FERTILIZER

SECTOR ANALYSIS

January - 2019

SECTOR Outline:

OVERVIEW

- *Industry | Demand Supply*
- *Future Outlook*
- *Pricing*

UREA

- *Industry Situation*
- *Market Share*
- *Pricing*

DAP

- *Industry situation*
- *Market Share*
- *Pricing*

COMPETITIVE ENVIRONMENT

- *Capacities*
- *Financial Highlights*

OVERVIEW

PACRA

SECTOR | Overview

DOMESTIC

Nominal GDP (PKR trillion)	22.4	25.2	27.4	29.1	32.0	34.4

Agriculture Share in GDP	FY13	FY14	FY15	FY16	FY17	FY18
PKR trillion	**4.8**	**5.3**	**5.7**	**5.8**	**6.2**	**6.5**
%	**21.4%**	**21.1%**	**20.7%**	**19.9%**	**19.5%**	**18.9%**
- *Crops*	8.6%	8.5%	8.2%	7.4%	7.3%	7.0%
- *Livestock*	11.9%	11.7%	11.7%	11.6%	11.4%	11.1%
- *Forestry*	0.5%	0.5%	0.4%	0.4%	0.5%	0.4%
- *Fishing*	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%

Growth Rates	FY13	FY14	FY15	FY16	FY17	FY18
Real GDP Growth (%)	3.7%	4.1%	4.1%	4.5%	5.3%	5.8%
Agriculture Growth (%)	2.7%	2.5%	2.1%	0.3%	3.5%	3.8%
Crops Growth (%)	1.5%	2.6%	0.2%	-5.0%	0.9%	3.8%

- GDP growth rate has historically outpaced agricultural growth rate
- Agricultural share in GDP took a dip in FY16. The reason was attributed to a decline in crop growth; crop growth declined in 2015-16 on account of decreased production of cotton, rice and maize on the backdrop of unfavorable weather conditions and crash of commodity prices.

Source: Pakistan Economic Survey

INDUSTRY | Demand Supply Situation

- Being primarily an agrarian state, Pakistan's growth is heavily dependent on the fertilizer industry. Historically, Pakistan's fertilizer demand has remained higher than its supply. Since CY16, however, the country's fertilizer industry installed capacity has surpassed the local demand.
- Pakistan has two crop seasons – Kharif and Rabi – Kharif crops are cultivated and harvested in summer season, depending on the area. Rabi crops are sown in winter and harvested in the spring.
- Apparent from the adjacent table, in 2015, ratio of urea to DAP sold bags was 3:1, which has come down to 2.5:1 in 2018

DOMESTIC DEMAND | Trend	%
Urea	65
DAP	20
Others	15
	100

Offtake (tons)	2015	2016	2017	2018
Urea	5,596,680	5,501,050	5,797,043	5,877,307
DAP	1,802,467	2,232,419	2,344,841	2,218,182

Fertilizer | Demand Supply Situation ('000') tonnes

Description	Kharif (Apr - Sep) 2017		Rabi (Oct - March) 2017 - 18		Kharif (Apr - Sep) 2018	
	UREA	DAP	UREA	DAP	UREA	DAP
Opening Stock	***1,489***	***59***	***796***	***367***	***307***	***135***
Imported Supplies	-	867	-	787	-	954
Domestic Production	2,956	434	2,698	377	2,922	422
Total availability	4,445	1,360	3,494	1,531	3,229	1,511
Offtake/Demand	3,234	992	3,003	1,403	2,959	782
Export	422	-	184	-	-	-
Write on/off	7	(1)	-	7	-	-
Closing Stock	***796***	***367***	***307***	***135***	***270***	***729***

Source: Pakistan Economic Survey

FUTURE OUTLOOK | UREA AND DAP

NFDC

(000 tonnes)

Description	Oct-18*	Nov-18*	Dec-18*	Jan-19**	Feb-19**	March-19**	TOTAL
	UREA						
Opening Inventory	115	212	245	174	177	256	115
Imported Supplies	-	-	105	-	-	-	105
Domestic Production	559	528	512	513	469	501	3,082
Total availability	674	740	862	687	646	757	3,302
Offtake	465	497	711	510	390	340	2,913
Write off/on	3	2	23	-	-	-	28
Estimated Inventory	**212**	**245**	**174**	**177**	**256**	**417**	**417**

(000 tonnes)

Description	Oct-18*	Nov-18*	Dec-18*	Jan-19**	Feb-19**	March-19**	TOTAL
	DAP						
Opening Inventory	729	505	528	493	449	424	729
Imported Supplies	239	221	90	-	-	-	550
Domestic Production	56	66	64	31	65	71	353
Total availability	1,024	792	682	524	514	495	1,632
Offtake	521	265	189	75	90	110	1,250
Write off/on	2	-	-	-	-	-	2
Estimated Inventory	**505**	**527**	**493**	**449**	**424**	**385**	**384**

*Actual, **Estimated.

Source: NFDC Report

FUTURE OUTLOOK | UREA AND DAP | Cont.

OUTLOOK

- Availability of Urea and DAP for the three months of CY19 including imports(Jan, Feb and March) is estimated to be 3.3mln tons and 1.6mln tons respectively, depicting comfortable levels to meet the expected demand of 2.9mln tons of urea and 1.3mln tons of DAP.

- Overall Industry is driven by changing demand supply behavior where optimal Inventory management is the key challenge.

- Urea market is locally driven; whereas DAP trading is majorly controlled by International variables. Prices are expected to remain stable in International market following decline in world oil prices. With Stable prices, DAP offtake is expected to improve.

- Urea prices are expected to go down in the coming months due to proposed GIDC settlement.

- DAP production is expected to improve in CY19 as maintenance activities in PMP during CY18 restrained production by FFBL.

Source: NFDC Report and PACRA In-house analysis

FERTILIZER | PRICE COMPONENTS

DOMESTIC

- Gas Price – As feed stock and fuel
- Gas Infrastructure Development Cess (GIDC)
- Subsidy and GST
- Exchange Rate (for Imported Fertilizer)

FERTILIZER | PRICING | Update

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GAS:

- During CY18, feed gas price was increased to Rs.185/mmbtu from Rs.123/mmbtu w.e.f 1-July-18. To note, EFERT and FATIMA are least affected by this rise as their feed cost is based on concessionary pricing ($0.7/mmbtu).
- Fuel gas price was increased to Rs.780/mmbtu from Rs.600/mmbtu w.e.f 1-July-18.

SUBSIDY:

- As per Finance Act-2017, the cash subsidy granted by GoP was reduced to PKR100 per bag of urea fertilizer from PKR156 per bag and abolished for other fertilizers. The same subsidy for urea was also withdrawn in 1HCY18. Fertilizer prices, including urea, therefore picked up in 2HCY18, due to withdrawal of subsidy and increased gas rates. Despite this, GST was proposed to be reduced from 5% to 3% in 2HCY18 whereas input tax on feedstock was proposed to be reduced to 5% from 10%.

FERTILIZER | PRICING | GIDC

G I D C

GAS INFRASTRUCTURE DEVELOPMENT CESS (GIDC):

- GIDC is a special additional tax that has been imposed by the GoP through GIDC Act, 2011 on various economic and industrial sectors, based according to the amount of natural gas consumed by the company. Therefore, the fertilizer sector, being the biggest consumer of natural gas in the country, is subjected to the highest rate of GIDC (Rs.300/mmbtu of feed gas and Rs.150/mmbtu of fuel gas).

- According to the GIDC Legislation bill 2015; the revenues generated by the 'Cess' were to be utilized for development of large-scale Gas-infrastructure projects.

- All industry players, including fertilizer manufacturers, in 2014, challenged the imposition of GIDC.

- GoP, responded by promulgating GIDC Act, 2015; which has again been declared void ab initio by the High Court of Sindh in 3Q16.

- Currently, all fertilizer manufacturers are accruing GIDC amount on fuel. On feed, FFC and FFBL are accruing GIDC on full production, while EFERT is accruing it on only base plant (35% of its total production).

FERTILIZER | PRICING | GIDC (Cont.)

GIDC

- Currently, reports on GIDC resolution – a long hauled concern, are on cards. 50% waiver of GIDC outstanding amount is expected to come into play for the fertilizer sector. If this happens, FFC would benefit the most out of it in terms of one time gain on EPS followed by FFBL, since they are accruing GIDC on full production. It is also expected that rates of GIDC as per Second Schedule of GIDC Act 2015 shall be prospectively reduced by 50%.

- The Government, in its mini budget presented on Jan 23, 2019 acclaimed that GIDC reduction would enable a price reduction of Rs.200/bag of urea. The fertilizer sector, however, does not agree to this as they believe reduction benefit would allow a maximum price cut of Rs.100/bag. Actual price effect is yet to unfold.

PKR mln				
GIDC Payable	**FFC**	**FFBL**	**EFERT**	**FATIMA**
	37,189	15,000	11,800	3,500

UREA

UREA | Industry situation

D Y N A M I C S

OFFTAKE:

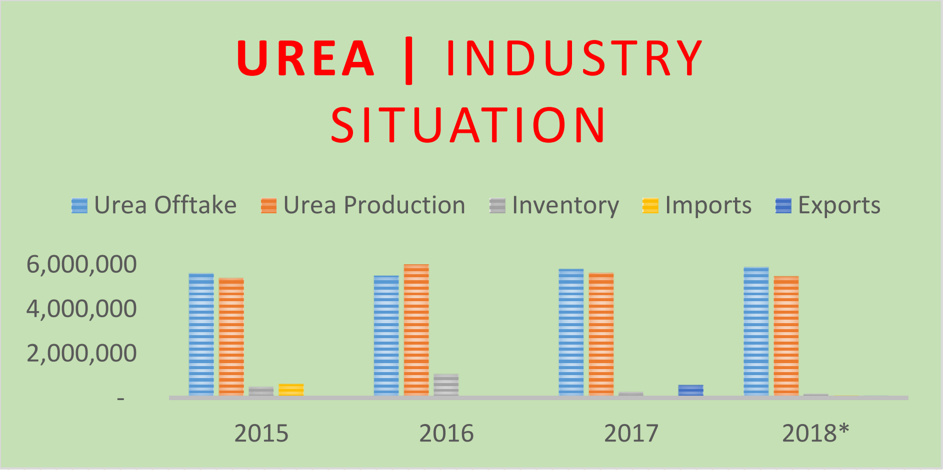
- Urea offtake was recorded at ~5.9mln tonnes in CY18 (up by 1% YoY).

PRODUCTION:

- Production for 2018 was recorded at 5.5mln tons (actual for 9 months and estimated for 3 months).

INVENTORY, IMPORTS, EXPORTS:

- Inventory situation in Pakistan continues to experience fluctuations subjected to changing demand supply scenarios. As in 2016, urea inventory accumulated to approx. 1mln tons due to improved local supply. Stringent efforts were carried out to offload excess inventory including export allowance of ~630,000 tons of urea in FY17-18. This, in return, flipped the situation to inventory damping below sufficient levels, which propelled the need of imported urea.
- Consequently, in 2HCY18, imports of 105,126 tons of urea was allowed by the GoP. Inventory as of December-18 stood at 174,000 tons. Going forward, inventory situation for rabi season is expected to be comfortable.



Source: NFDC reports and EFERT Analyst Briefings

UREA | Market Share | Offtake

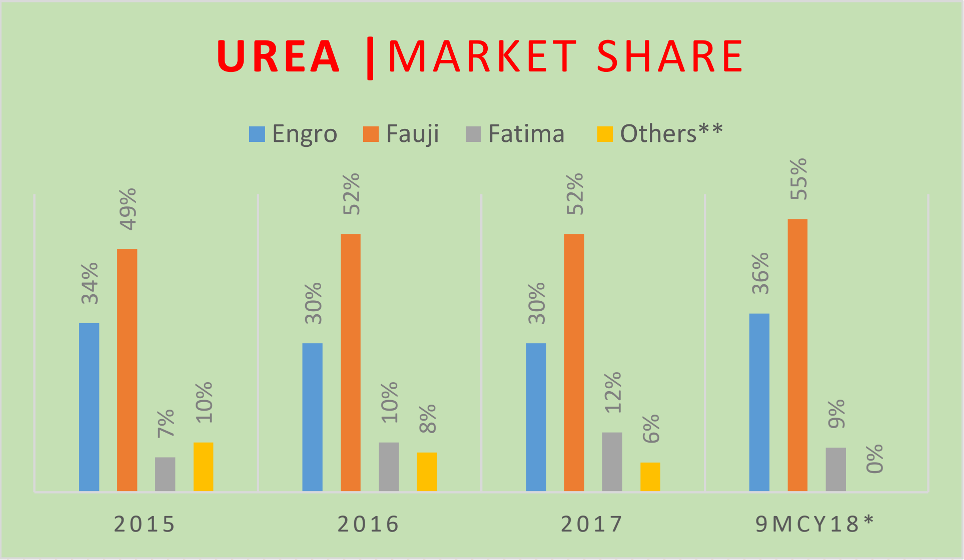
MARKET SHARE

❖ Fertilizer sector, being oligopolistic in nature, is ruled by three top conglomerates – Fauji, Engro and FATIMA.

❖ Share of Fauji (FFC and FFBL) has gone up to 55% in CY18 from 49% in CY15 in urea offtake.

❖ Engro follows with a share of ~36% in 9MCY18; experienced a share decline in 2016 mainly due to players previously not operating, that became operational with the availability of LNG.

❖ Others in the adjacent table include: Agritech and NFML.



Source: EFERT Analyst Briefings

UREA | Pricing

PRICING

LOCAL:

2018:

Average retail price per 50 kg bag hovered around PKR1,793 for sona urea and PKR1,769 for Kissan urea in December 2018. Prices took a hike on the backdrop of: (i) uplift in fuel and feed gas rates from 3QCY18 and (ii) removal of subsidy on urea bags.

2017:

Local players cut urea prices by providing discounts to reduce stock level carried forward from 2016. The situation, however, changed following reduction in subsidy from Rs.156/bag to Rs.100/bag. Average urea prices hovered around GoP notified price of Rs.1,400/bag.

2016:

Supply surplus situation propelled the producers to cut urea prices in three rounds.

INTERNATIONAL:

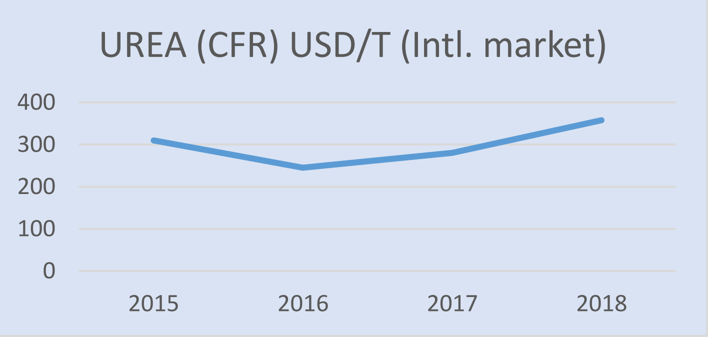
2018

International urea prices remained on the higher side to the local prices, and hovered around USD350-365/T, (landed equivalent to Rs.2,600-3,000/bag).

2017:

Global market witnessed a drop in urea prices in 1HCY17, however, rebounced in the 2nd half resulting from increased import demand coming from Asia, particularly India and Brazil. Urea prices touched around USD290/T in 3QCY17 and stabilized to around USD255/T in Dec-17.

International urea prices dampened in CY16, as a result of increased world capacities; Average urea price traded in the range of CFR USD 240-250/T.



Source: NFDC reports and Companies' Analyst Briefings

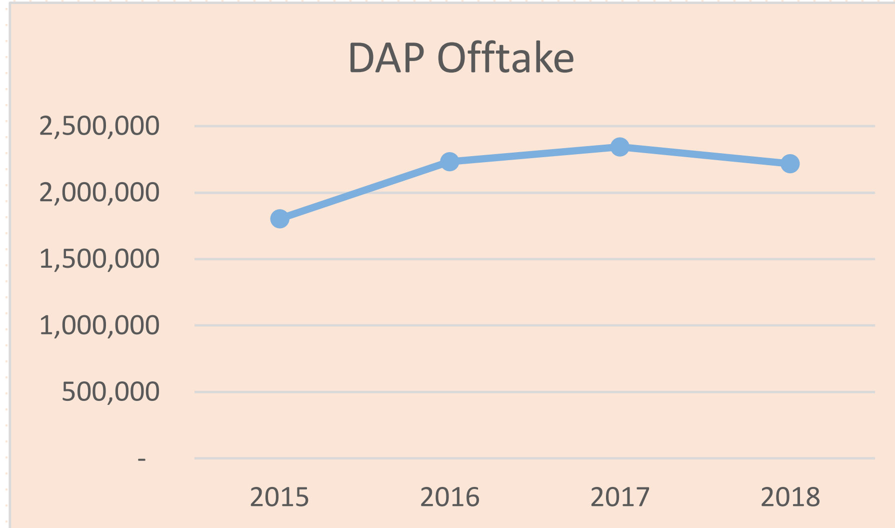
DAP

DAP | Industry Structure

D Y N A M I C S

OFFTAKE:

❖ Demand for DAP was recorded at 2.2mln tons in CY18 (~2.3mln tons in CY17): a decline of ~5% YoY. The offtake remained slow attributed to hike in DAP prices during the year.



PRODUCTION & IMPORTS:

❖ DAP is majorly imported. Production constitutes around 20% - 40% of the total DAP supply in the country.

INVENTORY:

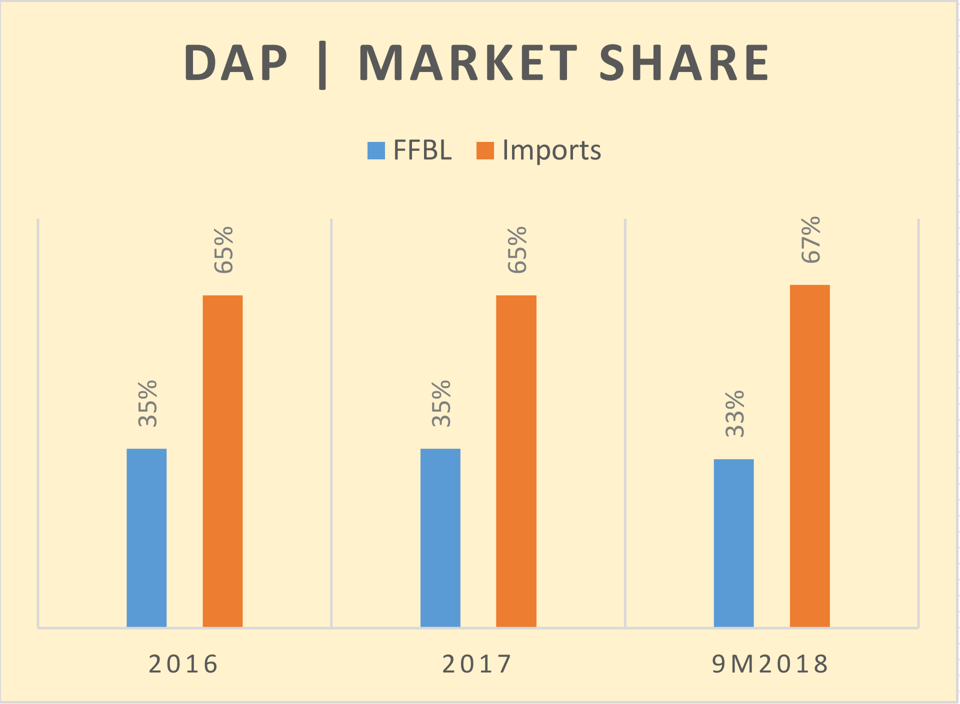
❖ Upward price trend in local market affected consumption at farmer level in CY18, resulting in slower offtake and increased inventory levels. Imports for CY18 clocked in around ~1.8mln tons and Dec-18 inventory levels were recorded at 493,000 tons, depicting sufficient availability for the remaining rabi season.

Source: Analyst Briefings – EFERT and FFBL and NFDC reports

DAP | Market Share | Offtake

MARKET SHARE

- Fauji Fertilizer Bin Qasim Limited (FFBL) is the only local manufacturer of DAP in the country. Others sell imported DAP (including private importers).
- FFBL maintained its market share of ~35% in 2016 and 2017 with a decline to ~33% in 9MCY18. Ratio of total production to imported DAP in 2018 was estimated at 29:71.
- In import market, Engro Fertilizers (EFERT) held a share of ~24%, 21% and ~27% in 2016, 2017 and 9MCY18 respectively.



Source: Analyst Briefings – EFERT and FFBL and NFDC reports

DAP | Pricing

PRICING

LOCAL:

2018:

Local SONA DAP and imported DAP prices increased steadily during 2018 on account of removal of subsidy of Rs.300/bag and devaluation of the local currency. Average retail price of local DAP was recorded at Rs.3,670/bag and ex-Karachi price of imported DAP was around Rs.3,500/bag in Dec'18.

2017:

Local DAP prices picked up in the last quarter of 2017 following upward trend in international prices.

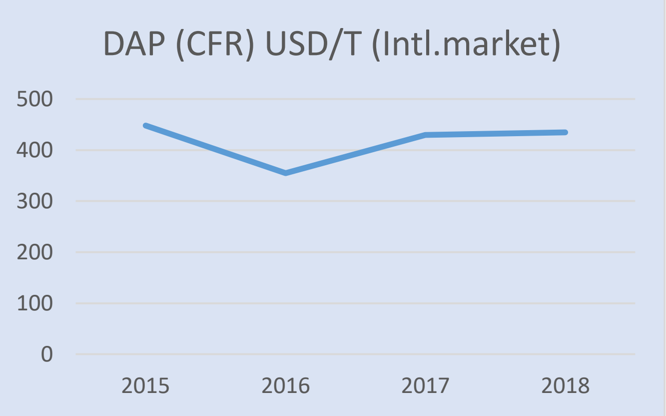
INTERNATIONAL:

2018

In consequence to controlled output from China, and demand supply scenario, International DAP prices hovered in the range of USD430-435/T.

2017:

In 2017, cutbacks in export availability from Chinese producers, to focus on their local demand, and seasonality factors led to a pickup in international DAP prices which hovered around CFR USD430/T. International prices witnessed a downward trend in 2016 as a consequence of improved global demand supply dynamics. Prices continued to fall from USD400/T to USD310/T by End-2016.



Source: Analyst Briefings – EFERT and FFBL and NFDC reports

COMPETITVE ENVIRONMENT

INDUSTRY | Capacities | Major Players

FERTILIZER INDUSTRY | Demonstrated Capacities | Major Players (tonnes)					Utilized Capacity (CY17) %	Gas Supply Arrangement	Plant
Group	Company's Name	Fertilizer					
		UREA & CAN	DAP, NP and NPK	Total			
Fauji	Fauji Fertilizer Company Ltd. (FFC)	2,048,000	-	2,048,000	123%	FFC Energy Limited	1- Rahim Yar Khan, 2 Ghotki, Sindh
	Fauji Fertilizer Bin Qasim Ltd. (FFC)	551,000	650,000	1,201,000	113%	SSGC, FFBL Power Co. Ltd	Port Bin Qasim, Karachi
	Sub-total	**2,599,000**	**650,000**	**3,249,000**			
ENGRO	Engro Fertilizers Limited (EFERT)	2,275,000	100,000	2,375,000	81%	Mari Gas and SNGPL	Daharki - Ghotki, Sindh
	Sub-total	**2,275,000**	**100,000**	**2,375,000**			
FATIMA	Fatima Fertilizer Company Ltd.	920,000	360,000	1,280,000	101%	Mari Gas and own captive power plant	Rahim Yar Khan
	Fatima Fert Limited	401,500	228,125	629,625	18%	SNGPL	Sheikhupura
	PakArab Fertilizers Limited	542,400	304,500	846,900	49%	Mari Gas	Khanewal Road, Multan
	Sub-total	**1,863,900**	**892,625**	**2,756,525**			
	Agritech Limited	433,000	81,000	514,000	62%	SNGPL	Mianwali and Haripur
	Sub-total	**433,000**	**81,000**	**514,000**			
		7,170,900	**1,723,625**	**8,894,525**			

❖ Oligopolistic Industry.

❖ FatimaFert, PakArab and Agritech's plants remained largely non-operational upto Oct'18 due to gas supply issues. Later, the Government ensured resumption of gas to the said plants. In 4QCY18, Fatima group made strategic decision of taking over FatimaFert (wholly owned) and all fertilizer plants of Pak-Arab Fertilizers, after which a dedicated gas pipeline shall be available to PakArab's plant which is expected to improve production in the future.

Source: Companies' financial statements

MAJOR PLAYERS | FINANCIAL HIGHLIGHTS

Company	Fauji Fertilizers Company		Fauji Fertilizer Bin Qasim Ltd		Engro Fertilizer		FATIMA FERTILIZERS	
	9MCY18	CY17	9MCY18	CY17	9MCY18	CY17	9MCY18	CY17
PKR mln								
Performance								
Sales	**70,677**	**90,714**	**37,573**	**52,733**	**48,585**	**67,990**	**34,511**	**37,612**
Gross Profit	18,112	18,093	4,763	6,028	21,382	25,452	16,131	20,337
GP Margin (%)	**26%**	**20%**	**13%**	**11%**	**44%**	**37%**	**47%**	**54%**
Net Profit	8,525	10,711	(203)	1,004	12,536	10,137	9,439	10,576
NP Margin (%)	**12%**	**12%**	**-1%**	**2%**	**26%**	**15%**	**27%**	**28%**
Investment Book	**49,599**	**58,752**	**26,465**	**23,065**	**20,314**	**9,643**	**4,739**	**5,237**
Equity	25,851	22,961	25,465	23,065	560	560	2,240	2,238
Debt Instruments	23,748	35,791	1,000	-	19,754	9,083	2,499	2,999
Borrowings	**24,253**	**33,942**	**33,492**	**28,476**	**27,218**	**32,576**	**14,811**	**18,152**
Long Term	18,694	22,403	20,733	18,542	25,827	30,904	13,643	16,426
Short Term	5,559	11,539	12,758	9,934	1,391	1,672	1,168	1,726
Equity	**29,828**	**29,352**	**12,247**	**13,151**	**44,201**	**41,013**	**58,455**	**53,742**

- FFC takes the lead in terms of business volumes.
- Margins are relatively better for EFERT and Fatima group due to concessionary feed gas available to them reducing cost of doing business.
- FFBL incurred a loss at the net level in 9MCY18 due to slower offtake of DAP attributed to inevitable upward price trend in DAP coupled with low production of DAP due to maintenance activity at PMP.

Source: *Companies' financial statements*,

Bibliography

1. Pakistan Economic Survey
2. NFDC Monthly Fertilizer Reviews
3. EFERT and FFBL Analyst Briefings
4. Companies' published financial statements
5. PACRA In-house Research

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