JCR-VIS

SECTOR UPDATE

# Fertilizer Sector

SEPTEMBER 2017

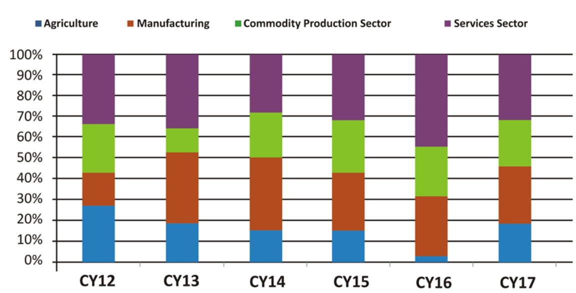
## AGRICULTURAL SECTOR

Pakistan is dependent on agriculture produce, where around 20% of the country's GDP is provided by the agricultural sector.

In light of higher dependence, usage of fertilizers becomes an important concern for timely production of agricultural crops.

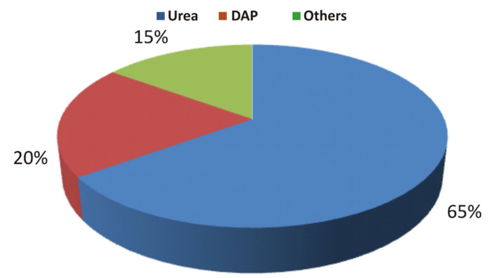
Limitations in agricultural sector growth are:

- Limited arable land
- Limited irrigation water supply
- Depleting soil fertility
- Lack of technological advancement




## FERTILIZER DEMAND

- Urea constitutes around 65% of the total fertilizer demand followed by DAP with a 20% share.
- Other products include NP, NPK, and CAN.



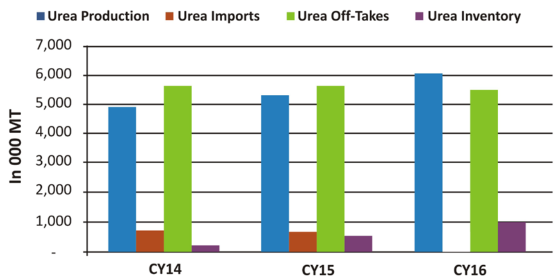

## UREA INDUSTRY STRUCTURE

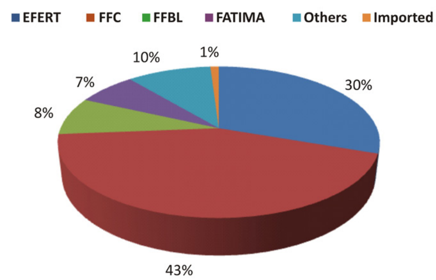
Historically, around nine-tenth of the total urea demand (5.5m MT) was met by local players while the remaining was catered to by imports.

In CY16, the aforementioned situation of excess demand has flipped to excess supply on account of better gas availability. Now the industry has an excess supply situation with inventory levels clocking in at ~1m MT at end of Dec'16 despite stable demand in the Rabi and Kharif seasons.

To facilitate farmers, Government of Pakistan (GoP) has declared subsidies on fertilizer. The subsidized urea price prevail at Rs. 1,400/bag which includes reduction by manufacturers, GST reduction from 17% to 5%, and cash subsidy.

In 1HCY17, industry off-takes increased by 48%YoY backed by 1) low base effect (low off-takes in 1HCY16 on account of subsidy anticipation), and 2) higher buying to pile inventory at lower prices in expectation of price hikes. JCR-VIS believes that this buying will lead to accumulation of inventory on the dealers' end. However, at Aug'17 inventory at the manufacturer's end stand at ~694k MT with around 300k MT gathered at the dealers' end.



Given the excess supply situation, GoP has allowed 0.6m MT of urea exports by Oct'17. In 1HCY17, total exports were recorded at 123,000MT at average prices of $250-260/MT.

## UREA PRICES

As discussed before, urea prices are fixed by the Government at subsidized price of Rs. 1,400/bag ($265/MT).

In order to reduce stock level, the local players had cut urea prices by providing discounts. This situation is anticipated to change amid decline in cash subsidy on urea from Rs.156/bag to Rs.100/bag (August'2017).

Industry players plan to partially pass on the impact of this subsidy reduction by cutting off discount offering on products that are currently hovering around Rs. 60-100/bag. Domestic urea prices are currently hovering in the range of Rs. 1,310/bag to Rs. 1360/Bag.

International urea prices have increased from a low of $190/MT in Jul, 2017 to $290/MT at end-Sep, 2017. This increase will benefit local players (FFC and FATIMA), who have significant export quota available, in reducing inventory levels at higher prices, However, there remains limited room to increase urea prices given that they have been capped by GoP at Rs. 1,400/- bag.

International prices have increased on account of increase in urea imports by India, better demand from Brazil, lower exports by China, shut down of plants for maintenance by Middle East manufacturers and short covering by Egyptian traders. While prices are expected to sustain in the short term due to better seasonal demand from Asia, they are expected to decline subsequently and are not expected to sustain at current levels.

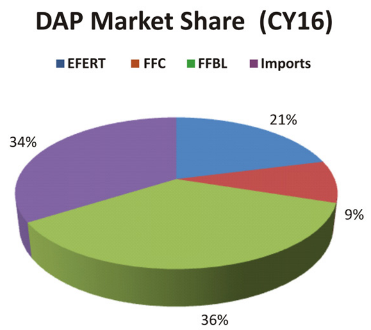
Historically, local urea prices traded at a 20% discount from international prices (CY11-15). From CY16 onwards, international urea prices dampened significantly on account of substantial capacity additions in 2016/2017.

## DAP INDUSTRY STRUCTURE

Demand for DAP is estimated at around 1.7m MT and has grown at a 5-yr CAGR of 14% while production and imports have increased by 4% and 17%, respectively.

Out of the total demand, 43% is met by the sole domestic producer- Fauji Fertilizer Bin Qasim Limited (FFBL) while the remaining is met through imports. Players other than FFBL sell imported DAP.

Higher price volatility prevails in this product segment as imported raw material (Phosphoric acid/rock) is used which is sensitive to foreign exchange movements.




Demand drivers for DAP fertilizer are:

- Government subsidy of Rs.300/bag leading to subsidized DAP price of Rs.2,500/bag.
- DAP is used in producing wheat crop, demand for which is more inclined towards the last quarter.

International DAP prices ($344/MT in Aug'17 vs. historical $450/MT) have weakened on the back of higher supply additions vis-a-vis demand growth. Upcoming capacity add-ons are:

- Morocco adding 1m MT in 1H17
- Saudi Arabia adding 3m MT of DAP.

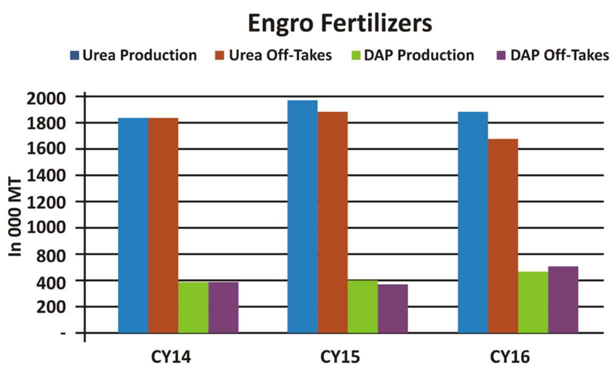
## LOCAL FERTILIZER PLAYERS

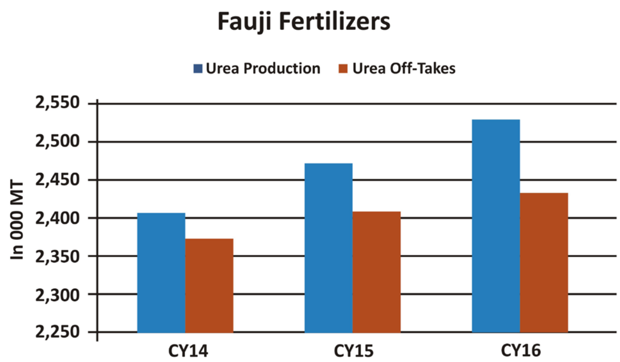
| Company | Fertilizer Type | Gas Network | Production Capacity (MT) | Production (SY15) | Utilization (CY15) | Production (CY16) | Utilization (CY16 |
|---|---|---|---|---|---|---|---|
| Engro Fertilizers | Urea I and II | SNGPL & Mari | 2,275,000 | 1,967,552 | 86% | 1,881,016 | 83% |
| | NPK | | 100,000 | 126,074 | 126% | 94,610 | 95% |
| Fauji Fertilizers | Urea | Mari | 2 ,048,000 | 2,469,000 | 121% | 2,523,000 | 123% |
| Fatima Fertilizers | Urea | Mari | 500,000 | 414,212 | 83% | 507,161 | 101% |
| | CAN | | 420,000 | 402,344 | 96% | 471,929 | 112% |
| | NP | | 360,000 | 363,020 | 101% | 401,189 | 111% |
| Fauji Fertilizers Bin Qamis | Urea | SSGC | 551,100 | 301,873 | 55% | 433,612 | 79% |
| | DAP | | 650,000 | 768,004 | 118% | 791,256 | 122% |
| PakArab Fertilizer Limited | Urea | SNGPL | 100,000 | - | 0% | NA | NA |
| | NP | | 304,500 | 265,349 | 87% | NA | NA |
| | CAN | | 450,000 | 287,954 | 64% | NA | NA |

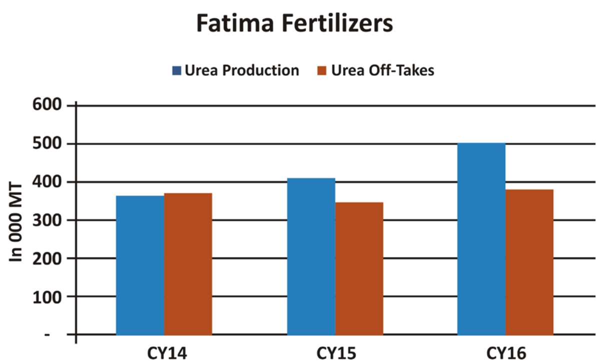
As shown above, the four players dominate the fertilizer space with supply of 97% of the demand requirement in CY16 with the remaining met by other players thereby completely eliminating imports from the equation.

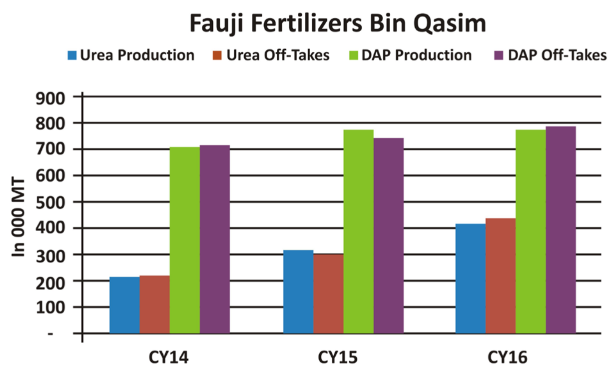
All the domestic players are operating at close to full capacities in the backdrop of improved gas supply.

## STATISTICS OF LOCAL PLAYERS



***BUSINESS RISK***

## WEAK DEMAND DYNAMICS

Demand for urea has remained stagnant over the years on account of weak farmer incomes and lower commodity prices. Moreover, area under cultivation has also witnessed a gradual decline which has impacted fertilizer off-take.

## EXCESS SUPPLY

Local urea production has grown at a significantly higher pace vis-à-vis demand growth over the last 5 years resulting in an excess supply situation. As of July'2017, urea inventory stood at ~1.15m MT on the back of improved gas supply. Excess supply, if persists, will result in weakening of pricing power & margins for industry players and result in higher finance cost.

## DISCONTINUATION OF GOP SUPPORT

GoP support through subsidy and reduction in tax on urea and DAP is a key element of maintaining demand and supply dynamics of the sector. Discontinuation of these incentives could impact fertilizer sector off-take.

## INTERNATIONAL FERTILIZER PRICES

Sizeable disparity in between local and international prices is a key hindrance to exports. In case exports are undertaken to reduce excess inventory, margins of industry players will be impacted. Moreover, in case if international prices are at a significant differential to local fertilizer prices, threat of imports remain.

## GAS CURTAILMENT REMAINS A CONCERN

The fertilizer manufacturers operate on three gas networks- SSGC, SNGPL and Mari Network. FFBL operates on SSGC and still face the issue of gas curtailment which remains a risk.Diversion of gas to household consumers during winter season for players operating on the SNGP network may lead to decline in production. Moreover, margins of players operating on RLNG will be adversely impacted.

## INCREASE IN INTEREST RATE

Given that gearing levels are on the higher side, increase in interest rates will negatively impact profitability and cash flows particularly for leveraged players FFC and FFBL.

## WATER SHORTAGE

Inconsistent supply of water to the agricultural lands could adversely impact fertilizer off-takes.

## LOW CROP PRICES

Farmers' income is dependent on crop prices. If they move in the downward direction it could potentially reduce their reliance on usage of fertilizers.

## ANY INCREASE IN GAS TARIFF WILL IMPACT MARGINS

Current Gas prices as set by OGRA at Rs. 423/mmbtu (inclusive GIDC of Rs. 300/mmbtu) for feed gas and Rs. 750/mmbtu (inclusive GIDC of Rs. 150/mmbtu) for fuel gas. Out of all the players, only two players- EFERT and

FATIMA have an edge over the others as they produce at concessionary feed gas rates of $0.7/mmbtu without the obligation to pay GIDC of Rs. 300/mmbtu on it (EFERT enjoys a 17% weighted average advantage over other players). Gas prices have surged at a 5-yr CAGR of 31% for feed and 13% for fuel, and any further rise will hit the margins of domestic players

***FINANCIAL RISK***

## PROFITABILITY

The profitability of the industry have shown a negative trend from CY15 to CY16 on account of decline in margins. The companies with higher margins enjoy advantage of concessionary and uninterrupted gas supply from SNGPL and Mari Network. Rationale for deterioration of margins over the year CY16 was due to lower urea prices and off-takes on the back of weak agricultural output.

Pressure on net margins persists due to higher finance cost and lower margins in 1HCY17.

| Engro Fertilizers | | | | |
|---|---|---|---|---|
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Sales | 61,425 | 85,003 | 69,419 | 27,311 |
| Gross Margin | 37% | 35% | 25% | 32% |
| Net Margin | 13% | 18% | 13% | 15% |
| ROA | 70% | 14% | 9% | 7% |
| ROE | 24% | 35% | 22% | 19% |
| **Fauji Fertilizers** | | | | |
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Sales | 81,240 | 84,831 | 72,877 | 30,161 |
| Gross Margin | 38% | 34% | 25% | 21% |
| Net Margin | 22% | 20% | 16% | 13% |
| ROA | 21% | 21% | 13% | 7% |
| ROE | 71% | 61% | 42% | 29% |
| **Fatima Fertilizers** | | | | |
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Sales | 36,169 | 30,226 | 33,765 | 17,692 |
| Gross Margin | 59% | 56% | 53% | 50% |
| Net Margin | 26% | 31% | 29% | 24% |
| ROA | 11% | 10% | 9% | 8% |
| ROE | 25% | 23% | 21% | 18% |
| **Fauji Fertilizers Bin Qasim** | | | | |
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Sales | 49,445 | 52,182 | 45,011 | 15,554 |
| Gross Margin | 22% | 14% | 3% | 2% |
| Net Margin | 8% | 8% | 3% | -2% |
| ROA | 9% | 7% | 2% | -1% |
| ROE | 31% | 28% | 11% | -6% |

## LIQUIDITY

High finance costs coupled with lower margins have led the FFO of the major players to decline from CY15 to CY16 (except FATIMA). Despite the drop, Funds From Operations (FFO) in relation to outstanding obligations remain healthy for Engro and Fatima Fertilizer. However, the same is on the lower side for FFC while cash flows for FFBL were negative during CY16 and 1HCY17.

| Engro Fertilizers | | | | |
|---|---|---|---|---|
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Total Debt | 44,004 | 36,027 | 36,462 | 38,664 |
| Total Equity | 34,478 | 42,526 | 41,282 | 42,343 |
| Gearing Ratio | 1.28 | 0.85 | 0.88 | 0.91 |
| FFO | 12,401 | 21,783 | 14,614 | 8,023 |
| FFO to Debt | 28% | 60% | 40% | 42% |
| **Fauji Fertilizers** | | | | |
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Total Debt | 15,883 | 38,424 | 45,264 | 52,648 |
| Total Equity | 25,670 | 27,311 | 28,211 | 26,542 |
| Gearing Ratio | 0.62 | 1.41 | 1.60 | 1.98 |
| FFO | 14,315 | 11,994 | 6,778 | 1,798 |
| FFO to Debt | 90 | 31 | 15 | 7 |
| **Fatima Fertilizers** | | | | |
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Total Debt | 24,310 | 30,209 | 29,871 | 29,251 |
| Total Equity | 36,757 | 40,229 | 47,374 | 47,465 |
| Gearing Ratio | 0.66 | 0.75 | 0.63 | 0.62 |
| FFO | 14,807 | 11,641 | 12,802 | 5,508 |
| FFO / Total Debt | 61% | 39% | 43% | 38% |
| **Fauji Fertilizers Bin Qasim** | | | | |
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Total Debt | 13,087 | 27,988 | 35,099 | 33,556 |
| Total Equity | 13,071 | 14,281 | 12,757 | 11,906 |
| Gearing Ratio | 1.00 | 1.96 | 2.75 | 2.82 |
| FFO | 4,346 | 2,374 | (759) | (1,940) |
| FFO / Total Debt | 33% | 8% | -2% | -12% |

## GEARING

Gearing indicators of all players have increased due to higher borrowings in order to fund stock-in-trade. Debt composition is inclined towards short term debt. While gearing levels of Engro and Fatima Fertilizer remain within manageable level at below 1(x), gearing levels of FFC and FFBL have increased by around 3 times over the last 2.5 years.

## WORKING CAPITAL

Working capital cycle has weakened on account of piling up of inventory in 1HCY17. Financing of the same has been done through short term debt thereby pulling leverage indicators upwards.

| Engro Fertilizers | | | | |
|---|---|---|---|---|
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Stock in trade | 1,101 | 6,942 | 6,820 | 12,999 |
| Short term debt | 7,913 | 10,737 | 7,082 | 16,314 |
| Trade debts | 757 | 2,262 | 7,585 | 8,967 |
| Payables | 24,727 | 16,887 | 14,960 | 18,379 |
| **Fauji Fertilizers** | | | | |
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Stock in trade | 982 | 5,100 | 4,237 | 15,298 |
| Short term debt | 13,383 | 22,531 | 28,611 | 35,373 |
| Trade debts | 822 | 1,774 | 4,306 | 8,247 |
| Payables | 37,904 | 8,114 | 10,852 | 22,552 |
| **Fatima Fertilizers** | | | | |
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Stock in trade | 2,681 | 7,003 | 6,243 | 4,851 |
| Short term debt | 6,975 | 17,041 | 13,529 | 15,720 |
| Trade debts | 448 | 335 | 2,116 | 5,169 |
| Payables | 7,341 | 8,646 | 17,339 | 9,937 |
| **Fauji Fertilizers Bin Qasim** | | | | |
| **Rs. in m** | **CY14** | **CY15** | **CY16** | **1HCY17** |
| Stock in trade | 1,557 | 4,549 | 2,427 | 7,544 |
| Short term debt | 3,087 | 18,613 | 18,557 | 18,431 |
| Trade debts | 1,466 | 1,025 | 3,524 | 1,940 |
| Payables | 13,860 | 12,828 | 13,380 | 16,465 |

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