## JCR-VIS SECTOR UPDATE

## **Fertilizer Sector**

Demand of the fertilizer industry is directly aligned with growth in agricultural sector. The sector accounts for 21% of the GDP and absorbs around 44% of the country's workforce.

F ertilizer is a substance applied to soils in order to enhance its yield capacity. Fertilizer products are largely variations of three primary soil nutrients, namely nitrogen (N), phosphorous (P) and potassium (K). However, usage of a particular fertilizer is primarily determined by the suitability of a nutrient for a specific crop. Nitrogen and its compounds are the most commonly used fertilizers, contributing more than 60% of global demand followed by phosphate and potash.

Historically, Pakistan's soil has been deficient in nitrogen and phosphate; an optimal combination of these nutrients is necessary to achieve higher yield levels. However, the availability and prevailing price of a product largely impacts the demand pattern for that product. For instance, lower prices of Urea and Di-ammonium Phosphate (DAP), being partial substitutes of Calcium Ammonium Nitrate (CAN) and Nitrogen Phosphate (NP) respectively, are likely to affect the demand of these products. Moreover, lack of awareness among farmers also plays a role in determining the use of fertilizers. Not realizing the benefits of an optimal NP ratio, farmers tend to favour products available in the market at cheaper rates. However, there is considerable room for growth in the industry given that farmers are consistently educated about their benefits.

Demand of the fertilizer industry is directly aligned with growth in agricultural sector. The sector accounts for 21% of the GDP and absorbs around 44% of the country's workforce. Key drivers of fertilizer demand include availability

Table 1: Domestic Production (000s) tons	FY14	FY13
Urea	4,896	4,829
DAP	702	745
CAN	479	472
NP	464	424
Singular Super Phosphate (SSP)	86	73
Nitrogen, Phosphorus, Potassium (NPK)	71	56
Total	6,698	6,599
Table 2: Imports (000s) tons	FY14	FY13
		1
Urea	696	957
Urea DAP	696 864	957 755
DAP	864	755
DAP NP	864 0	755 15
DAP NP Sulphate of Potash (SOP)	864 0 4	755 15 8

The fertilizer industry has an oligopolistic market structure. Three major players in the segment have significant pricing power, which is hampered by government intervention in the form of taxes, agricultural subsidies and other regulations of arable land, population growth and higher income levels. Availability of water & gas and favorable government policies also play a pivotal role in determining the viability of the fertilizer industry. Domestic demand is known to follow a cyclical trend with peaks occurring in June and December followed by troughs during April and October.

Table 3: Domestic Consumption (000s) tons	FY14	FY13
Urea	5,631	5,895
DAP	1,654	1,634
Nitrogen	3,128	3,239
Phosphate	897	875
Potash	30	21
Total	11,340	11,664
Total	1,595	1,743

Imbalance between domestic demand and supply continues to widen with lower

demand levels during FY14. Fertilizer off-take was recorded at 11.3m tons (FY13: 11.7m tons) vis-àvis production of 6.7m tons (FY13: 6.6m tons) during FY14. In order to cater to the gap in demandsupply, a total volume of 1.6m tons (FY13: 1.7m tons) was imported by the government and private companies during FY14. During 1HFY15, cumulative urea sales were reported to be 2.9m tons vis-àvis production of 2.5m tons.



Engro Fertilize 32.8% Fertilizer industry of Pakistan comprises nine companies with three companies holding 82% share in the urea market. Largest overall share is held by Fauji Fertilizer Company Limited followed by Engro Fertilizer Limited. Market share of major players in the urea segment are given below:

The fertilizer industry has an oligopolistic market structure. Three major players in the segment have significant pricing power, which is hampered by government intervention in the form of taxes, agricultural subsidies and other regulations. In order to offset the impact of a disrupted gas supply,

companies have intermittently raised local prices on a timeline basis. Barring SSP, prices of all other fertilizer products increased in FY14.

On account of lower anticipated differential between local and international prices and urea imports by the government may limit the industry's pricing power. This along with, the government's intention to subsidize DAP fertilizers for local farmers in FY15 also pose a downside risk to urea off-take. On the supply side, fertilizer production will continue to be dependent upon gas availability. The Economic Coordination Committee's (ECC) approval to import Liquefied Natural Gas (LNG) and completion

Table 4: Prices of fertilizers (Rs. Per bag of 50Kg)*	end- Dec'14	end- Dec'13
Urea	1,933	1,857
DAP	3,807	3,479
SOP	4,900	4,148
SSP	1,022	1,036
NP	2,676	2,451
CAN	1,613	1,536

of the Pak-Iran gas pipeline could provide some relief to fertilizer manufacturers in this regard. Meanwhile, imposition of Gas Infrastructure Development Cess (GIDC) amounting to Rs. 300 per mmbtu on feedstock, along with upcoming hike in gas tariff are expected to raise the sector's overall cost of production. Given that Engro (new plant) and Fatima currently receive gas at concessionary rates, they are protected from any hike in feedstock

\*National Fertilizer Development Centre (NFDC)

prices. In relation to imposition of GIDC, Fatima may face lower margins in comparison to Engro as the latter has started paying its outstanding GIDC dues in 1HY15, going forward.

## Analysts Contacts

Muniba Khan Manager muniba.khan@jcrvis.com.pk Ibad Deshmukh Assistant Manager ibad.deshmukh@jcrvis.com.pk