

## Indian Fertilizer Industry June 2020

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### Production, Imports and Sales during 2019-20

**Table 1: Production, Imports and Sales of Key Fertilizers (unit: Lakh Metric Tonnes- LMT)**

			Change y-o-y (+/-)	
	2018-19	2019-20	2018-19	2019-20
Overall Fertilizers Production	415	426	0.3%	2.7%
Overall Fertilizers Imports	191	223	14.4%	16.6%
Overall Fertilizers Sales	579	706	4.3%	22.0%
Urea Production	240	245	0%	1.9%
Urea Imports	74	91	24.2%	22.5%
Urea Sales	320	373	5.4%	16.7%
DAP Production	39	46	-16.2%	16.7%
DAP Imports	66	49	57.1%	-26.2%
DAP Sales	94	103	5.7%	9.5%
MOP Imports	42	37	-10.2%	-13.0%
MOP Sales	29	29	-7.5%	-1.3%
SSP Production	41	43	5.2%	4.4%

Source: Department of Fertilizers, CMIE, Office of the Economic Adviser

Fertilizer sales are considered as a proxy for demand.

- **Overall fertilizers** production has increased by 2.7% during FY20 after registering muted growth in the last three fiscal years. Improvement in demand due to a good southwest monsoon which resulted in higher sowing aided the increase in production. Imports have increased sharply by 16.6% supported by the increase in urea imports which constituents around 40% of the overall fertilizer imports. Sales too have increased by 22% buoyed by a good monsoon and harvest season.

- Production of **urea** increased by 1.3%. Production has increased marginally on account of efficiencies of scale achieved by urea manufacturers even with the temporary shutdown of certain manufacturing units during the year. Imports have risen by 22.5% to counter the shortfall in domestic production. Import dependence of urea (imports as a proportion of production plus imports) has increased to 27% (from it being 24% during FY19). India mainly imports Urea from Oman, Iran and China. Offtake during the year has been positive and has increased by 16.7%.

- Softening of raw material prices and a low base has aided in increasing **DAP** production by 16.7%. Increase in production has led to a decline in imports by 26.2%. Import dependence of DAP (imports as a proportion of production plus imports) has decreased to 52% (from it being 63% during FY19). India mainly imports DAP from China, Saudi Arabia, USA and Jordan. Sales had increased by 9.5%.

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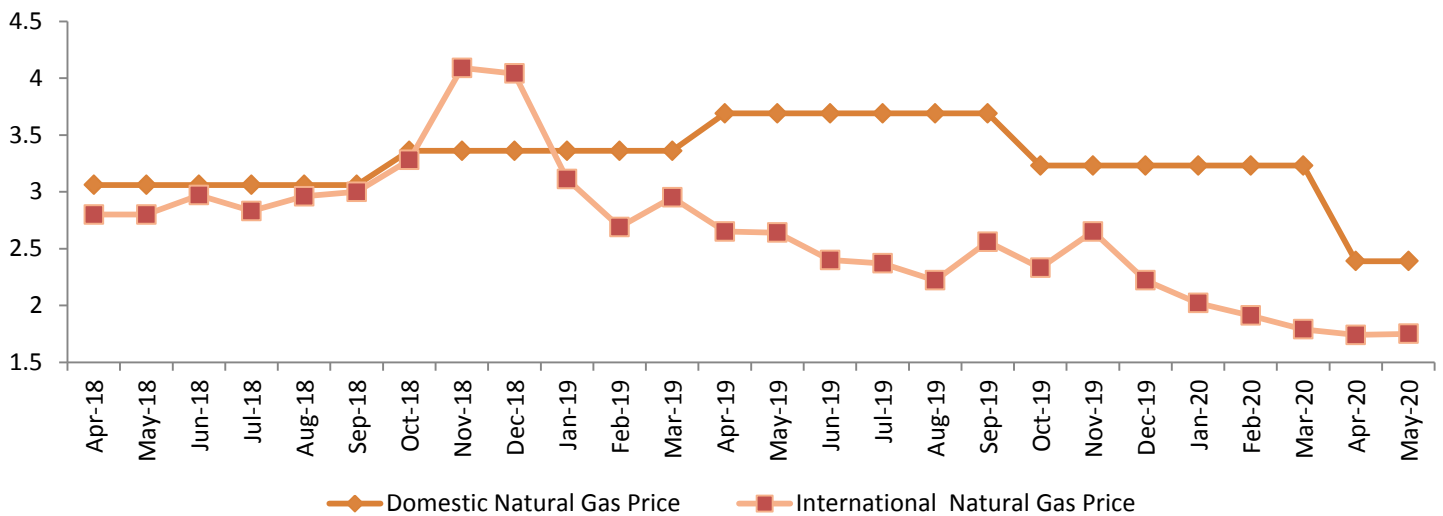
- **MOP** imports have fallen by 13% and sales has decreased marginally by 1.3%. India meets its Potassium chloride (commonly referred to as Muriate of Potash or MOP) requirements completely through imports from Canada, Russia, CIS+ Belarus, Israel, Jordan and Lithuania.
- The production of **SSP** which is an indigenous phosphatic multi-nutrient fertilizer increased by 4.4%. SSP is a cheaper alternative to DAP.
- The availability of urea, DAP and MOP increased by 22.9%, 49.6% and 23.3% respectively during the year.

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

India imports the raw materials needed for manufacturing fertilizers. Natural gas is used as feedstock for the manufacturing of urea and accounts for 50%-80% of the raw material cost. The fertilizer industry is the leading consumer of domestic natural gas. Additional requirement of natural gas is supplied through imports in the form of RLNG. Out of 31 urea plants in India, 28 are gas based and 3 are naphtha based. Natural gas is preferred as:

1. It is intrinsically hydrogen rich and therefore contributes more hydrogen compared to other feedstock on a unit weight basis.
2. The heavier feedstock like coal and oil are more complex to process and therefore the capital costs are higher compared to natural gas.

**Chart 1: Trend in Domestic and International Natural Gas Prices (unit: USD/mmBtu)**



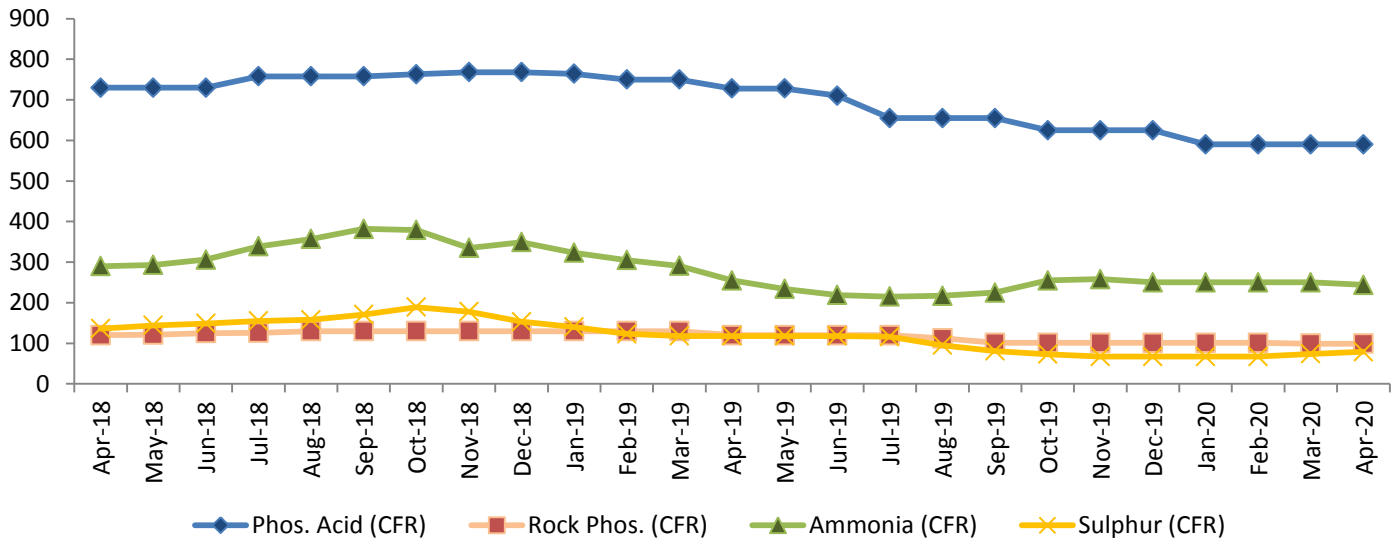
Source: PPAC and EIA

As per the New Domestic Gas Policy, the government revises the domestic natural gas price every six months i.e. April-September and October-March. During FY20 the price of domestic natural gas was USD 3.69/mmBtu during H1-FY20 and USD 3.23/mmBtu during H2-FY20. Currently (H1-FY21) the price for gas produced from local fields has been revised to USD 2.39/mmBtu which is the lowest price ever set as the New Domestic Gas Policy.

As per our estimates, a 26% fall in natural gas prices could potentially lead to a 12.5% decrease in cost of production of urea, thus decreasing the working capital intensity of the fertilizer manufacturers and it will also act as a relief for the fiscal spending of the government while disbursing the urea subsidy, which is already constrained at the moment. This also comes at a good time as the centre is planning to ease the controls on the retail prices of urea and make the release of the ever-rising subsidy on it far more targeted.

Prices of R-LNG are usually governed by market dynamics based on contracts and are linked with the global crude oil prices. However, soon fertilizer plants could be taking delivery on India’s first gas exchange (prices are based on market demand-supply) — the Indian Gas Exchange (IGX) which has just been launched but currently it is only dealing with delivery of imported natural gas (LNG) not of domestic natural gas price which is formula driven.

**Chart 2: Prices of other key Raw Materials used for Fertilizer Production (unit: USD/MT)**



Source: Department of Fertilizer

Prices of phosphoric acid, rock phosphates, ammonia and sulphur have fallen sharply by 13.9%, 15.3%, 27.1% and 41.5% during FY20 respectively. Manufacturers have passed on the benefit of soft raw material prices by lowering the MRP of decontrolled fertilizers.

The same downward trend has continued in the new financial year as prices of phosphoric acid, rock phosphates, ammonia and sulphur have fallen by 19.0%, 17.5%, 4.3% and 33.1% y-o-y during April 2020.

**Status on the Progress of the Revival of 5 fertilizer plants**

The government is reviving 5 closed fertilizer plants - 4 of Fertilizer Corporation of India Limited (FCIL) in Talcher, Ramagundam, Gorakhpur and Sindri and 1 of Hindustan Fertilizer Corporation Ltd. (HFCL) in Barauni. This is being done by setting up new ammonia-urea plants with a capacity of 12.7 LMT (Lakh Metric Tonne) per annum. The Government expects that with the commissioning/ start of the above plants, it can increase indigenous urea production significantly leading to a substantial reduction in imports and make India self-sufficient in the years to come.

- Ramagundam Fertilizers and Chemicals Limited (RFCL) has already achieved 99.5% of physical progress but there has been some delay (due to COVID-19) in completion of a small component of physical work. It is expected that urea production will commence by the end of H1-FY21.
- Gorakhpur, Sindri, Barauni fertilizer plants have achieved 77%, 70% and 69% of physical progress respectively. It is expected that Gorakhpur, Barauni and Sindri plants will be completed before May 2021.
- Pre-project activities are in progress for the Talcher Fertilizer Plants in Odisha.

Post the commissioning of all the above plants the domestic indigenous urea production is slated to rise by atleast 63.5 LMT/year.

## Subsidies offered towards the Fertilizer Sector

The fertilizer industry is highly regulated and monitored by the government. The difference between the cost of production which is higher than the price at which the fertilizer is sold to the beneficiary, is reimbursed by the Government in the form of subsidies. Whenever there is shortage of funds, the Government liquidates the pending subsidy by arranging loans under a Special Banking Agreement (SBA).

While the MRP of urea is fixed and controlled by the Central Government that is not the case with decontrolled fertilizers where in the manufacturers have the liberty to price the product freely and according to the prevailing market conditions.

**Table 2: Allocation of the Subsidy within the Fertilizer Sector (figures in Rs/crore)**

	2018-2019 (A)	2019-2020 (P)	2020-2021 (BE)	Change y-o-y (+/-)	
				2019-2020 (P)	2020-2021 (BE)
Urea Subsidy	46,514	54,755	47,805	17.7%	-12.7%
Nutrient based Subsidy	24,090	26,369	23,504	9.5%	-10.9%
<b>Total</b>	<b>70,605</b>	<b>81,124</b>	<b>71,309</b>	<b>14.9%</b>	<b>-12.1%</b>

Source: Budget.nic, Controller General of Accounts

Note 2019-20 figures have been sourced from CGA and are Provisional; A-Actuals; BE Budget Estimates

The fertilizer subsidy to be disbursed during FY21 has been reduced by 12.1% to Rs 71,309 crore which could be insufficient for the fertiliser industry which has time and again faced issues regarding inadequate subsidy provisioning. This could lead to a subsidy backlog, thereby impacting the liquidity position of the industry. Additionally, the Ramagundam unit is also expected to start production during FY21 supplanting the increase in the urea subsidy requirement during the year.

If prices of raw materials (particularly of natural gas) are to rise during the year, this could prove to be problematic and challenging for the government.

Within the subsidy Rs 47,805 crores has been earmarked as the urea subsidy and the remaining Rs 23,504 crores has been earmarked for the nutrient based subsidy.

Under NBS, the subsidy given to the companies is fixed annually on the basis of its nutrients content (i.e. Nitrogen, Phosphate, Potash and Sulphur) on per kg basis which is converted into subsidy per tonne depending upon the nutrient content in each grade of the fertilizers. These rates are determined taking into account the international and domestic prices of P&K fertilizers, exchange rate, inventory level in the country.

**Table 3: Rates of Nutrients under NBS (Unit: Rs/kg)**

Nutrient Type	2019-20	2020-21	Change y-o-y (+/-)	
			2019-20	2020-21
Nitrogen (N)	18.9	18.8	0.0%	-0.6%
Phosphorus (P)	15.2	14.9	0.0%	-2.2%
Potash (K)	11.1	10.1	0.0%	-9.1%
Sulphur (S)	3.6	2.4	31.9%	-33.4%

Source: PIB

For FY21, there has been a downward revision for the nutrients covered the NBS. It is estimated that the subsidy on phosphatic and potassic fertilisers during the current financial year would cost Rs 22,187 crore and the government also approved the inclusion of a complex fertilizer namely Ammonium Phosphate (NP 14:28:0:0) under the NBS Scheme.

**Table 4: Fertilizer Subsidies paid by the end of April 2020 (figures in Rs/crore)**

	2020-21 (BE)	Actuals up to April 2020	% of Actuals to Budget	Estimates
Urea Subsidy	47,805	12,799		27%
Nutrient Based Fertilizers Subsidy	23,504	7,795		33%
Total	71,309	20,594		29%

Source: Controller General of Accounts

In the new financial year the government has already paid 29% of the budgeted subsidy amount.

### Fertilizer sector demand-supply in the current financial year

**Table 5: Production, Imports and Sales of Key Fertilizers (unit: Lakh Metric Tonnes- LMT)**

	2019-20	2020-21	Change y-o-y (+/-)	
			2019-20	2020-21
Overall Fertilizers Production	28.8	27.5	-4.4%	-4.5%
Overall Fertilizer Sales	14.2	20.6	10.9%	45.1%
Urea Production	16.5	18.3	-18.1%	10.5%
Urea Imports	1.8	3.4	-72.1%	94.3%
Urea Sales	16.0	20.2	7.5%	26.8%
DAP Production	4.2	2.6	85.0%	-37.8%
DAP Imports	5.4	2.6	195.6%	-51.3%
DAP Sales	3.6	7.0	26.5%	95.2%
MOP Imports	3.7	2.5	6.7%	-31.0%
MOP Sales	1.0	1.4	-17.3%	48.5%
SSP Production	2.6	2.4	14.3%	-6.9%

Source: Department of Fertilizers, CMIE, Office of the Economic Adviser

All Sales figures are April-May; Production and Imports are of the month of April

The **overall fertilizer production** contracted by 4.5% during April'20 y-o-y. Reason attributable to the decline in production is due to the shortage in raw material availability and labour constraints owing to the shutdown. Production of DAP and SSP fell by 37.8% and 6.9% but the production of urea on the other hand increased by 10.5%. Urea production increased as manufacturers were quick enough to resume operations once the government announced relaxations came into effect 15<sup>th</sup> April 2020 onwards.

**Overall sales of fertilizers** have increased sharply by 45.1% during the first two months of FY21. Sales of urea, DAP and MOP have increased by 26.8%, 95.2% and 48.5%. Panic buying by farmers and dealers coupled by the low prices of the commodity have led to increased sales of fertilisers. Farmers are currently stocking up fertilizers for the on-going Kharif season and are building up stocks in order to avoid any later logistical issues which might be faced due to the coronavirus pandemic. A favourable monsoon forecast ahead of the main kharif application season too has augmented the demand.

**Imports** of urea have increased sharply by 94.3% while and on the other hand imports for DAP and MOP fell sharply by 51.3% and by 31% respectively during April 2020.

## Conclusion/ Outlook for FY21

The underlying macros for the Indian fertilizer industry look promising despite the coronavirus pandemic and macroeconomic uncertainty. With surplus reservoirs levels, forecasts for a good kharif crop and plentiful rainfall this June-September monsoon season, demand for the procurement of fertilizers seems promising. Sales have increased sharply by 45.1% during the first two months of FY21 and going forward with the recent proposals under the 'Aatmanirbhar Bharat' package pertinent towards the agrarian economy which are focused on boosting the agriculture and allied sector (by strengthening its infrastructure and logistics), demand for fertilizers for the rest of FY21 seems sanguine for the industry.

- Higher MSP procurement, timely PM-KISAN disbursement, high offtake of seeds and the prioritization of agriculture and businesses involved in the food chain by the Indian government will support the demand/sales of fertilizers going forward.
- The area under cultivation has risen due to the timely arrival and progress of the monsoons.
- Decontrolled fertilizer production and usage is also to increase on the back low prices of DAP and SSP and the government's thrust on improving balanced nutrition.

**The overall fertilizer production is to grow by 3-4% by the end of FY21.** Overall fertilizer production had increased by 0.3% and 2.7% during FY19 and FY20.

- We expect production to increase in the coming months on the back of restocking activities undertaken by fertilizer manufacturers. Softening of raw material prices too will aid in spurring production.
  - o Commissioning of the Ramagundam plant by the end of H1-FY21 will also add onto the overall fertilizer production.
- Currently the liquidity situation of manufacturers seems to have improved. Fall in input costs has abetted the working capital situation of manufactures.
  - o Urea manufactures are to immensely benefit with the current low gas prices. Another positive for urea makers is the clarity the government has finally provided in March with regards to the reimbursement of additional fixed cost.
  - o DAP prices are also low which will have an impact on working capital of decontrolled fertilizer manufacturers as well.

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