Domestic Fertilizer Production, Import and Sales during H1-FY19

Table 1: Production, Import and Sales of key fertilizers (LMT*)

<table>
<thead>
<tr>
<th></th>
<th>H1-FY18</th>
<th>H1-FY19</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Fertilizer Production</td>
<td>202</td>
<td>205</td>
<td>1.8%</td>
</tr>
<tr>
<td>Overall Fertilizer Imports</td>
<td>95</td>
<td>102</td>
<td>7.5%</td>
</tr>
<tr>
<td>Urea Production</td>
<td>115</td>
<td>120</td>
<td>4.0%</td>
</tr>
<tr>
<td>Urea Imports</td>
<td>32</td>
<td>33</td>
<td>4.3%</td>
</tr>
<tr>
<td>Non-Urea Production**</td>
<td>87</td>
<td>87</td>
<td>-0.9%</td>
</tr>
<tr>
<td>DAP Production</td>
<td>25</td>
<td>18</td>
<td>-28.4%</td>
</tr>
<tr>
<td>DAP Imports</td>
<td>29</td>
<td>41</td>
<td>41.2%</td>
</tr>
<tr>
<td>SSP Production</td>
<td>19</td>
<td>21</td>
<td>7.7%</td>
</tr>
<tr>
<td>MOP Imports</td>
<td>23</td>
<td>21</td>
<td>-7.2%</td>
</tr>
</tbody>
</table>

Source: Department of Fertilizers, CMIE, Office of the Economic Adviser (figures do not add up due to different sources)

Note: LMT* - Lakh Metric Tonnes, Non-Urea** Fertilizers include NPK fertilizers, Ammonium nitrate, ammonium sulphate, DAP and SSP

The overall production of fertilizers has increased by 1.8% during H1-FY19. Fertilizer production has increased on account of restocking for the sowing season. (rabi sowing season)

Domestic production of urea (which constitutes about 60% of the overall fertilizer production) has increased by 4.0%, and imports by 4.3%. Increase in production can be attributed to the reopening of certain urea plants which were kept shut for operational maintenance purposes during the previous year. This has led to better operational efficiencies resulting in better capacity utilization.

Import dependence of urea (imports as a proportion of production plus imports) has remained the same during H1-FY19 (from 22% in Q1FY18 to 22% in Q1-FY19). Presently India mainly imports Urea from Oman, Iran and China.

Diammonium Phosphate (DAP) production has fallen by 28.4% on account of higher raw material prices and also as the raw material sourced for manufacturing of DAP (phosphoric acid) was diverted for the production of NPK (nitrogen (N), phosphorus (P) and potassium (K)) grade fertilizers and complex grade fertilizers. Imports on the other hand have risen sharply by 41.2% to make up for the domestic shortfall and also because it was more conducive to import the finished product. India mainly imports DAP from China, Saudi Arabia, USA and Jordan. The Industry has maximized the availability of phosphoric acid usage by...
shifting its production from DAP to complex base while DAP demand is being catered mainly through imports

India meets its **Potassium chloride (commonly referred to as Muriate of Potash or MOP)** requirements completely through imports from Canada, Russia, CIS+ Belarus, Israel, Jordan and Lithuania. MOP imports have decreased by 7.2%

**Single superphosphate (SSP)** production has increased due to the increase in demand for phosphatic grade fertilizers. SSP is indigenously produced and procured. Farmers are opting more for the lower ‘P’ grade product than the higher ‘P’ grade product like DAP.

Primary fertilizer sales increased despite the increase in raw material costs and currency depreciation.

**Trend in prices of key input raw materials**

Natural gas is used as feedstock for the manufacturing of urea and accounts for 80% of the raw material cost for urea manufacturing. The fertilizer industry is the leading consumer of domestic natural gas. Additional requirement of natural gas is plugged in via imports of natural gas in the form of RLNG. Out of 31 urea plants in India, 28 are gas based.

![Chart 1: Trend in Domestic and International Natural Gas Prices (USD/MMBTU)](image)

Source: PPAC, EIA

The price of natural gas was the lowest during H1-FY18 (USD 2.48/mmBtu), which aided in improving the profitability of urea manufacturers. As per the New Domestic Gas Policy, price of domestic natural gas is revised every 6 months and currently (H1-FY19) the price of domestic natural gas is USD 3.06 mmBtu (which is 23.4% higher as compared with the price prevailing during the corresponding period in the previous quarter). Prices of natural gas have risen on account of a sharp increase of crude oil prices. Price of domestic natural for H2-FY19 has been fixed at USD 3.36/mmBtu which is a 9.8% increase as compared with the prices prevailing during H1- FY19.

India imports the raw materials needed for manufacturing of fertilizers. Raw material prices remained firm during the quarter, as plant closures in China and higher global demand impacted the availability. Prices of phosphoric acid, rock phosphates, ammonia and sulphur have increased by 29%, 5%, 15% and 44% respectively.

*Note: We have compared the y-o-y average prices prevailing during H1-FY19 vis-à-vis with the prices prevailing during H1-FY18.*
Phosphoric acid prices for Q3 have been finalized at USD 768/MT (up by 1.3% from USD 758 level). This could add pressure to the margins of DAP producers. The only relief for the manufacturers is that the subsidy for the raw material phosphorus (P) has increased by 26.7% for FY19. Nutrient based subsidies for nitrogen (N) and potash (K) have been reduced by 0.5% and 10.4% respectively whereas subsidy for sulphur (S) has been increased by 20.5% for FY19.

Policy Update

Direct Benefit Transfer (DBT): Direct benefit transfer scheme has been stabilized; the industry has started receiving the payments from the department on a fortnightly basis or within a month.

Challenges

The rise in domestic natural gas price and R-LNG prices are to affect domestic urea manufacturers.

- As per our estimates a 9.8% increase in natural gas prices can potentially lead to a 7.8% increase in cost of production of urea, thus increasing the working capital intensity of the fertilizer manufacturers and also adding pressure on the fiscal spending of the government while disbursing the urea subsidy. The fertilizer subsidy for FY19 has been fixed at ₹70,090 crore out of which ₹44,989.50 crore is earmarked as the urea subsidy and the remaining ₹25100.5 crore as the nutrient based subsidy.

The fertilizer sector could face issues regarding the liquidity of working capital and credit accumulation.

- The fertilizer sector faces still faces an inward duty structure with the raw materials being taxed at 18% (except phosphoric acid which is now taxed at 5%) and the final product being charged at 5%. Ammonia and sulphuric acid are still being taxed at 18% which could lead to a temporary liquidity crunch and an increase in credit accumulation. The increase in raw material prices, higher inventory levels to meet the seasonal demand and migration to the DBT regime is also to have an impact on the working capital.
CARE Ratings Outlook

The Government of India is focused towards the development of the agricultural sector and on improving the rural economy. So far the MSP announced for the rabi crop has been in line with the government announcement (of fixing it at last 1.5 times the cost of production). IMD too is predicting a normal northeast monsoon during the rabi season.

- Going forward with improved reservoirs levels in certain markets and prediction of normal northeast monsoon, we expect a favourable agricultural environment during the second-half of the year. Further, with the stabilization of direct benefit transfer in fertilizer and reduction in GST rates on phosphoric acid, working capital situation is also likely to improve going forward.
- We expect the overall fertilizer production to be around 422-425 LMT by the end of FY19. Till now (H1-FY19) overall fertilizer production has been 205 LMT.

The government is committed in improving the quality of soil and in bringing it to its ideal NPK levels. The ideal NPK ratio is 4:2:1 whereas Indian soils the ratio is 6.8:2.7:1.

- We can expect the usage of non-controlled fertilizers to increase given the importance of balanced usage of fertilizers.
- The domestic production of DAP is to remain depressed in Q3FY19 as the prices of phosphoric acid has been increased again by 1.3% (to USD 768).
- Demand for DAP to be offset by the increase in use of NPK fertilizers and SSP.

With the commencement of the Gorakhpur, Sindri and Barauni urea gas based plants and with the revival of the Ramagundam unit we can expect urea production to increase by 6% during FY19.

- Urea production to be around 254-257 LMT by the end of FY19. Till now (H1-FY19) urea production has been 120 LMT
- As on 31st October, 2018 91.7% of the physical progress of the revival of the Ramagundam unit has been made.