

# **Fertilizers Sector in Pakistan**

## **- Cultivating Economy**

**October 2015**

# Significance<sup>1</sup> of Fertilizers

Fertilizers is the most significant and expensive agricultural input

Increased Agri production and higher crop yield is essential for food security

Agriculture (Agri) accounted for 21% of GDP in FY15

Agri is important for Food Security and reducing poverty | political interests

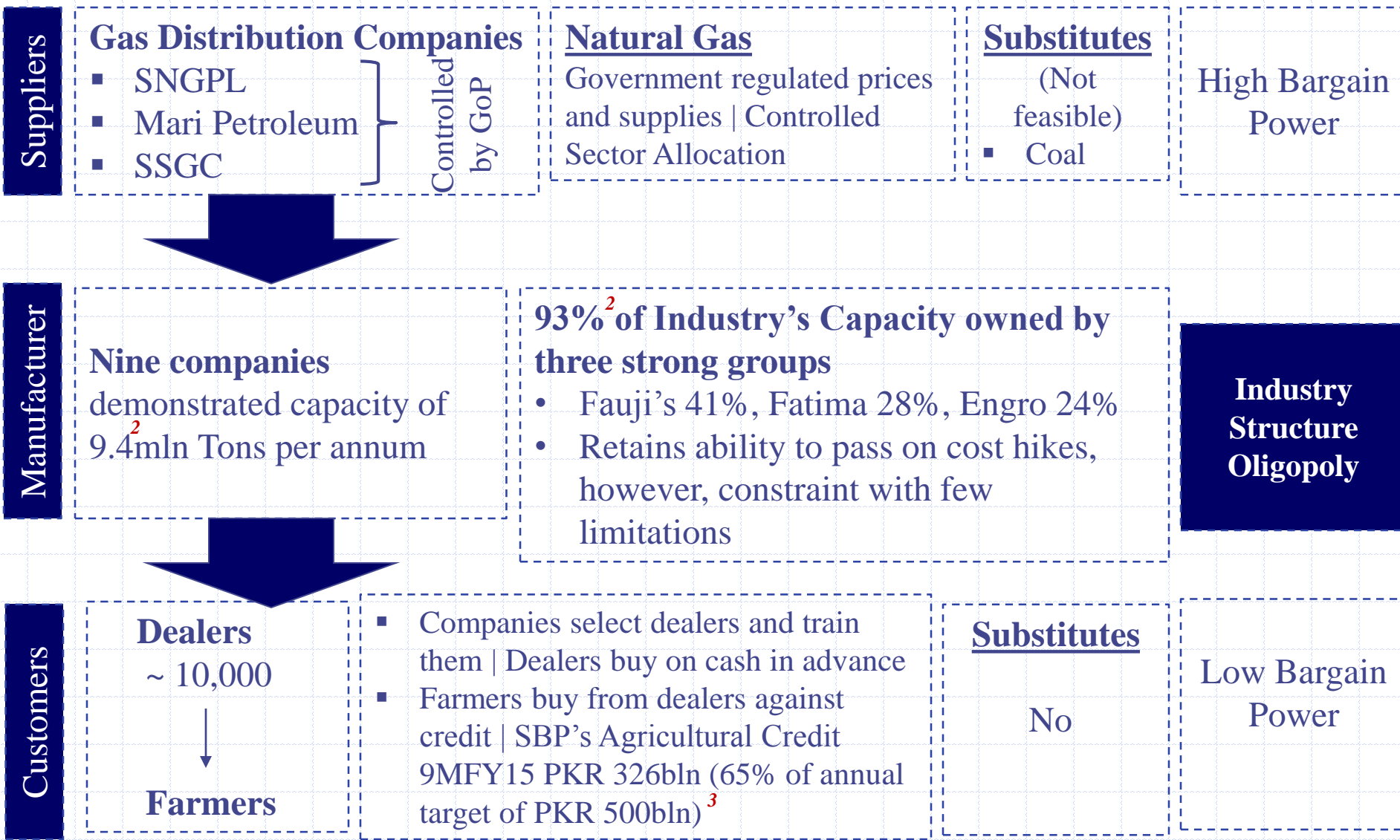
Crop yield (30% - 50%) is dependent upon balanced use of fertilizers; One kg of fertilizers nutrients produces

- 8 kgs of cereals (Wheat, Maize and rice)
- 2.5 kgs of cotton
- 114 kgs of stripped sugarcane

Nutrient deficiency in soil of Pakistan is met through fertilizers

- Nitrogen Deficiency: 100% of soil
- Phosphorus Deficiency: 80% - 90% of soil
- Potassium Deficiency: 30% of soil

# Fertilizers Sector | Competitive Analysis

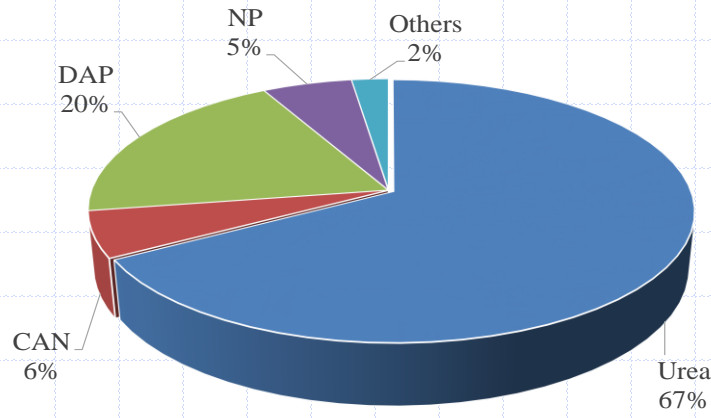


# Fertilizers Sector | Capacities <sup>2</sup>

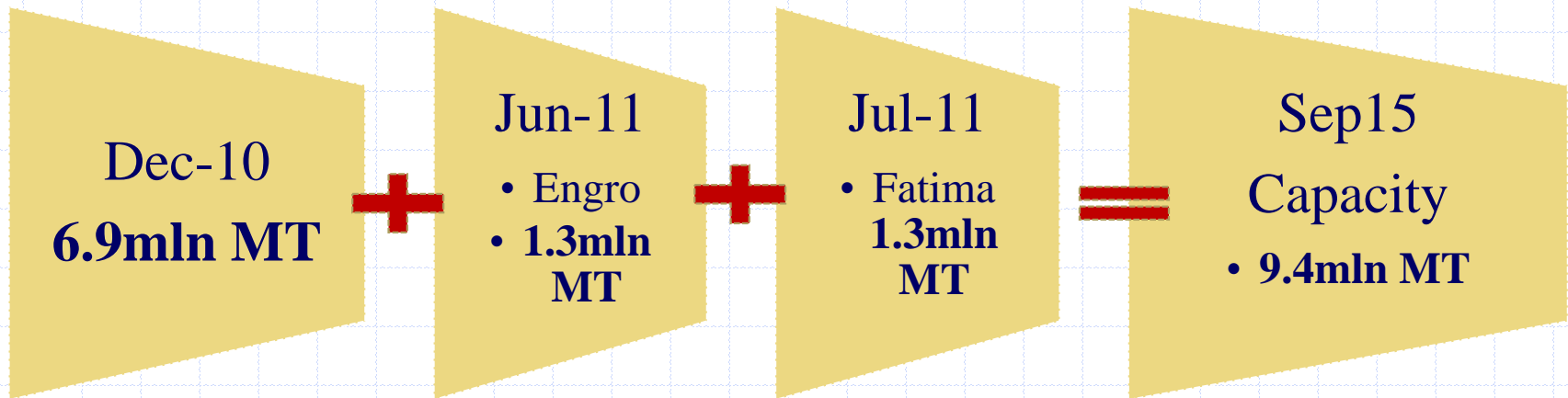
Fertilizer Industry Demonstrated Capacities (thousand MT p.a.)

Group's Name	Company's Name	Nitrogenous Fertilizers			Phosphatic   Complex Fertilizers			Grand Total	Plant Location	Brand Name
		Urea	Urea Market share	CAN	DAP	NP	Others (SSP)			
Fauji's	Fauji (FFC)	2,500	36%	-	-	-	-	2,500	1 & 2 - RYK   3-Ghotki	Sona
	FFBL	700	10%	-	670	-	-	1,370	Port Qasim Karachi	Sona
	<b>Sub-Total</b>	<b>3,200</b>	<b>46%</b>	<b>-</b>	<b>670</b>	<b>-</b>	<b>-</b>	<b>3,870</b>		
Engro	Engro Fertilizer	<b>2,275</b>	<b>33%</b>					<b>2,275</b>	Base Plant & Enven - Dharki	Engro
Fatima	Fatima	500	7%	420	-	360	-	1,280	Rahim Yar Khan	SarSabz
	Pakarab	92	1%	450	-	350	-	892	Multan	SarSabz
	DH Fertilizers	446	6%	-	-	-	-	446	Sheikhupura	Bubber Sher
	<b>Sub-Total</b>	<b>1,038</b>	<b>15%</b>	<b>870</b>	<b>-</b>	<b>710</b>	<b>-</b>	<b>2,618</b>		
	Agritech	433	6%	-	-	-	81	<b>514</b>	Urea-Mianwali   SSP-Hazara	Tara
	Others	-	-	-	-	-	162	<b>162</b>	Jaranwala Punjab	None
<b>Grand Total</b>		<b>6,946</b>	<b>100%</b>	<b>870</b>	<b>670</b>	<b>710</b>	<b>243</b>	<b>9,440</b>		
<b>Demand CY14</b>		<b>5,631</b>		<b>480</b>	<b>1,655</b>	<b>470</b>	<b>193</b>	<b>8,430</b>		

Fertilizer Mix by Demand



## Capacity Expansion in latest 5 years – Majorly Nitrogenous Fertilizer



Despite Capacity Expansion, enabling excess supply over demand, the Industry continued to import urea due to shortage of vital raw material – Natural Gas.

# Raw Material | Gas Supply Situation

## Scarce resource in Pakistan

<i>(Quantity in mmcfd)</i>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>
<b>Allocated Gas to Fertilizer Manufacturers</b> <sup>2</sup>	<b>822</b>	<b>822</b>	<b>822</b>
<b>Gas Supplied – Actual</b> <sup>4</sup>	595	521	597
Less Temporary Gas (Guddu Power Plant)			(60)
	595	521	537
<b>Shortfall (adj by Guddu)</b>	<b>227</b>	<b>301</b>	<b>225 (285)</b>
<b>%age shortfall</b>	<b>28%</b>	<b>37%</b>	<b>27%(35%)</b>

Gas Network	Urea Capacity (000'Tons)	Capacity utilization <sup>5a</sup>		
		CY13	CY14	9MCY15
Mari Petroleum*	4,300	94%	95%	101%
Sui Northern Gas (SNGPL)	1,946	28%	32%	31%
Sui Southern Gas (SSGC)	700	32%	30%	38%
<b>Total</b>	<b>6,946</b>	<b>70%</b>	<b>71%</b>	<b>75%</b>

\*Engro's new plant Even swapped to Mari from SNGPL since Jul13

Sector (Priority)	Allocation %
Domestic (1)	20%
Power (2)	30%
Fertilizer (3)	18%

Significance

Competitive Analysis

Capacities

**Raw Material Gas Supply Situation**

Urea | Performance

DAP | Performance

Risk Profile

Outlook

# UREA Performance

Country's largest selling Nitrogenous Fertilizer

Significance

Competitive  
Analysis

Capacities

Raw Material |  
Gas Supply  
Situation

Urea |  
Performance

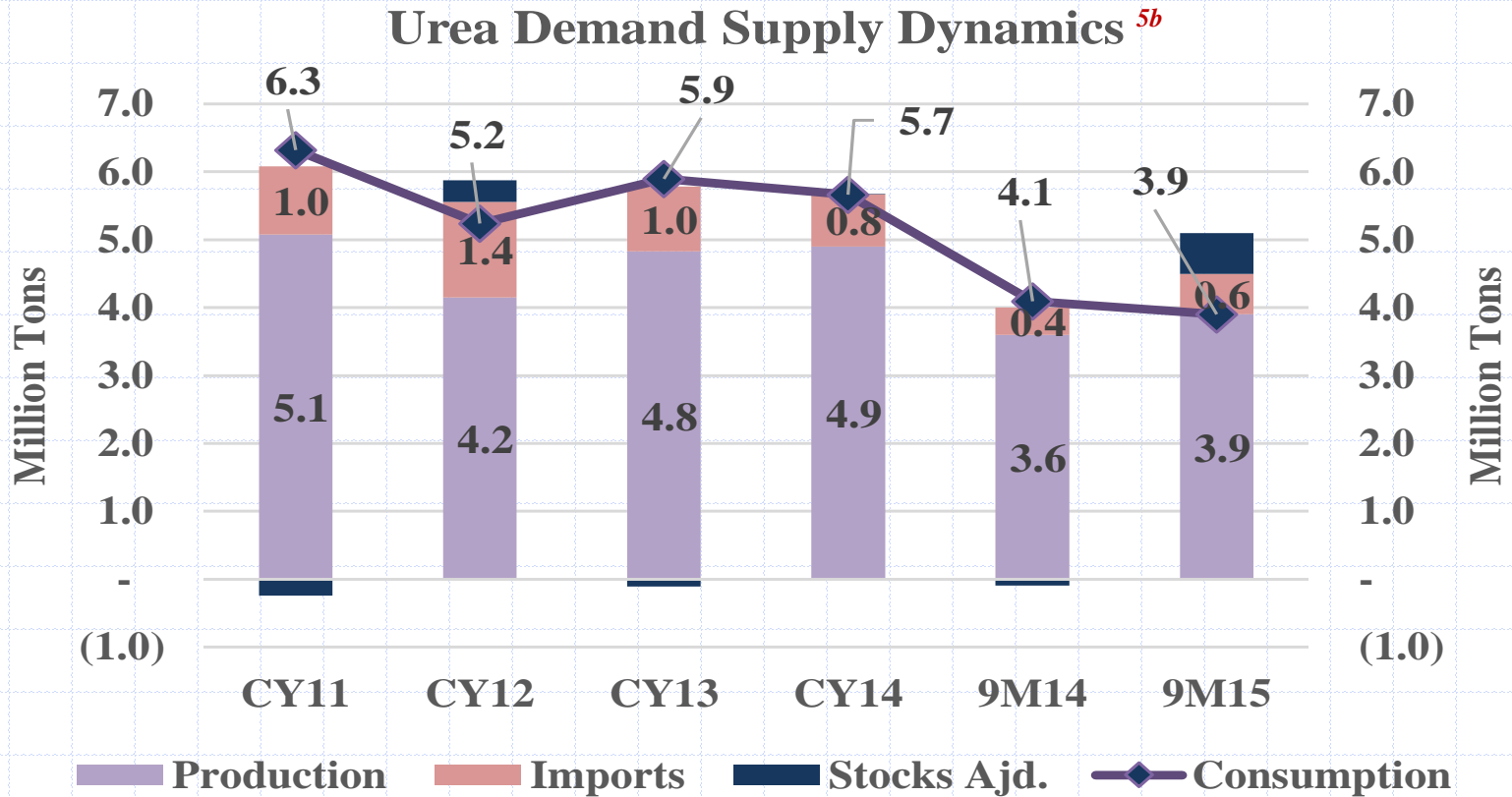
DAP |  
Performance

Risk  
Profile

Outlook

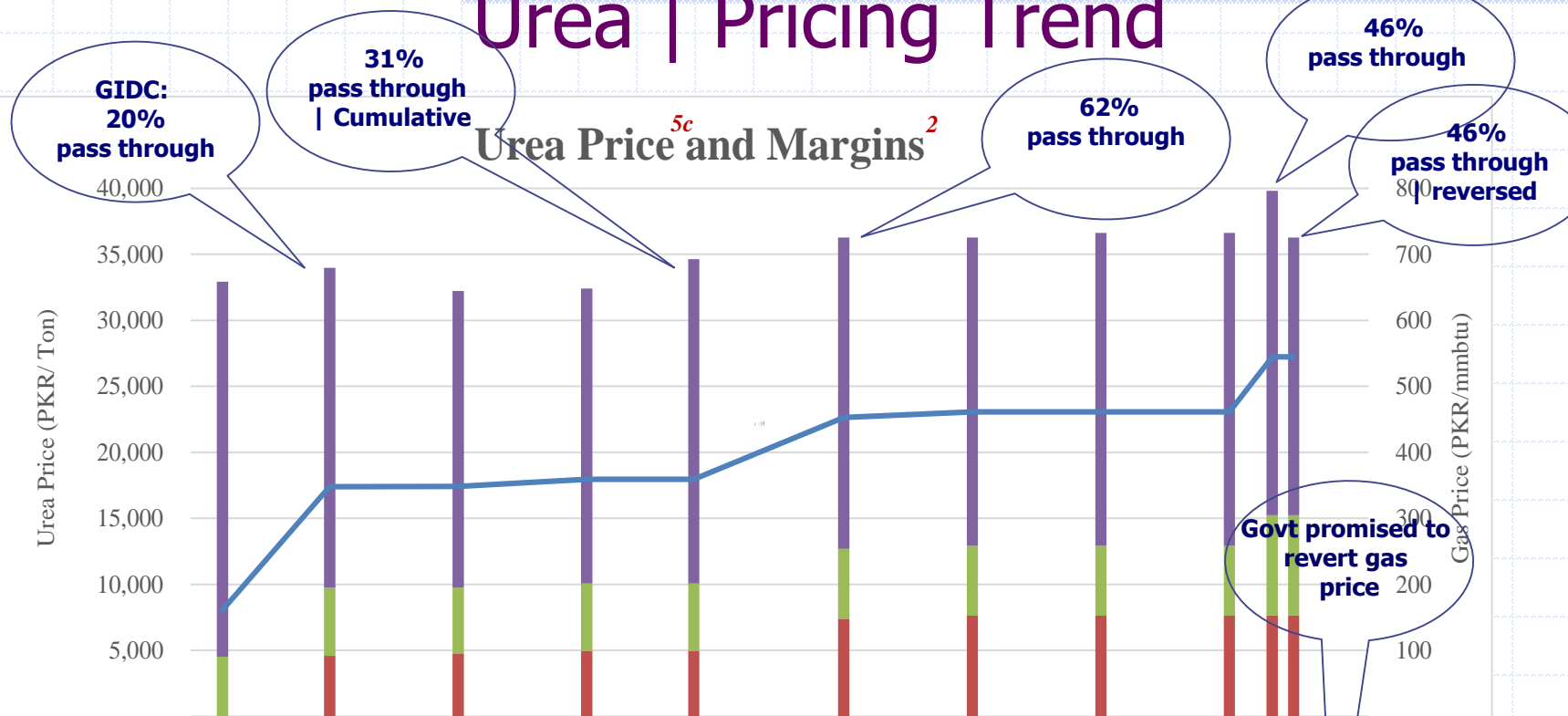
# Urea Industry

*Supply deficit continued to be met through imports*





# Urea | Pricing Trend



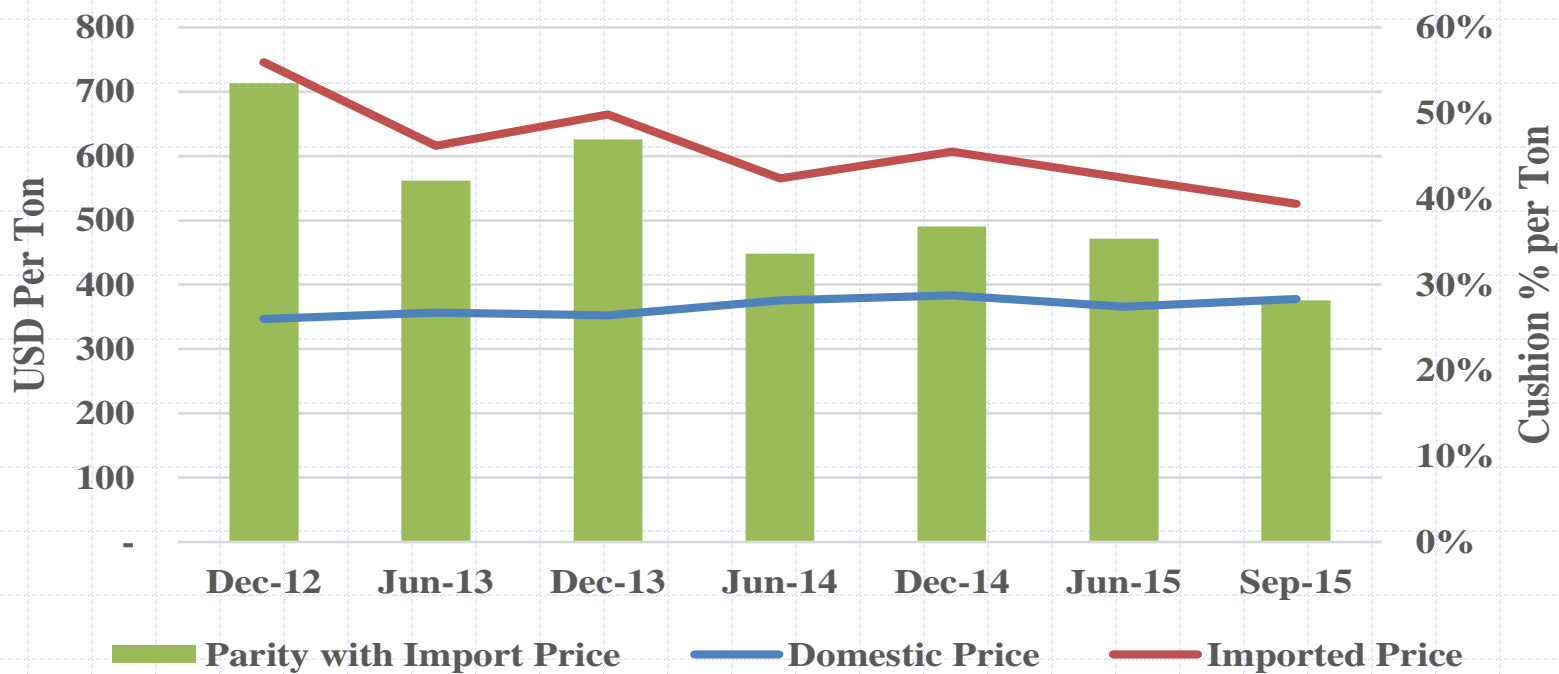
	Aug-11	Jan-12	Jul-12	Jan-13	Jun-13	Jan-14	Jul-14	Jan-15	Jul-15	Sep-15	Oct-15
Margins/Ton <sup>2</sup>	28,403	24,235	22,465	22,339	24,579	23,580	23,341	23,701	23,701	24,550	21,010
Basic Gas Cost/Ton <sup>2</sup>	4,517	5,149	4,974	5,115	5,115	5,280	5,280	5,280	5,280	7,600	7,600
GIDC Cost/Ton <sup>2</sup>	-	4,596	4,781	4,945	4,945	7,400	7,639	7,639	7,639	7,650	7,650
Gas Price / mmbtu <sup>6</sup> (weighted Average)	161	348	348	359	359	453	461	461	461	545	545

- Concessionary Feedstock (Fertilizers Policy, 2001) fixed at USD 0.7/mmbtu | GIDC differential (PKR 300/mmbtu) abolished | Stay Order from High Court
- GIDC Benefit for New Urea plants → cost saving of PKR 6,900 per ton (PKR 345/bag)

# Urea Price

## Declining Parity with Import Price

Urea Retail Price *5c and 5d*



# DAP Performance

Country's largest selling Phosphate Fertilizer

Significance

Competitive  
Analysis

Capacities

Raw Material |  
Gas Supply  
Situation

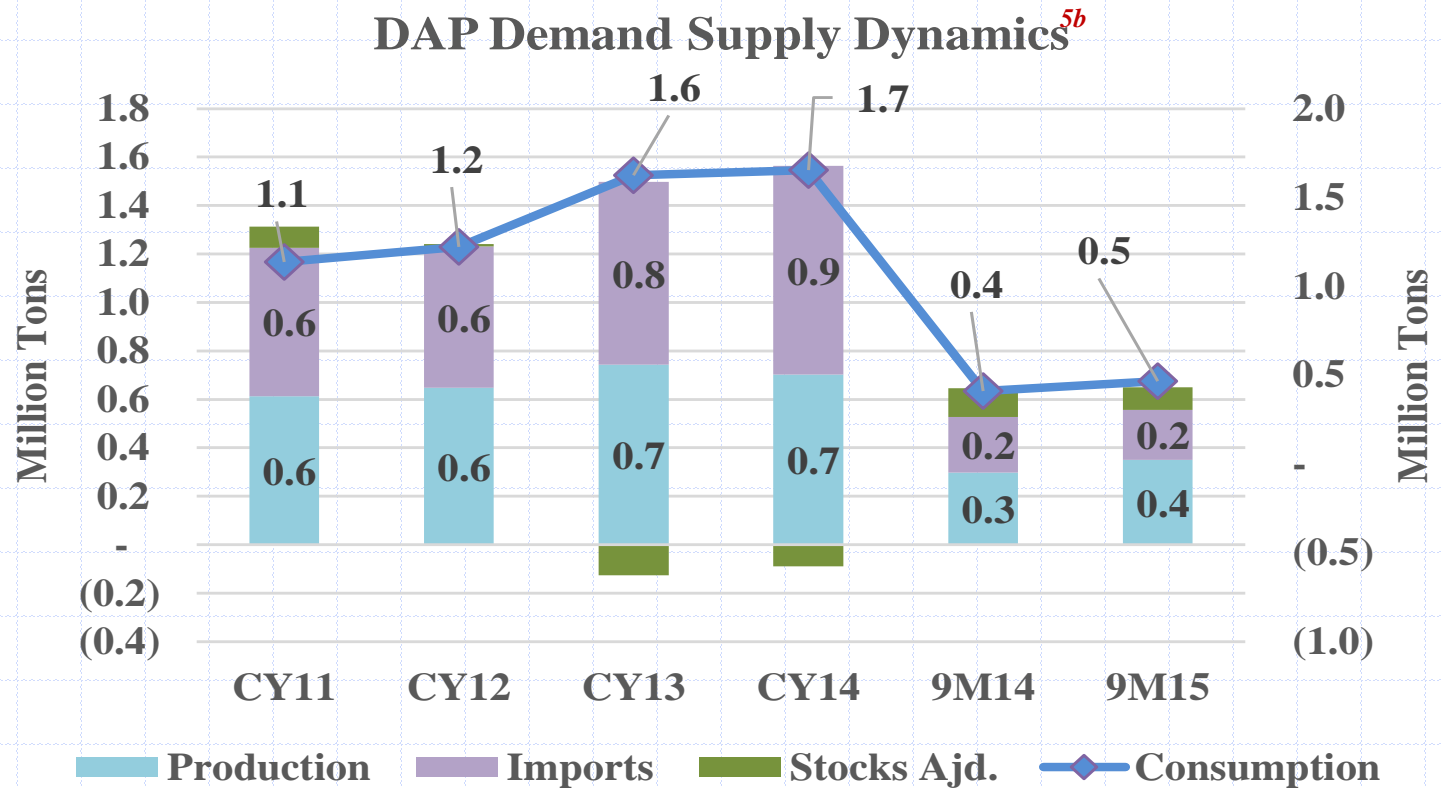
Urea |  
Performance

**DAP |  
Performance**

Risk  
Profile

Outlook

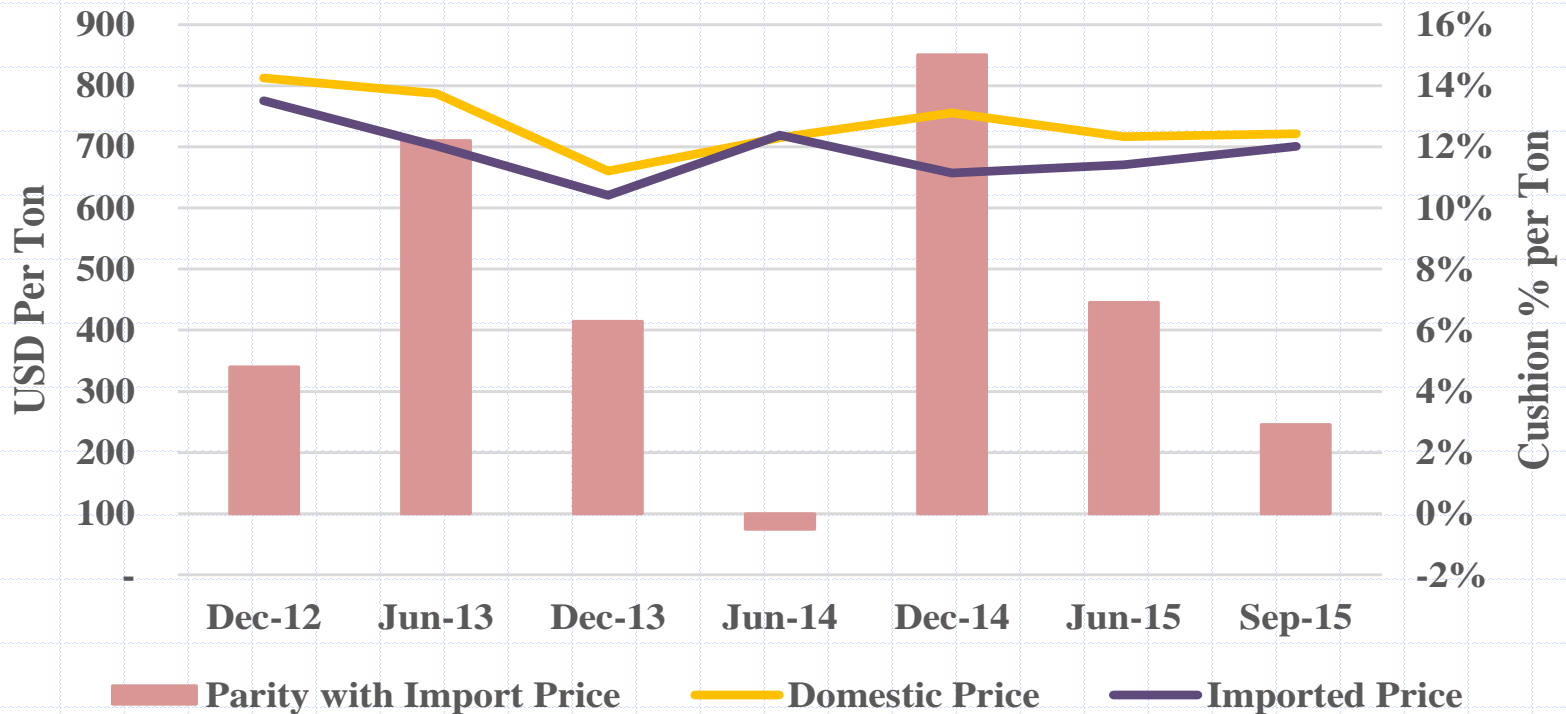
# DAP Industry – Subsidy announced after 5yrs



# DAP Price

Fluctuating Parity with Import Price | Thin margins for importers

## DAP Retail Price <sup>5c and 5d</sup>



# Fertilizer Industry | Risk profile

- + The industry's financial risk profile is improving; debt raised for recent capacity expansion shall be completely paid off in 2018 (mainly Fatima and Engro). Providing fiscal space to grow further.
  - + Established Demand of fertilizers backed by vital need of agricultural output
  - + No substitute of the products
  - + Key players associated with Mari Network (62% of Industry's capacity) have been receiving regular/ uninterrupted gas supplies. In addition, one key provided with additional gas, though temporary, have enabled robust cashflows consecutively for two years.
- 
- Permanent resolution of gas to small players is vital for their survival.
  - Limitations imposed through government intervention to pass on Gas Cost hikes may further impede industry's margins. Nevertheless, the players have requisite cushion to absorb such shocks.
  - Any drop in international urea price will further constraint urea price raise to pass on cost hikes

Significance

Competitive  
Analysis

Capacities

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# Fertilizer Industry

□ Positive Outlook

Significance

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  - a. Annexure 11\_ Fertilizer Production by Product and Manufacturer
  - b. Annexure 5\_ Plant wise Production Sales and Stock position
  - c. Section 9\_Fertilizer Prices, Table 7\_Average Fertilizer Retail Prices
  - d. Section 9\_Fertilizer Prices, Table 8\_International Prices
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# Thank You

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