 1980s with the abolition of wheat ration shops in 1987, by very high duties (60% plus)

security reserve. The provincial governments, however, take the final decision for actual procurement and fixing quota for flour mills from the government storages and release price for millers. Nevertheless, the debate regarding huge fiscal cost of this policy is getting intense in the country.⁷

Nevertheless, current policy and wheat procurement system has remained ineffective and inefficient in meeting its goals of (i) increasing wheat productivity and output; (ii) supporting the poor farmers; (iii) stabilizing prices and (iv) providing cheap flour to urban consumers. The same is discussed at length from this point onwards.

Wheat Production and Consumption Trend

Wheat is an important crop in Pakistan with farmers growing it on a total of about 8.8 million hectares (40% of the country's total cultivated land)⁸, contributing 37% of total food energy intake. Wheat production has been hovering around 24-26 million tons per year with Punjab contributing about 75% (Figure 1-B). Wheat yield has increased over time but still around 30% lower than in other countries with comparable conditions (Figure 1-A), while the potential for irrigated wheat is about 6 tons/hectare compared to current yield of 2.5 to 3 tons/hectare.

Figure 1-A: Wheat Yield

Figure 1-B: Wheat Production in Pakistan

Source: FAOSTAT & Economic Survey of Pakistan

Cereals are reducing their importance in household food basket in Pakistan. As cereal consumption has declined, consumers are shifting towards more dairy, meat, eggs, and other high value food products in their diet (Figure 2). The trend has been observed both in richest 20% and

⁷ Paul Dorosh and Abdul Salam, 2008, "Wheat Markets and Price Stabilization in Pakistan, An Analysis of Policy Options", *Pakistan Development Review* 44(1):71-88

⁸ Economic Survey of Pakistan, Ministry of Finance, 2018-19

the poorest 20% (**Figure 3-A and 3-B**). Annual per capita consumption of wheat has declined from 134 kgs in 1979 to 87 kgs (**Figure 4-A, 4-B and Table 2**).

Figure 2: Domestic Food Consumption Is Shifting Towards High-Value Commodities

Source: Household Income Expenditure Surveys

Figure 3-A: Richest 20% of Population

Figure 3-B: Poorest 20% of Population

Source: HIES 2002, 2014, and 2016

Fig 4-A: Average Yearly Per Capita Consumption of Wheat and Wheat Flour in Urban Areas (Kgs)

Fig 4-B: Average Yearly Per Capita Consumption of Wheat and Wheat Flour in Rural Areas (Kgs)

Source: Policy Briefing Paper, Ministry of Food, Agriculture and Cooperatives, August 1987, HIES 2015-16,

Wheat Support Price

Pakistan was a net importer of wheat during 1980s and 1990s until a bumper wheat harvest in early 2000 which led to a record procurement of 8.6 million tons and a large increase in stocks. Nevertheless, crop shortfalls from 2002-2004, rising market prices, problems with government import tenders in 2004, and food prices crisis in 2008 led to sharp increase in wheat procurement price.

The support price for wheat has been consistently rising over time. It increased 1.3 times between 1992/1993 and 2002-03 and 3.7 times since then (**Figure 5-A**). Indian minimum support price (MSP) for wheat, adjusted for PKR, have remained lower than Pakistan until 2017-18 and has started rising above Pakistan's support price since 2018-19 (**Figure 5-B**).

Figure 5-A: Support Price of Wheat/40 Kgs

Source: Agriculture Statistics of Pakistan

Figure 5-B: Support Price of Wheat/40 Kgs in India

Source: nic.in.irb

The wheat support price has often been above the international (see Figure 6-A), compelling the government to provide subsidy of US\$90-120/ton (shared equally by the federal and provincial governments) to export surplus wheat. This difference between the procurement price, now fixed at PKR1400/40kgs (US\$223/ton), and international price has narrowed because of rupee depreciation during the last 18 months. Support price and import parity price/ton gap has widened due to regulatory duty (60%), income tax (6%), and provincial infrastructure Cess⁹ of 1.05% (see Figure 6-B) to protect domestic wheat.

Figure 6-A: Support Price-International Price/Ton

Source: World Bank Pink Sheet as on March 13, 2020

Fig. 6-B: Import-Export Parity Price/Ton

Source: API, MNFS&R, and Pink Sheet

Wheat Procurement

The wheat procurement in the country has been between 19-25% of the total production since 2005-06 except for 2008-09 (38.3%), 2012-13 (32.7%) and 2019-20 (proposed at 31%). Punjab's share in this procurement has ranged from 35 to 67% or 14-23% of the Punjab's wheat production except for 2008-09 when it was 31%. Procurement in Sindh has ranged between 2.4% to 6% during the same period or 14%-40% of Sindh own wheat production (see Table 3, Figure 7).

⁹ Cess is a purpose specific levy imposed by the Government of Sindh

Figure 7: Wheat Procurement in Pakistan and Punjab

Source: Economic Survey of Pakistan and Punjab-Sindh Food Departments

Wheat Market Operation

Figure 8 reflects wheat market operation in Pakistan. Wheat procurement and price support system, introduced in the late 1950s, has been ineffective in meeting its goals of supporting the poor farmers, stabilizing prices and providing cheap flour to urban consumers. The wheat procurement system is plagued with patronage and elite capturing, particularly in the distribution of gunny bags, delivery of wheat to the purchase points, weighing of wheat received from poor farmers and releases of wheat to flour mills, which is often not transparent. Small farmers rarely get bags and face difficulties in accessing delivery points. Key players of the existing wheat procurement system are indicated at **Figure 9**.

Figure 8. Wheat Marketing System in Pakistan

Figure 9. Key Players of Wheat Procurement System

CONSEQUENCES OF SUPPORT PRICE AND PROCUREMENT SYSTEM

1. **Support Price for Procurement has resulted in structural oversupply of Wheat:** Maintaining wheat support prices above international or import parity level throughout the last 10 years and research focus on wheat¹⁰ has resulted in structural oversupply despite declining annual per capita consumption from 134 kgs in 1978/79 to 87 kgs in 2015/16 (see **Table 2**). Punjab has recorded a surplus of around 3 million tons in Punjab alone (see **Figure 10**).

¹⁰ ASTI Fact Sheet: Pakistan spends 0.18% of Agriculture GDP on research, 19% of which is spent on wheat, highest amongst major crops.

Figure 10: Wheat Stocks, Production & Utilization in Punjab, 2010-2019

Source: Agriculture Statistics and AMIS Punjab

2. **The current wheat procurement program benefits large farmers.** The top 40 percent of wheat farmers produce 79% of wheat in the Punjab. They sell 84% of the total production in the province to the Government or the market (**Figure 11-A**). Bottom 40% of the farmers produces 11.0% of wheat in Punjab and sell only 6.4% to the Government or the middleman. Similar is the situation in Sindh where top 40% farmers sell their 88% of their wheat production (**Figure 11-B**). Typically, the large farmers are the beneficiaries of the current system.

Traditionally over the past 10 years, the Government of Punjab (GoPunjab) through Punjab Food Department (PFD) has procured about 4 million metric tons (MMT) of wheat on the average. Less than **3% (or about 140,000)** of farmers with less than 5 ha (12.5 acres)¹¹ of land sell wheat to the PFD. Since PFD procures wheat from several hundred thousand farmers, most wheat procured by the Government is thus from 9% relatively larger farmers. Furthermore, small farmers do not necessarily receive the procurement price due to inefficiencies in the system and zero losses policy. This is demonstrated by the market price being typically lower than the procurement price.

¹¹ Small farmers account for 91% of all farmers in Punjab.

Figure 11-A: Sale of Wheat in Punjab

Source: IFPRI-Pakistan

Figure 11-B: Sale of Wheat in Sindh

3. **Flour millers are beneficiaries of the current system:** As already highlighted that flour mills which receive subsidized wheat from the government enjoy rents from sales of subsidized wheat flour at market prices as the ceiling prices for wheat flour milled set by the Government are not enforced.¹² Profits from sales of wheat milled using government wheat are thus substantial. Lohano et al. (1998) and Ahmad et al. (2006) argue that this policy offers considerable opportunities for rent seeking and has resulted in a considerable excess capacity in the flour milling industry. Another consequence of these rent opportunities is that many mills operate only when the government releases wheat at below-market rates (November–April).¹³
4. **Banks are the prime beneficiaries of the current system.** Around 73% of the total wheat subsidy cost incurred¹⁴ is paid to the banks because of delayed retirement of outstanding wheat procurement loans by the provincial governments.
5. **Creation of Two-Tier Market for Wheat:** The System of *bardana* (the bags which are mandatory for wheat delivery to the Government's purchase centers) creates two-tier market for wheat, i.e. those who have access to bags and are able to sell at the official procurement price of PKR 1400/40 Kgs and those who are compelled to sell at lower prices to

¹² Paul Dorosh and Abdul Salam, op.cit.

¹³ According to Pakistan Flour Mills Association, currently there are 1219 flour mills with milling capacity of 280,000 tons per day against domestic demand of 40,000 per day.

¹⁴ Subsidy cost is the differential between wheat procurement cost minus release price to millers.

private traders and millers. This system is already a source of rural unrest besides providing incentives for rent seeking.

6. **The wheat procurement and release system has failed to provide cheap flour to urban consumers and rural poor.** Since wheat flour produced from government wheat is not distinguishable from wheat flour produced from market wheat, their prices are the same.¹⁵ Therefore, urban consumers and the rural poor, who are net consumers of wheat, are paying significantly higher prices than they would in a liberalized wheat market as the support price has remained above the import-parity price. The wheat price shot up to PKR 48,000/MT in Lahore and PKR 60,000/MT in Karachi in January 2020¹⁶ while import-parity price rose substantially.¹⁷
7. **Dynamics of wheat support price:** Econometric analysis by Khan and Mohsin (1996) suggests that a 10 percent increase in the wheat procurement prices would increase the food prices index by 7.4%.¹⁸ However, Khan and Schimmelpfennig (2006) found that domestic wheat prices in Pakistan follow international prices though with a lag. Wheat price increase after May 2003 and 2019 started before the wheat support price was raised.¹⁹
8. **Support price does not necessarily effect market price.** Average ratio of Lahore wholesale price to procurement price during procurement season from 1990-91 to 1998-99 was 1.085 reflecting market costs from villages to procurement centers to Lahore wholesale market. Similar situation existed during 2003-2010, 2014, 2016 and 2019. This price ratio fell below 1.0 in 2000-2002, 2011-2012, 2015, and 2017-2018, the largest in 2011 to 0.91. It is an evidence that procurement price was exogenously determined during these years as procurement price was higher than the wholesale market price (see **Figure 12**).

¹⁵ Dmitry Prikhodko and Oleksandr Zrilyi, 2013. Pakistan: Review of the Wheat Sector and Grain Storage Issues. Food and Agriculture Organization, Rome, Italy.

¹⁶ Agriculture Market Information System

¹⁷ Federal Government has clamped 60% regulatory duty since 2018 and 7% withholding tax. Additionally, the provincial government charge 1.05% infrastructure Cess¹⁷ bringing the import parity price of wheat @ Karachi to PKR73063/MT

¹⁸ Ashfaq H. Khan and Mohammad Ali Qasim (1996), "Inflation in Pakistan Revisited", *The Pakistan Development Review* 35:4, 747–759: using data from 1971-72 to 1994-95.

¹⁹ Mohsin S. Khan and Axel Schimmelpfennig (March 2006), "Inflation in Pakistan: Money or Wheat?", International Monetary Fund Working Paper.

Figure 12: Wholesale Market to Support Price Ratio

Source: Economic Survey of Pakistan and AMIS Punjab

11. **Enormous Financial Cost of Current System:** The support price and wheat procurement system have enormous financial cost. Every year, the wheat procurement operation is financed by borrowings from the banking consortium which has been rising, from PKR 37 billion in 2001-02 to PKR433 billion in 2018-19 (see **Figure 13-A**). Resultantly, annual mark-up has increased substantially, from PKR3.1 billion to PKR 30 billion during the same period (see **Figure 13-B**).

Figure 13-A: Bank Borrowing and Subsidy

Figure 13-B: Annual Mark Up (PKR Billion)

Source: Provincial Food Department

The cost of incidentals in Punjab, approved by the Finance Department annually, has risen from PKR 1615/ton in 2002-03 to PKR 9,511/ton in 2018-19, an increase of 489% (see

Table 4). The direct costs of buying, storing and releasing 4 million tons of wheat are estimated at PKR38 billion per year, 73 percent of which consists of bank commission and interest payments both on current borrowing and accumulated debt.

12. **High Financial Loss to Public Exchequer:** Annual financial loss in **Punjab** because of wheat procurement and wheat release policy has risen from PKR3.5 billion in 2005-06 to PKR52 billion in 2008-09 and declined to PKR23.8 billion 2018-19 because of reduction in procured quantity (3.3 MMT). The cumulative financial loss in Punjab from 2005-06 to 2018-19 amounts to PKR294 billion, growing at an annual compound growth rate (ACGR) of 13% per annum (**Figure 14-A, Table 5**). Likewise, **annual financial loss has risen from PKR0.7 billion to PKR10.6 billion in Sindh** during the same period except 2018-19 when Sindh opted not to procure wheat. Cumulative financial loss in Sindh during this period amounts to PKR76 billion, growing at an ACGR of 23% per annum (**Figure 14-B, Table 6**).

Figure 14-A: Financial Loss to Punjab

Figure 14-B: Financial Loss to Sindh

Note: Possible financial loss for each year is calculated as the domestic procurement price plus the cost of incidentals minus the release price, times the quantity of procured.

13. **Rising Food Account Debt:** Government wheat procurement operation has led to a huge and rising food account debt. Since the provincial governments do not settle commodity bank loans each year, it has led to yet another circular debt issue (others being electricity

and gas). PASSCO²⁰, TCP²¹, Punjab Food Department, Sindh Food Department and Balochistan Food Department owed PKR 757 to the banks /State Bank of Pakistan as of mid-December 2019 against the stocks of PKR 320 billion, risking PKR 437 billion²² which must be financed through general revenues as the loan was obtained against government guarantees.²³ The GoPunjab's food account debt stock stood at PKR 435.5 billion as on September 30, 2019 and exceeded PKR 477 billion as of mid-January 2020 against the stocks of PKR 103 billion. the Ministry of Finance has warned the provinces for deduction at source from their respective NFC-share.

14. **Export Subsidization:** In absence of a transparent wheat export policy and a track record of taking adhoc decisions, the Government incurs additional cost by subsidizing export of surplus stocks as the support price has been well above export parity price (**Figure 15**). The Government provided US\$90/ton during 2014-2016 and US\$120/ton during 2017-18, equally shared between federal and provincial government, to export excess wheat stocks rusting in government storages.

Figure 15: Wheat Export Parity Price-2020

Source: API's Wheat Policy Analysis and Pink Sheets

Current support price announced for 2020 is (US\$222/MT) is still slightly higher than the export parity price, Pakistan's wheat may well become competitive in certain export markets given the high gluten content (higher than Black Sea wheat which is its main competitor). However, it may be noted that whilst Pakistan has been able to use the World Trade

²⁰ Pakistan Agriculture Storage and Services Corporation

²¹ Trading Corporation of Pakistan

²² The Express Tribune, December 15, 2019 <https://tribune.com.pk/story/2117477/1-centre-seeks-deduction-nfc-pay-off-loans/>

²³ Daily Express Tribune, December 14, 2019

Organization (WTO) developing country exception to use occasionally export subsidies, there is growing pressure for the use of export subsidies to be further curtailed, i.e. there is a political cost for Pakistan to have regular recourse to export subsidies, especially when their use is due to an inappropriate policy environment rather than temporary/exceptional market situation.

15. **Crowding Out of Private Sector:** Government wheat procurement has traditionally crowded out private sector activities.
 - a) **Bank financing:** Wheat procurement is mostly financed with bank loans and therefore crowds out private sector financing. Increasing the quantity of wheat procured by the Government would worsen this already worrisome situation. Reducing government wheat procurement on the other hand would allow banks to divert funds that previously were used to support public wheat procurement towards private sector financing, including financing of private sector wheat purchases by traders, stockists and millers.
 - b) **Private sector wheat demand:** Increased procurement crowds out private sector wheat demand during the critical post-harvest period. With wheat procurement averaging about 20% of production, it is essential to encourage competition and demand amongst private sector purchasers. Evidence from other countries (Egypt, Ukraine, Turkey) shows that reduced state procurement reinforces competition creating more stable prices.
16. **Indirect Costs:** Indirect costs are also substantial and include physical losses due to poor storage and high spoilage; pilferage; over-production of wheat and a consequent under-production of other higher value commodities; diversion of credit from the banking system; and a disincentive for the private sector for building storage facilities that would also be available for other crops besides wheat.
17. **Governance Challenge:** Absence of regular third party audit system of wheat storages leads to adulteration and misappropriation causing additional financial loss. “A multi-billion-rupee scam involving around 2 to 2.5 million bags of wheat either missing or misappropriated or adulterated with chaff and husk” has been unearthed by the Anti-Corruption authorities in Sindh.²⁴ Sindh Food Minister confirmed the incident of misappropriation in the Provincial Assembly.²⁵

²⁴ Dawn dated May 26, 2019

²⁵ Dawn dated January 23, 2018

PERCEIVED WHEAT CRISIS OF 2019

The wheat crisis of 2008 and 2019 has its roots in the government's desire to control every facet of the wheat market. Government's interference in international trade is costly and counterproductive. Lack of mechanism to assess grain situation in neighboring and international markets, incorrect assessment of grain availability while taking decision for wheat export, lack of coordination between federal and provincial governments, political interventions and bureaucratic mismanagement led to the so-called wheat crisis of 2019:

(a) **Decisions were based on inaccurate data:**

- (i) Provincial Crop Reporting Services are weak. They provided authentic data for wheat crop in November 2019 while decision was taken on initial estimation much earlier.
- (ii) **Production Loss:** Ministry of National Food Security and Research (MNFS&R), projected wheat production for 2018-19 at 25.51 MMT. However, the final estimation was 24.359 MMT, a production loss of 1.213 MMT because of heavy rains and hailstorm during the maturity stage of wheat. In addition, quality of wheat was severely affected because of yellow rust attack.
Dorosh and Salam (2008) suggest that lower than expected wheat production lead to increase in prices relative to expected prices with no production loss²⁶ as was observed in 2005 and 2019 when production was affected by untimely rains and high winds/storm.
- (iii) **Estimation of stocks for seeking ECC approval for wheat export:** Ministry of National Food Security & Research (MNFS&R), in its summary to ECC in November 2018, estimated wheat availability of **31.45 MMT** and sought permission to export 3.1 MMT (2 MMT from Punjab, 0.6 MMT from PASSCO, and 0.5 MMT from Sindh). ECC, however, finally approved export of only **0.5 MMT** (Punjab 250,000 MT, Sindh 150,000 MT, and PASSCO 100,000 MT) with US\$105 per ton export subsidy for sea route (70% of the total export) and US\$75-80 per ton for land route (30% of the total export)²⁷ to be borne by the respective provinces.²⁸

²⁶ Dorosh and Salam suggest that wheat production loss of 5% in Punjab could lead to 8-14% increase in prices.

²⁷ Business Recorder and Dawn dated November 21, 2018

²⁸ Report of the Senate Standing Committee on National Food Security and Research, February 19, 2020.

- (b) **Domestic prices of wheat were slightly lower than the prices in Afghanistan which contributed to illegal export.** Federal Minister for MNFS&R is on record saying that “about 40,000 MT of wheat were smuggled to Afghanistan per month.”²⁹
- (c) **Wheat and Wheat Flour Export:** PASSCO exported 163,000 MT against approval of 100,000 MT.³⁰ In all, 275,000 MT of wheat was exported during November 2018 to December 2019 while 694,787 MT³¹ of wheat flour was exported during FY2018-19. Additional 26,206 MT of wheat flour was exported during August-October 2019.
- (d) **Based on the Food Balance Sheet for the last 12 years, there should have been no wheat shortage in Pakistan.** Despite this production loss, net wheat availability for food use for the year 2019-20 was 25.6 MT [opening stock (3.777 MT) + Production (24.359 MT) – Seed & Feed (2.436 MT) – Export (0.094 MT)] which was significantly higher than last year consumption of 24 MMT.
- (e) **Higher prices of soybean led to substitution by wheat for poultry or livestock feed that increased the wheat consumption.** It increased from PKR34,644/MT in June 2017 to PKR53,365 in April 2018 (risen by 54%) and now declined to PKR50,244 in January 2019.³² The government of Punjab released 22,400 to 26,125 of wheat to the Poultry Feed Mills when there was shortage in April and May 2019 and stopped supply of wheat to Khyber Pakhtunkhwa.³³
- (f) **Lack of Coordination between Federal and Provincial Governments:** PASSCO and Provincial Governments procured 4.034 MMT against the target of 6.250 MMT, a reduction of 35%. While Punjab procured 3.3 MMT,³⁴ Sindh (because of investigation of missing wheat from government storages scam) as well as Balochistan opted not to procure wheat without informing the federal government. KPK also procured only 12% of its assigned target.
- (g) **Political interventions in the wheat market alarmed the stockists and millers.** On the back of politically motivated press reports about wheat shortage and rising prices, Punjab

²⁹ <https://www.geo.tv/latest/268213-wheat-prices-to-start-declining-from-monday-says-food-security-minister-khusro-bakhtiar>

³⁰ Report of the Senate Standing Committee on National Food Security and Research, February 19, 2020.

³¹ Pakistan Bureau of Statistics, External Trade Data

³² <https://www.indexmundi.com/commodities/?commodity=soybean-meal&months=60¤cy=pkr>

³³ Report of the Senate Standing Committee on National Food Security and Research, February 19, 2020.

³⁴ Punjab was to procure 3 Million MT as per covenant under Strengthening Markets for Agriculture and Rural Transformation (SMART)

Food Department entered the market in August 2019 instead of October, the scheduled date for government wheat releases, to stabilize the price. By December 19, 2019, Food Department released 1.84 MMT, an average monthly release of **368,000 MT** against **150,000 MT** per month during the previous four years. Looking at fast depleting stocks of the government, the stockists and millers started hoarding the wheat to earn higher profits. This could have fallen apart in a liberalized market that allows trade.

Outcomes of the Perceived Wheat Crisis

The Government's response to the crisis has been in line with expectation of interest groups. The widely held notion that the recent uptick in wheat flour prices was due to lower government wheat procurement during 2018-19 moved the government for import and higher procurement target. The Economic Committee of the Cabinet has:

- (a) **Approved import of duty free 300,000 MT of wheat** by the private sector in its meeting of January 20, 2020, to mitigate the effects of “perceived shortage” of flour supplies while a wheat stock of 4.239 million was available as on January 15, 2020, sufficient for two-and-half months consumption requirements³⁵ as the Sindh wheat enters the market in March every year.
- (b) **Enhanced the wheat support price from PKR 1300/40 kgs to PKR 1400/40 kgs** based on increased cost of production in its meeting held on March 13, 2020.³⁶
- (c) **Increased the procurement target from 4.034 MMT (2018/2019) to 8.25 MMT (an increase of 104.5%) for 2019/2020 at a total cost of PKR 288.75 billion** with Punjab procuring 4.50 MMT costing PKR 157.5 billion, Sindh 1.4 MMT (PKR49 billion), KPK 0.45 MMT (PKR15.75 billion), Balochistan 0.10 MMT (PKR3.5 billion) and PASSCO 1.8 MMT (PKR 63 billion).³⁷

IMPLICATIONS OF INCREASING WHEAT PROCUREMENT TARGET

³⁵ Express Tribune, January 21, 2020

³⁶ Dawn, March 13, 2020

³⁷ Dawn March 10 and March 13, 2020

The implication of enhanced wheat procurement target will lead to:

- (i) Procuring wheat above the agreed targets under Punjab SMART program will be breach of covenant resulting in cumulative loss of US\$24.5 million.
- (ii) The financial loss/subsidy will substantially increase adding to rising commodity debt of Punjab. Increasing wheat procurement in Punjab to 4.5 million tons will bring annual financial loss/subsidy to **PKR 48 billion**, assuming incidentals @PKR10,500/MT compared to PKR 31.4 billion last year.
- (iii) Likewise, the financial loss/subsidy in Sindh is likely to increase to PKR 14 billion.
- (iv) With huge outstanding food account debt, as elaborated above, the liability will continue to surge eating out provincial fiscal space further impeding the pace of investment and development in the provinces.
- (v) **Higher procurement, as decided, can be regarded as “pre-exports” may lead to lower farmgate prices for the small farmers with a serious risk of rural unrest.** Surplus wheat procured by the government will eventually be available for export at a much higher cost (incidentals, inefficiencies, and export parity price) and will displace (crowd-out) private wheat demand and resources. This will lead to two tier pricing, rent-seeking, lower incomes for smaller farmers with no access to government procurement, and ultimately a serious risk of rural unrest.

RECOMMENDATIONS

Following recommendations/options are proposed for consideration of the government to move out of this morass:

Option I: Maintaining the Status Quo

As discussed above, **maintaining the status quo is not a sustainable option** because of its: (i) inability to meet the policy goals (higher productivity, supporting farm incomes, fair consumer prices for urban consumers and rural poor, and food security; (ii) inability to cope with high and low production scenarios (last 5 years trend is an evidence of this) and high and low prices scenarios; (iii) very high economic, financial and opportunity cost contributing to rising

commodity debt; (iv) inefficiency, non-transparency, and opportunity for elite capture; and (v) crowding out the private sector.

Option II-Liberalize the Wheat Market with Three Years Transition Period

There is a pressing need for a long-term sustainable approach that balances support for farmers, food security, consumer prices and government costs rather than continuing with the current high-cost system. When assessing future options, the ability to meet the policy goals (supporting farm incomes, fair consumer prices and food security) in the full range of production and price scenarios should be considered.

The only sustainable way to manage the wheat market is a gradual withdrawal of the Government. The aim of gradual withdrawal is to encourage competition for wheat amongst private traders, millers and stockists and avoid the risk of collusion. It will **entail the following:**

- (i) The Government to announce upfront a **policy of gradual withdrawal** from the wheat market with a **three-year transition period**.
- (ii) **Limiting the Government's role** to ensure food security, fair and transparent competition in a completely liberalized wheat market, helping the farmers to increase their productivity and reducing unit cost of production, and stand ready to help consumers when wheat and wheat flour prices exceed socially acceptable level.
- (iii) **Defining and expanding the role of the private sector**, millers, and stockists in procurement, trade, and building modern silos for bulk storing of wheat.
- (iv) **The Government should notify a clear wheat export policy.** The recent devaluation of the PKR has greatly improved the competitiveness of Pakistani wheat in overseas export markets. To further facilitate wheat exports by the private sector, the Government should define a clear-cut and stable export policy to promote export in years of abundant domestic supplies while incentivizing private traders to implement a wheat standard and branding to compete in specific segments of the international wheat market. Adhoc decisions must be avoided at all costs.
- (v) **Pakistan wheat is priced almost identically to Black Sea wheat in target markets such as Indonesia (CIF basis) but of better quality.** Pakistan currently is very close to export parity. Any future further depreciation of the PKR, even by a few rupees, would solidify international competitiveness of Pakistani wheat. Lower

moisture and higher protein contents should result in a premium for Pakistan wheat of \$10 to \$20/MT but Pakistan wheat in fact sells at least at a \$10/MT discount because of relatively high foreign matter content, absence of standards and poor phytosanitary control.

- (vi) **Steps to introduce a wheat standard and reduce inefficiencies in the wheat export value chain would decrease this negative premium from 2020-21 onwards, a viable proposition.** This would also help to ensure that the domestic wheat surplus does not weigh on farm-gate prices, thus improving farmers' income and avoiding the problems caused by a large overhang in stocks going into the 2021-22 marketing year. Introducing a wheat standard also offers a route to using procurement as a tool to drive quality and productivity improvements. The use of (basic) quality parameters would enable farmers to be compensated for quality improvements, whereas in the current system there is no incentive mechanism.
- (vii) **Liberalized private sector trade preclude national security stocks.** Security stocks may only be released in situations of real emergencies such as wide-scale natural disasters, war, etc., highly unlikely and very infrequently occurring though, looking at the data of last 15 years. In all other situations, the market should be allowed to work in a fair and transparent way, which the government should guarantee through enforcement of law³⁸, and any adverse effect on poor consumers may be addressed by safety nets³⁹ instead of perverse market intervention by the government.
- (viii) **The government may maintain a national security stock comprising 10-15% of national consumption:** 4-5 MMT in the ratio of 2 MMT (Punjab), 1 MMT (PASSCO), 750,000 MT (Sindh), 200,000 MT (KPK) and 50,000 MT (Balochistan). The strategic reserve at current rate of consumption per capita will be sufficient to feed 46 million people for one year or 92 million for 6 months, and 184 million for 3 months.⁴⁰ It may be added that Bangladesh is maintaining a strategic reserve of 1.5 MMT of rice and wheat combined for a population of 163 million.
- (ix) **The strategic reserve may be rolled over every 2 years,** with price-cascading. Such rolling over can be done by issuing tenders to the private sector and should not justify continued government intervention in the domestic wheat market.

³⁸ Check against hoarding, black-marketing, price collusion and cartelization.

³⁹ Ehsas or Benazir Income Support Programs

⁴⁰ It is enough time frame during which the government has to import wheat if there is a real wheat shortage.

- (x) **National Security Stock will require modern bulk wheat storage.** It is important to develop modern bulk wheat storages or silos in a phased manner in collaboration with the private sector to be able to roll over wheat stocks at minimum losses.
- (xi) **Compared to the baseline situation which implies a subsidy bill of nearly PKR 47.25 billion for 4.5 MMT at the current rate of differential between procurement and releases prices,** reducing procurement to 2 million in Punjab will cut the subsidy bill to PKR 21 billion. Likewise, Sindh will reduce its subsidy from PKR 14 billion to PKR 7.5 billion.
- (xii) **A reduction in government wheat procurement implies a reduction in public wheat stocks which may trigger a false feeling of food insecurity.** As part of gradual government withdrawal from the wheat market, stocks previously held by the Provincial Food Departments will be held by private parties, including traders, stockists and millers. It will require robust legal regime and enforcement mechanism to forestall hoarding and black-marketing.
- (xiii) **In parallel, with gradual Government withdrawal from the wheat market, there is a need to eliminate rent seeking in the milling sector.** There exists significant overcapacity in the milling sector and mills (i.e. roller flour mills, not counting village mills or “chakis”) which can be categorized in three groups: (i) real, efficient mills in operation during most of the year; (ii) mills which only operate at peak times such as Ramadan; and (iii) mills that are closed and seek rent through the release quotas. Government’s withdrawal from the market will encourage these millers to maintain their own stocks rather than depending on government’s released wheat, thereby reducing the milling cost substantially. Secondly, some millers, those who depend solely on government subsidized wheat quota, would go out of business which would imply rationalization of wheat milling capacity⁴¹ in Pakistan.
- (xiv) **Technology based wheat market monitoring system for monitoring global and domestic wheat markets:** Market outlook, market behavior, production, consumption, stocking capacity and levels (especially for millers), wheat trade, wheat demand, and pricing trends are vital to make critical thinking and institutional analysis, for timely sensitive policy advice and to provide institutional lead for the moves to transition and modernize the wheat marketing system. It will need establishment of Wheat Market Monitoring and Analysis Units in Provincial Food Departments, particularly in Punjab and Sindh and Federal Ministry of National Food Security and Research. Their exclusive mandate should be continuous monitoring of the

⁴¹ According to Pakistan Flour Mills Association, currently there are 1219 flour mills with milling capacity of 280,000 tons per day against domestic demand of 40,000 per day.

wheat market, both domestic and international, collecting data, and analysis based timely policy advice as well as decision making.

Until several years ago, the consequences of policy decisions and market situations was well understood by knowledgeable provincial food departments. However, as Pakistan has gradually moved towards becoming a surplus wheat producer, past relationships and behaviors have changed, such as the purchase and stocking decisions of commercial wheat millers. Government authorities do not currently have access to timely and accurate information on these, which means that policy decisions are having to be made with either incomplete information or based on anecdotal evidence. This puts government authorities in a difficult situation.

- (xv) **A gradual reduction in wheat procurement reduces government costs, which in turn is available for a more targeted support scheme designed to boost farm productivity and incomes.** Additionally, a gradual reduction in procurement and related modernization of the wheat marketing system would ensure that the Food Department still has the tools to ensure the fundamental food security needs of the province and ensure continuing support to both farmers and consumers. A phased transition to lower procurement volumes enables stakeholders to adapt to the changes, minimize risks and enable a modern marketing system to take root.

Tools Required for Gradual Withdrawal from Wheat Market:

The prerequisites for gradual withdrawal of the Government from wheat market and full liberalization include:

- (a) **Strengthening and digitalizing the Provincial Crop Reporting Services urgently to provide timely and accurate information about production.** PBS must include cereal consumption in PSLSM also to assess updated cereal demand-based consumption.
- (b) **A modern market-oriented wheat marketing system,** post-harvest finance system for farmers and a better developed export value chain and establish wheat standards. This was slowly developing in summer of 2019 until the Government decided to impose an export ban.
- (c) **Review of Policy Regime:** i) Review existing regulatory and policy tools with a view to test their ability to meet different market scenarios (such as wheat deficit and surplus scenarios) and propose modifications accordingly; ii) facilitate liberalization of the wheat marketing system to encourage a greater market and export orientation; iii) introduce wheat standard and branding; iv) support a switch from

a bag to a bulk storage system; and v) upgrade existing data reporting requirements to improve the quality and timeliness of decision making.

- (d) **Liquidity:** As the Provincial Food Departments reduces procurement, private sector purchases of wheat in the critical post-harvest period should be encouraged. For this, the Government through banks must ensure sufficient liquidity to support.
- (e) **Warehousing:** Promote warehouse receipts system to ensure finance options to farmers.
- (f) **Build the Capacity of MNFS&R** and provincial food departments and equip them with tools to protect farmers and consumer interests in all potential scenarios.
- (g) **Build capacity of MNFS&R and Provincial Food Departments in use of future markets in the medium term.** It could reduce some of the risks involved in reliance on international markets in years of large price increases. This will also help in reducing subsidy on imports in case domestic production shortfall and high international prices.
- (h) **Develop and modernize the Pakistan Commodity Exchange.** It can facilitate the government, large farmers, private traders and millers to hedge price risk through future markets contracts.
- (i) **Communication:** Clear communication and continuous dialogue between the government and stakeholders will help build consensus for gradual reforms. The policy must clearly communicate the benefits to farmers and budget savings available to boost efficient and effective farm assistance to incentivize farmers to enhance their productivity and grow viable alternatives, such as high value agriculture with robust marketing channels to increase farm income.
- (j) **Co-ordination:** Coordination between federal and provincial governments and inter as well as intra-provincial governments is essential to avoid the mishaps of 2019. Towards this end, MNFS&R must restructure and build Agriculture Policy Institute to make it policy adjunct to the Ministry.
- (k) **Debt Management:** International experiences reflect that successful reforms are accompanied by debt elimination. Therefore, it is vital to design a clear roadmap and its implementation to eliminate existing commodity debt.

Enhancing the Productivity and Reducing Unit Cost

In the long run, the only way to lower food prices is to reduce unit production cost by increasing productivity. The producer price of wheat in Pakistan is too high as compared to its competitors in Central Asia, USA, Australia as well as in Black Sea (see **Figure16**). Secondly, average production of wheat in best areas of the Punjab produces 2-2.5 MT/hectare compared to about 4-4.7 MT/hectare in Indian Punjab in 2017-18, suggesting a substantial yield gap. Achieving sustained productivity surge requires substantial investment in agricultural research and extension including developing improved crop varieties and crop management technologies. Pakistan is spending only 0.18% of its Agricultural GDP on research as compared to 0.3% in India, 0.6 in Sri Lanka, and 0.63% in China in addition to private sector investment. It is equally important to build demand led agricultural research system that can generate a flow of quality seed varieties and new technologies on a continuous basis.

Wheat Producer Price, 2018, US\$/Ton, 2018

Pakistan Producer Price vs Black Sea US\$/MT

Source: <http://www.fao.org/faostat/en/#data/PP>

Debt Retirement- Way Forward

Both the federal and provincial governments must design food account debt retirement plan (currently PKR 757 billion, the largest liability is that of the Punjab). It should be noted that international experience shows that long term solutions include debt relief in some form. Following options can be considered:

- (1) **Issuance of Promissory Note:** Federal and Provincial Governments may amortize the loan payment over 10 years in biannual payments and may consider issuance of promissory notes to the State Bank of Pakistan, dated each maturity period, for adjustment against outstanding food account debt.

- (2) **Adjustment against NFC Releases:** Ministry of Finance may apportion the outstanding food account debt over a period of 10 years and may be adjusted against NFC share of each provinces. It may have a provision allowing the provinces to retire more than apportioned instalment.
- (3) **Agreement with State Bank of Pakistan:** Each province may enter into an agreement with the State Bank of Pakistan to retire outstanding food account debt as on June 30, 2019 over a period of 10 years, as happened many a times in the past and each installment is adjusted on the first of each month against the cash balances of the respective province. However, the MOF and SBP may consider enhancing ways and means ceiling of the provinces to facilitate the provinces.
- (4) **Federal Government (MOF) may issue Pakistan Investment Bonds to lending banks with maturity corresponding to debt maturity** and adjusting that amount against NFC releases to the provinces over a period of 8-10 years.

Option 3: Compensating the Poor Farmers while Withdrawing from Wheat Market

The Provincial Governments should gradually withdraw from the wheat market in a period of 3 years and leave the trade to the private sector which has both the required capacity and expertise. This withdrawal may be accompanied by **Compensation to farmers who would be negatively impacted in case market prices would drop.** Compensation may be in the form of a direct income transfer based on the difference between the prevailing market price at harvest and the Government announced procurement price previously. The cash transfer would be capped by limiting the compensation to a certain quantity of wheat per farmer (e.g. two tons) and for a fixed time period (e.g. two years to enable farmers to diversify out of wheat if they wish to do so). Eligibility for the income transfer could range from only those farmers who had sold to the Punjab Food Department in the last four years (average 450,000) to all small farmers growing wheat, irrespective of whether they ever sold wheat to the government acutally (see **Table 7**).

Table 7: Options for Compensating Small Farmers Growing Wheat

Scenario 1			Scenario 2		Scenario 3	
No of Farms			Upto 2.5 Acres	2.203	Upto 5 Acres ⁴²	3.348
Average No of Farmers sold wheat to PFD during last 4 years ⁴³		450,000	Compensation to 80% of farms upto 2.5 Acres	1.76	Compensation to 80% of farms upto 5 Acres	2.678
Wheat Procurement Price/MT (PKR)		35,000	Wheat Procurement Price/MT (PKR)	35,000	Wheat Procurement Price/MT (PKR)	35,000

⁴² Pakistan Agriculture Census 2010

⁴³ 273926 (2015-16); 420848 (2016-17); 422757 (2017-18); 594494 (2018-19)

Market Price or Wheat Import Parity Price (PKR)		44,850	Market Price or Wheat Import Parity Price (PKR)	44,850	Market Price or Wheat Import Parity Price (PKR)	44,850
Subsidy (Row 4 – Row 3) PKR		9.850	Subsidy (Row 4 – Row 3) PKR	9.850	Subsidy (Row 4 – Row 3) PKR	9.850
Compensation to each farmer @ 3 tons of wheat Row 2 x 3 x Row 5 PKR Bn		13.3	Compensation to each farmer @ 3 tons of wheat (PKR Bn) Row 2 x 3 x Row 5 PKR Bn	52.00	Compensation to each farmer @ 3 tons of wheat (PKR Bn) Row 2 x 3 x Row 5 PKR Bn	79.14
Compensation to each farmer @ 3 tons of wheat (PKR Bn) @ 50% of subsidy		6.65	Compensation to each farmer @ 3 tons of wheat (PKR Bn) @ 50% of subsidy	26.00	Compensation to each farmer @ 3 tons of wheat (PKR Bn) @ 50% of subsidy	39.57
Compensation to each farmer @ 2 tons of wheat (PKR Bn) Row 2 x 2 x Row 5		8.87	Compensation to each farmer @ 2 tons of wheat (PKR Bn) Row 2 x 2 x Row 5	34.67	Compensation to each farmer @ 2 tons of wheat (PKR Bn) Row 2 x 2 x Row 5	52.76
Compensation to each farmer @ 2 tons of wheat (PKR Bn) @ 50% of subsidy		4.435	Compensation to each farmer @ 2 tons of wheat (PKR Bn) @ 50% of subsidy	17.335	Compensation to each farmer @ 2 tons of wheat (PKR Bn) @ 50% of subsidy	26.38

Table 1: History of Pakistan Wheat Policy

Independence to early 1980s	Substantial government market intervention: ration shops with fixed prices, but substantial leakages and malpractices
November 1987	Abolition of wheat ration shops
Late 1980s	Broad trade liberalisation; private sector wheat imports allowed in late 80s, but subsequently disallowed
Bumper harvest in 1999-00 (i.e. March-April 2000)	<ul style="list-style-type: none"> • 8.6 million tons procurement; large increase in stocks • Subsequent subsidised exports of stocks, including private sector exports • Incentives for private investment in storage • Public investments in laboratories for grain testing
Government policy response to shortfalls	Crop shortfalls in 2001-02, 2002-03 and 2003-04 <ul style="list-style-type: none"> • Restrictions on inter-provincial transport of wheat (and inter-district transport of wheat in Punjab) • Government tenders for imports (but some shipments rejected on quality basis in early 2004) • Increased procurement price for 2004-05 crop (to 400 Rs/40 kg)
Production recovery and market liberalisation: 2005	<ul style="list-style-type: none"> • Good harvest 2004-05 (21.1 million tons) • Lifting of restrictions on transport of wheat • Encouragement of private sector commercial wheat imports
Food Prices Crisis: 2008	Sharp increase in procurement prices moving it above the international price

Table 2: Annual Per Capita Consumption of Wheat in Pakistan

	Urban		Rural		Average	
	1979	2015/16	1979	2015/16	1979	2015/16
Punjab	126	76	161	99	149	92
Sindh	94	70	96	75	95	72

Khyber Pakh-tunkhwa	116	96	152	97	140	97
Balochistan*	100	83	136	87	124	86
Pakistan	115	75	147	93	134	87

Source: Household Income Expenditure Surveys 1979, 2015/16

Note: Figures of 1979 HIES for Balochistan are computed

Table 3. Wheat Production and Procurement

Year	Production Million MT	Production in Punjab Million MT	Procurement in Pakistan Million MT	Procurement in Punjab Million MT	Total Pro- curement as % of Total Production	Procurement in Punjab as % of total Procurement	Procurement in Punjab as % of Punjab Production	Stock as on May 1 Million MT
2005-06	21.277	16.776	4.514	2.56	21.2	56.7	15.3	2.107
2006-07	23.295	17.853	4.422	2.57	19.0	58.1	14.4	0.499
2007-08	20.959	15.607	3.918	2.56	18.7	65.3	16.4	0.137
2008-09	24.033	18.420	9.200	5.78	38.3	62.8	31.4	0.822
2009-10	23.311	17.919	6.715	3.72	28.8	55.4	20.8	4.223
2010-11	25.214	19.041	6.150	3.19	24.4	51.9	16.7	3.186
2011-12	23.473	17.739	5.792	3.19	24.7	55.0	18.0	3.506
2012-13	24.211	18.587	7.910	2.78	32.7	35.1	15.0	1.618
2013-14	25.979	19.739	5.948	3.68	22.9	61.9	18.6	7.566
2014-15	25.086	19.282	6.139	3.74	24.5	60.9	19.4	6.447
2015-16	25.633	19.527	5.806	3.23	22.8	55.6	16.5	6.284
2016-17	26.674	20.466	6.516	3.92	23.3	65.3	19.2	4.531
2017-18	25.076	19.178	5.989	4.0	23.7	67.3	20.8	5.942
2018-19	24.358	18.377	4.034	3.3	16.6	81.8	18.0	3.377

Source: Economic Survey of Pakistan, 2018-19

Table 4: Wheat Incidentals in Punjab

Component	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Gunny Bag	446.84	844.09	191.84	-412.53	-115.57	-681.39	4.97	569.11	(150.81)	787.75	932.72	
Delivery Expenses.	106.81	70.00	74.74	74.93	74.96	74.94	74.96	74.92	74.90	89.90	82.53	
Bank Commission.	41.72	59.31	89.66	89.34	89.34	98.72	112.78	112.78	121.69	122.21	122.21	
Taxes & Duties.	16.50	15.60	9.96	16.46	12.20	10.76	12.40	10.42	27.21	10.55	10.48	
Transportation	898.45	1104.11	356.09	98.24	338.27	556.00	502.06	402.10	645.73	496.75	365.48	
Handling Charges	0.86	0.57	0.09	2.71	0.80	3.17	0.00	0.04	0.03	-	-	
Godown Expenses	227.33	161.79	142.28	133.04	139.92	201.98	326.53	107.60	471.88	222.37	298.25	
Shortage & Unforeseen Expenses	0.00	0.00	0.00	144.68	0.00	123.21	0.00	-				
Departmental Charges	227.34	193.07	93.14	187.57	260.82	329.91	266.38	283.28	365.43	307.93	341.62	
Interest	1157.80	1541.39	3291.39	6978.22	7264.05	7266.24	4427.29	5,296.66	5,718.30	4,717.34	5,435.35	
Total (Per metric ton)	3123.65	3989.93	4249.19	7312.66	8064.79	7983.54	5727.38	6,856.91	7,274.36	6,754.80	7,588.64	9,511
Total (Per 40 kg)	124.95	159.60	169.97	292.51	322.59	319.34	229.10	274.28	290.97	270.19	303.55	
Percentage of Mark-up	37.07	38.63	77.46	95.43	90.07	91.02	77.30	77.25	78.61	69.84	71.64	72

Table 5: Punjab Wheat Procurement: Financial Loss in 2005-06 to 2018-19

Year	Procurement MMT	Procurement Price Rs/MT	Procurement Price/KG (Rs)	Incidentals cost/Kg (Rs)	Cost price Kg (Rs)	Release Price (Rs)	Subsidy Kg (Rs)	Total Procurement Cost (Rs Bn)	Expected Return from sale of Stocks (Rs Bn)	Financial Loss (Rs Bn)
2005-06	2.56	10,375	10.38	1.73	12.11	10.75	1.36	31.0	27.5	3.5
2006-07	2.57	10,625	10.63	1.95	12.58	11.63	0.95	32.3	29.9	2.4
2007-08	2.56	15,625	15.63	3.12	18.75	15.63	3.12	48.0	40.0	8.0
2008-09	5.78	23,750	23.75	4.00	27.75	18.75	9.00	160.4	108.4	52.0
2009-10	3.72	23,750	23.75	4.25	28.00	25.00	3.00	104.2	93.0	11.2
2010-11	3.19	23,750	23.75	7.31	31.06	25.00	6.06	99.1	79.8	19.3
2011-12	3.19	26,250	26.25	8.06	34.31	25.00	9.31	109.4	79.8	29.7
2012-13	2.78	30,000	30.00	7.98	37.98	28.12	9.86	105.6	78.2	27.4
2013-14	3.68	30,000	30.00	5.73	35.73	31.25	4.53	131.5	115.0	16.5
2014-15	3.74	32,500	32.50	6.86	39.36	32.50	6.86	147.2	121.6	25.7
2015-16	3.23	32,500	32.50	7.27	39.77	32.50	7.27	128.5	105.0	23.5
2016-17	3.92	32,500	32.50	6.75	39.25	33.25	6.00	153.9	130.3	23.5
2017-18	4.0	32,500	32.50	7.59	40.09	33.25	6.84	160.4	133.0	27.4
2018-19	3.3	32,500	32.50	9.51	42.01	34.80	7.21	138.6	114.8	23.8
Total										293.8

Table 6: Sindh Wheat Procurement: Financial Loss in 2005-06 to 2018-19

Year	Procurement MMT	Procurement Price Rs/MT	Procurement Price/KG (Rs)	Incidentals cost/Kg (Rs)	Cost price Kg (Rs)	Release Price (Rs)	Subsidy Kg (Rs)	Total Procurement Cost (Rs Bn)	Expected Return from sale of Stocks (Rs Bn)	Financial Loss (Rs Bn)
2005-06	0.700	10,380	10.38	1.44	11.82	10.75	1.07	8.3	7.5	0.7
2006-07	0.566	10,630	10.63	1.62	12.25	11.63	0.62	6.9	6.6	0.3
2007-08	0.506	15,630	15.63	1.99	17.62	12.16	5.46	8.9	6.2	2.8
2008-09	1.200	23,750	23.75	2.51	26.26	18.75	7.51	31.5	22.5	9.0
2009-10	1.496	23,750	23.75	4.97	28.72	25.24	3.48	43.0	37.8	5.2
2010-11	1.412	23,750	23.75	6.14	29.89	25.50	4.39	42.2	36.0	6.2
2011-12	1.290	26,250	26.25	7.08	33.33	28.00	5.33	43.0	36.1	6.9
2012-13	1.056	30,000	30.00	6.50	36.50	30.00	6.50	38.5	31.7	6.9
2013-14	1.216	30,000	30.00	6.50	36.50	34.50	2.00	44.4	42.0	2.4
2014-15	0.892	32,500	32.50	7.07	39.57	32.50	7.07	35.3	29.0	6.3
2015-16	1.098	32,500	32.50	7.59	40.09	32.50	7.59	44.0	35.7	8.3
2016-17	1.400	32,500	32.50	7.71	40.21	32.87	7.34	56.3	46.0	10.3
2017-18	1.400	32,500	32.50	7.93	40.43	32.83	7.60	56.6	46.0	10.6
2018-19	0									0
Total										76.0

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