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POLICY REFORMS & ANALYSIS OF WHEAT PROCUREMENT SYSTEM IN PUNJAB, PAKISTAN

BY

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ABSTRACT

The current policy of minimum price prevailing in the country should be abandoned as although this policy encourages the farmers to produce greater amounts of wheat but it is unfavorable for the government. Instead of minimum price policy, input costs need to be reduced to compete in the international markets as higher domestic prices leave a country internationally uncompetitive and increase the costs to the economy. The objective of this study was to find suitable price policy reforms. Extensive analysis revealed that higher cost of production is the main reason for higher domestic prices. Therefore, the study proposes that controlling and reducing input costs will benefit the farmers as well as the economy. Subsidies on inputs, especially fertilizers, should be given by the government as this will reduce the cost of production significantly. Moreover, reduced input cost for wheat will be the appropriate policy intervention which will lead to achieve international competitiveness. Thus, the policy recommendation on the basis of the analysis carried out in the previous sections is that subsidy should be given on inputs of wheat, especially fertilizers, to reduce the cost of production, as reduction in the production cost will proportionately reduce the support price.

Key Words: Wheat, Food, Fertilizer, Farmers, Cost of Production.

1 INTRODUCTION

Wheat is the main strategic commodity. It is grown over 17.25 million acres (76%) in Punjab. Provincial share of Punjab in total production is 77% (19.28 million tons). Around 80% farmers (which are 45% of total population) depend on it for their livelihood and is the basis of the country’s food security (Pakistan Grain and Feed Annual Report, 2013). Wheat policy (revised from time to time with the approval of Economic Coordination Committee of the Cabinet) is aimed at increasing the wheat productivity, supporting farmers’ income, and providing food security through various subsidies and price control. Policy interventions include the regulations of input and output prices, incentivizing consumers and producers through various subsidies and taxes programs. Government of Punjab and Federal Government are involved in announcing support price and procuring wheat since last many years with the prime objective to secure farmers and the supply for consumers at controlled rates. This intervention policy is beneficial in order to secure farmers and consumers from the monopolists (middle man, the price makers). Food security through maintaining reserves and to secure supply for the population of the country at low and subsidized prices is the main concern of government (Khan et al., 2003). However, support price and wheat procurement policy have put financial pressure on the Government of Punjab. Purchasing wheat at prices far higher than the international prices and inability to sell the product in international market at right time and at appropriate prices are two primary reasons for the

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2 Accessed at agriculture marketing information system website www.amis.pk on 16-03-2017
financial burden. This research is aimed to analyze the pitfalls of the prevailing policy and suggested future course of action.

Wheat is procured through Pakistan Agricultural Storage and Corporation (PASSCO) at Federal level and Food department in Punjab. Ministry of National Food Security and Research proposed the support price for wheat Rs.1300/40kg for Rabi season 2016-17, approved by Economic Coordination Committee (ECC), to ensure sufficient production. However, the study done by Ali, (1990) shows that the support price of one crop affects the composition of other crops so a careful analysis is required that considers the cross effects while changing the price. Finding of Krishna, R. (1963) indicates farmers’ decision in growing between bajra and wheat are affected by price rather than yield of crops in irrigated areas. Prices are more important than any other factor. Niamatullah et al. (2010) revealed that support price increases protect the farmers, traders and marketers and increase the production of particular crop along with affecting the nutrients off take and area grown for other crops. However, literature is silent on suggesting the policy makers an optimal option based on careful investigation of economic and financial repercussions.

The current mechanism of procurement price putting large cost to Government of Punjab in the form of wheat procurement, handling, distribution and management of wheat stocks. The existing storage capacity is occupied by the previous stocks and is insufficient to store further commodity of 2017-18. Furthermore, domestic price is higher than the international price of wheat which restricts the county from integration in global markets. This research will help the policy makers to allocate the resources optimally and design a course of action in such a way that wheat procurement price can be reduced and international markets integration can be achieved. It is suggested that allocating subsidy on input factors can reduce the cost of production for wheat as a result support price can be reduced which causes the export of wheat in international markets.

Study is organized in different sections. Section 1 gives introduction. Section 2 presents the prevailing situation of wheat markets. Section 3 section consists of minimum support price and farmers’ profitability. Section 4 presents proposed reform. Potential markets for exports are given in section 5 while policy implications and conclusion is presented in section 6.

2 PREVAILING SITUATION

According to FAO (2013), existing wheat system in Punjab is facing the problem of storage facilities. Having said that, godowns store about 70% wheat, binishels store 13%, hexagonal bins 7%, bunkers 6%, concrete silos 4% while rest of the commodity is stored outdoor covered with polyethylene. Government interventions in wheat markets pose a constraint on private sector driven development (FAO, 2013). Current, government is encouraging private sector expansion in wheat markets. Asian Development Bank (ADB) is providing assistance to the government to deregulate wheat markets. It provides loans to Government to restructure the functions of the food
department. According to ADB a targeted wheat subsidy along with public strategic reserves is an
effective policy mix to reduce food insecurity in Pakistan.

At present, 3.07 million tons' wheat is available at provincial government stocks and the
government has plan to add 4 million tons for which the government lacks storage capacity,
according to Punjab Food Department.

2.1 Procurement cost

Financial repercussions of procuring wheat at large scale are serious enough to put the government
in financial burden which has been witnessed during the last years. Quantity procured during 2016-
17 was 3.92 million tons at a minimum support price of Rs.1300/40kg (Rs.32.50/kg. Subsidy for
the last year is calculated as Rs. 9.51/kg and the total loss incurred was Rs.37.36 billion, as per
official figures. The loss amount depends on the difference between the procured and release price
and the amount procured. Total procurement cost is calculated by multiplying the total quantity
procured and the total cost of procurement (cost pricing) that was Rs.164.68 billion in year 2016-
17. While expected return from sale of stock is Rs.127.40 billion in year 2016-17 (obtained by
multiplying release price times quantity procurement). Table-1 shows the yearly financial loss
incurred by the government since 2011-12 which depicts increasing trend over the period.

Table-1: Financial Loss due to Strategic reserves in Punjab

<table>
<thead>
<tr>
<th>Year</th>
<th>Procurement Punjab (million tons)</th>
<th>MSP (Rs/40Kg)</th>
<th>MSP/Kg</th>
<th>Incidentally Cost</th>
<th>Cost Price/ Kg</th>
<th>Releas Price</th>
<th>Subsidy</th>
<th>Total procurement cost (Billion)</th>
<th>Expected return from sale of stocks (Billion)</th>
<th>Financial Loss (Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>3.19</td>
<td>1050</td>
<td>26.25</td>
<td>8.06</td>
<td>34.31</td>
<td>25</td>
<td>9.31</td>
<td>109.45</td>
<td>79.75</td>
<td>29.70</td>
</tr>
<tr>
<td>2012-13</td>
<td>2.78</td>
<td>1200</td>
<td>30.00</td>
<td>7.98</td>
<td>37.98</td>
<td>28.12</td>
<td>9.86</td>
<td>105.58</td>
<td>78.17</td>
<td>27.42</td>
</tr>
<tr>
<td>2013-14</td>
<td>3.68</td>
<td>1200</td>
<td>30.00</td>
<td>5.72</td>
<td>35.72</td>
<td>31.25</td>
<td>4.47</td>
<td>131.45</td>
<td>115.00</td>
<td>16.44</td>
</tr>
<tr>
<td>2014-15</td>
<td>3.74</td>
<td>1250</td>
<td>31.25</td>
<td>6.85</td>
<td>38.1</td>
<td>32.50</td>
<td>5.6</td>
<td>142.49</td>
<td>121.55</td>
<td>20.96</td>
</tr>
<tr>
<td>2015-16</td>
<td>3.23</td>
<td>1300</td>
<td>32.50</td>
<td>9.48</td>
<td>41.98</td>
<td>32.50</td>
<td>9.48</td>
<td>135.60</td>
<td>104.97</td>
<td>30.65</td>
</tr>
<tr>
<td>2016-17</td>
<td>3.92</td>
<td>1300</td>
<td>32.50</td>
<td>9.51</td>
<td>42.01</td>
<td>32.50</td>
<td>9.51</td>
<td>164.68</td>
<td>127.40</td>
<td>37.36</td>
</tr>
</tbody>
</table>

Source: Punjab Development Statistics 2015, Agriculture Statistics 2015, Punjab Food Department

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3 Subsidy per kg is calculated by adding MSP and incidental cost minus government release price
4 Financial loss is calculated by multiplying the procurement quantity and subsidy per unit
2.1.1 Bank borrowings

Procurement, handling, storage, maintenance and distribution of wheat stocks are financed through bank loans. Punjab food department borrows funds from commercial banks every year with interest rate ranging from 9-12% (SMART, 2016). Government’s cost of wheat subsidy is exceeding Rs.5500/tons. Last year, the government has bear a loss of Rs. 37.36 billion. Debt serving on accrued loans comprises as a major component of total payables.

Table-2: Bank borrowings for wheat procurement

<table>
<thead>
<tr>
<th>Year</th>
<th>Old Borrowing (Rs. billion)</th>
<th>New Borrowing (Rs. billion)</th>
<th>Total Borrowing (Rs. billion)</th>
<th>Repayments made (Rs. billion)</th>
<th>Balance payable (Rs. billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>90.00</td>
<td>76.02</td>
<td>166.02</td>
<td>56.12</td>
<td>109.89</td>
</tr>
<tr>
<td>2012-13</td>
<td>109.89</td>
<td>73.30</td>
<td>183.20</td>
<td>104.258</td>
<td>78.94</td>
</tr>
<tr>
<td>2013-14</td>
<td>78.94</td>
<td>110.53</td>
<td>189.48</td>
<td>97.26</td>
<td>92.21</td>
</tr>
<tr>
<td>2014-15</td>
<td>92.21</td>
<td>112.58</td>
<td>204.79</td>
<td>39.09</td>
<td>165.70</td>
</tr>
<tr>
<td>2015-16</td>
<td>165.70</td>
<td>105.34</td>
<td>271.04</td>
<td>75.23</td>
<td>159.81</td>
</tr>
<tr>
<td>2016-17</td>
<td>159.81</td>
<td>128.06</td>
<td>323.878</td>
<td>78.87</td>
<td>245.00</td>
</tr>
</tbody>
</table>

Source: Punjab Food Department

Punjab borrowed Rs.128.06 billion for wheat procurement in 2016-17, with old borrowing Rs.159.81 billion. Total borrowing in 2016-17 was Rs. 323.87 billion, repayment made was Rs. 78.87 billion. The amount payable during 2016-17 is Rs.245 billion. The total amount payable in terms of loan is increasing since last three years from 2013-14 to 2016-17. Almost 62% loans payable is increased from 2013-2017. Higher MSP at Rs.1300/40kg induce farmers to produce more and the government to procure more quantity.

3 Minimum Support Price and Farmers Profitability

Pakistan has higher MSP as compared to regional competitor countries like India. Wheat support price in India is much lower than Pakistan. India has MSP INR 650/40kg in year 2016-17, after adjusting with exchange rate, it becomes rupees 1014/40kg in year 2016-17 while in Pakistan MSP is Rs.1300/40 kg with a difference of Rs.286/40kg. the average difference of MSP price between India and Pakistan is around 275 for last 5 years from 2012-2017. Pakistan has 22% higher prices of wheat as compared with India in 2016-17.

Table-3: India and Pakistan MSP comparison

<table>
<thead>
<tr>
<th>Year</th>
<th>MSP/40kg in Punjab, Pakistan (PKR Rs)</th>
<th>MSP India (IND rupee/40 kg)</th>
<th>Exchange rate (1INR=PKR Rs)(^5)</th>
<th>Adjusted MSP of India in Pak Rs. per 40 kg</th>
<th>Difference between Pakistan MSP &amp; adjusted India’s MSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>1050</td>
<td>514</td>
<td>1.06</td>
<td>545</td>
<td>505</td>
</tr>
<tr>
<td>2012-13</td>
<td>1200</td>
<td>540</td>
<td>1.67</td>
<td>902</td>
<td>298</td>
</tr>
<tr>
<td>2013-14</td>
<td>1200</td>
<td>560</td>
<td>1.74</td>
<td>974</td>
<td>226</td>
</tr>
<tr>
<td>2014-15</td>
<td>1250</td>
<td>580</td>
<td>1.66</td>
<td>963</td>
<td>287</td>
</tr>
<tr>
<td>2015-16</td>
<td>1250</td>
<td>610</td>
<td>1.59</td>
<td>970</td>
<td>280</td>
</tr>
</tbody>
</table>

Difference between the MSP of Pakistan and the neighboring country India is primarily due to lower cost of production which provide us an understanding toward putting efforts to ensure lower cost of production through some sort of market mechanism or providing subsidy to the farmers at production stage instead of higher MSP. It will, at least, lower the financial burden on the government up to reducing cost on handling, storage, maintenance and distribution of wheat, on one hand and ensuring stable food prices in the province, on the other hand.

The following figure gives the comparison of production cost and MSP. It will help in understanding the farmers’ profitability.

![Figure-1: Cost of Production and MSP comparison](image)

Farmers profit rate is highest in year 2016-17 for wheat accounts for 29.8% (profit amount Rs.388/mound). Lowest profitability was observed in year 2013-14 that have only 15.4%. (Profit amount Rs.185/mound). While in year 2010-11 it accounts for 13.47%. On average the average profit for farmers is around 25% over the specific years.

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6 Cost of production excludes 25% investment incentive.
### 3.1 Components of cost of production

The per acre requirement of fertilizer is 2-bags of Urea, 1-bag of DAP and half bag of Muriate of Potash (MOP). Fertilizers have the highest share in input cost of wheat. The cost of land preparation share is second highest after fertilizer. The cost of seed and irrigation also significantly contributes in the wheat cost of production. Input cost can be reduced by giving subsidy on land preparation, seed cost, irrigation cost and by providing fertilizer to farmers at affordable rates.

![Figure-2: Cost of production by inputs](image)

**Source:** Crop Reporting Services and Agricultural Marketing Information System

According to the Government of India (2015-16), cost for producing per 40-Kg of wheat in year 2015-16 was INR 476 (equivalent to Pak Rs.790/40kg) while the production cost of 40-kg is higher in Pakistan, stands at Rs.994/40kg, due to lower production cost of wheat India has lower MSP for wheat as compared with Pakistan.

Production cost is lower in India due to subsidy on wheat inputs like certified seed and fertilizers. Farmers that have less than 5-acre land were given 50% subsidy on certified wheat seed. Moreover, overall fertilizer subsidy increased 2.8% (from INR709.67 billion in 2014-15 to INR729.68 billion in 2015-16).

Indian govt pay a subsidy of INR 12350/ton (PKR.19487/ton or PKR. 9743/50 kg bag) for fertilizer. Subsidy is paid to companies i.e. at source. The urea price is fixed at INR 5360/ton or 268/50kg bag (PKR 422/50kg bag). Fertilizer companies fix the maximum retail price (MRP) in return for being paid a fix per ton subsidy. The MRP for di-ammonium phosphate (DAP) ranges between INR 2300-2500/ ton (PKR 3611-3925/ton or PKR 1805-1962/50 kg bag) for Muriate of Potash (MoP) it ranges INR 12350-9300/ton (PKR 19390-14601/ton or 9695-7300/50kg bag) is
paid to companies. Furthermore, wheat farmers are also benefitted by 50 percent subsidy on certified seed for maximum of 5-acres land is paid by Indian government.

But in Pakistan, subsidy on inputs is lower as compared to India. Total subsidy of Rs.27.96 billion was allocated for fertilizers, in which Urea has Rs.17.16 billion, DAP has Rs.10.80 billion. This subsidy will reduce the fertilizer prices by Rs.300/50 kg bag on DAP, Rs.156/50 kg bag on Urea fertilizer in financial year 2016-17. The following table (Table 4) gives the details comparison of the prices of fertilizers in India and Pakistan.

<table>
<thead>
<tr>
<th>Fertilizer</th>
<th>Price in Indian Punjab (PKR/50-Kg bag)</th>
<th>Price in Pakistani Punjab (PKR/50-Kg bag)</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea (Nitrogen)</td>
<td>422</td>
<td>1760</td>
<td>431</td>
</tr>
<tr>
<td>DAP (Phosphorus)</td>
<td>1896</td>
<td>2800</td>
<td>142</td>
</tr>
<tr>
<td>Muriate of Potash MOP Fertilizer (Potash)</td>
<td>1224</td>
<td>3250</td>
<td>265</td>
</tr>
</tbody>
</table>

Source: Internet sources

The Pakistani farmers are paying more for fertilizers in the region as prices of urea and DAP are much higher in the country compared to the prices of neighboring countries including India, Bangladesh, Sri Lanka and Afghanistan and also against international market. prices of urea and DAP are much higher in Pakistan as compared to international market. In a nutshell, Pakistan, can reduce its input cost by reducing prices of fertilizers and subsidizing farmers on input. Once, the production cost reduces, output price can be reduced proportionately as a result the farmers may diversify its production and procurement can be reduced by producing less through diversification.

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4 Conclusion and Policy Implications

The current policy of minimum price prevailing in the country should be abandoned as although this policy encourages the farmers to produce greater amounts of wheat but it is unfavorable for the government. Instead of minimum price policy, input costs need to be reduced to compete in the international markets as higher domestic prices leave a country internationally uncompetitive and increase the costs to the economy. The objective of this study was to find suitable price policy reforms. Extensive analysis revealed that higher cost of production is the main reason for higher domestic prices. Therefore, the study proposes that controlling and reducing input costs will benefit the farmers as well as the economy. Subsidies on inputs, especially fertilizers, should be given by the government as this will reduce the cost of production significantly. Moreover, reduced input cost for wheat will be the appropriate policy intervention which will lead to achieve international competitiveness. Thus, the policy recommendation on the basis of the analysis carried out in the previous sections is that subsidy should be given on inputs of wheat, especially fertilizers, to reduce the cost of production, as reduction in the production cost will proportionately reduce the support price.

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