

Modes of Fertilizer Subsidy

June 3, 2021

Faced with a possible revival of farmer protests – this time over fertiliser prices – the government has announced a 137% increase in the subsidy on di-ammonium phosphate (DAP). This warrants a look at the fertilizer subsidy system in India.

In news: Centre hikes subsidy by 140%, farmers to get DAP at old rates

Placing it in syllabus: Agriculture

Dimensions

- Brief History of Fertilizer Subsidy
- Urea Subsidy System
- Nutrient Based Subsidy System
- Issues related to NBS
- DBT in Fertilizer Subsidy

Content:

Brief History of Fertilizer Subsidy:

- Fertilizer Subsidy as a concept originated during the Green Revolution of the 1970s-80s.
- Subsidy scheme for fertilizers was first introduced by the Indian Government in 1977 through the **Retention Price Scheme (RPS)** for **indigenous nitrogenous fertilizer units**.
- Subsequently, it was extended to phosphatic and other complex fertilizers and Single Super Phosphate.
- In the case of P&K fertilizers, those which contain Phosphorus and Potassium compounds, a **Nutrient Based Subsidy (NBS) Policy** was implemented in 2010.
- Under this a fixed rate of subsidy, in Rs per Kg basis, on each nutrient- Nitrogen (N), Phosphate (P), Potash (K) and Sulphur (S), is provided by the government each

year taking into consideration international prices, exchange rate, and other factors.

- A third category of fertilizers, known as **City Compost** is given a fixed subsidy of ₹ 1500 per tonne notified in 2016. This scheme was to promote the use of city compost made from garbage in cities, that would provide carbon and other primary and secondary nutrients to the soil, in addition to keeping cities clean.
- Before 2018, companies were reimbursed after the material was dispatched and received by the district railhead or designated godown.
- 2018 saw the beginning of **DBT (Direct Benefit Transfer)**, which would transfer money directly to the retailer's account.
- However, the companies will be paid only after the actual sale to the farmer.

What is fertiliser subsidy?

- Farmers buy fertilisers at MRPs (maximum retail price) below their normal supply-and-demand-based market rates or what it costs to produce/import them.
- The MRP of neem-coated urea, for instance, is fixed by the government at Rs 5,922.22 per tonne, whereas its average cost-plus price payable to domestic manufacturers and importers comes to around Rs 17,000 and Rs 23,000 per tonne, respectively.
- The difference, which varies according to plant-wise production cost and import price, is footed by the Centre as subsidy.
- The MRPs of non-urea fertilisers are decontrolled or fixed by the companies. The Centre, however, pays a flat per-tonne subsidy on these nutrients to ensure they are priced at "reasonable levels".
- Decontrolled fertilisers, thus, retail way above urea, while they also attract lower subsidies.
- The subsidy goes to fertiliser companies, although its

ultimate beneficiary is the farmer who pays MRPs less than the market-determined rates.

Urea Subsidy System:

- In India, urea is the only controlled fertilizer and is sold at a statutory notified uniform sale price.
- Till 2003, the subsidy to urea was under the provisions of the Retention Price Scheme (RPS).
- Under RPS, the difference between retention price (cost of production + 12% post tax returns)
- In the year 2000, **The Expenditure Reforms Commission (ERC)** recommended the dismantling of existing RPS for urea. Hence, RPS for urea units was replaced by **New Pricing Scheme (NPS)** in the year 2003.

New Pricing Scheme for Urea:

- Concession Scheme for urea units based on the prices of feedstock used and the vintage of plants. It had various phases like NPS-I (2003-2004), NPS-II (2004-2006), and NPS-III (2006 onwards).
- Government implemented the pooling of gas for the urea from 2005 onwards.
- Under this policy the domestic gas is pooled with imported LNG gas to provide uniform natural gas to all the urea manufacturing plants for the production of urea.
- All the gas-based urea plants have been placed in three categories based on group specific energy norms (how much gas is required to a particular quantity of urea).
- Urea plants falling in the same category will be getting the same amount of subsidy per KG as fixed by the government (based on normative cost of each plant), no matter what their actual cost of production is.
- This will force plants to become more efficient as the subsidy will be the same for each plant within a group

and a plant being more efficient or having lesser cost of production will be more profitable.

Problems caused due to price control of urea:

- **Unsustainable use of urea:** Ideally the ratio of N: P: K should be 4:2:1, but at present it is 8:3:1 which is harmful for the health of the soil. In Punjab, the ratio is around 23:7:1, leading to mounting deficiencies in micronutrients such as boron, zinc, molybdenum, iron and sulphur. Overuse of urea has caused ground water pollution along with decline in soil fertility especially in Punjab and Haryana region.
- **Huge burden on government:** Urea subsidy accounts for 66% of the total fertilizer subsidy, thus there was an urgent need to rationalise it to keep fiscal deficit in control.
- **Incentive for Inefficient Production:** Urea subsidy was directly paid to the producers, so there was no incentive, to discipline the cost of production, for producers as subsidy is provided covering the cost of production.
- **Leakages:** Though the government fixes the prices for the urea, still farmers, especially in Northern India, find its price varying due to hoarding which causes supply demand mismatch. Thus farmers never find fertilizer at a price set by the government for urea at fair price shops.

Plant Nutrients:

- **Primary (Macro) Nutrients:** Nitrogen (N), Phosphorus (P), and Potassium (K), Calcium (Ca), Magnesium (Mg), Sulphur (S)
- **Secondary (Micro) Nutrients:** Boron (B), Chlorine (Cl), Copper (Cu), Iron (Fe), Zinc (Zn), etc

Types / Classification:

They are classified based on the essential component in the fertilizer.

- **Nitrogenous:** Essential Component is Nitrogen (N).
Example: Urea, Ammonium Nitrate, Ammonium Sulphate
- **Potassic:** Potassium Nitrate, Chile Saltpetre

Phosphatic: Super Phosphate, Triple Phosphate

Nutrient Based Subsidy System

- The **Nutrient Based Subsidy (NBS) Programme** for Fertilizers was initiated in the year 2010.
- A fixed rate of subsidy, in Rs per Kg basis, on each nutrient- Nitrogen (N), Phosphate (P), Potash (K) and Sulphur (S), is provided by the government each year taking into consideration international prices, exchange rate, and other factors.
- Secondary and micronutrients are also eligible for subsidy. There is a separate additional subsidy for micronutrients namely Boron and Zinc.
- The scheme is administered by the Department of Fertilizers under the Ministry of Chemicals & Fertilizers.
- In a recent development, the Cabinet Committee on Economic Affairs has approved the proposal of the Department of Fertilizers for the continuation of the NBS till 2019-20.
- The continuation of the Nutrient Based Subsidy Scheme will ensure that an adequate quantity of P&K is made available to the farmers at a statutory controlled price.
- The NBS scheme allows the manufacturers, marketers, and importers to fix the MRP of the Phosphatic and Potassic (P&K) fertilizers at reasonable levels.
- The domestic and international cost of P&K fertilisers is considered along with the country's inventory levels

and the currency exchange rate in order to decide the MRP.

Union Budget 2021 and Nutrient Based Subsidy Scheme

There have been no reforms in the Nutrient Based Subsidy Scheme in Union Budget 2021.

Though Nirmala Sitharaman made an announcement to release an additional Rs 65,000 crore towards fertilisers subsidy over and above Rs 71,000 crore allocated in the Budget for Fiscal Year (FY) 21 and for FY22, she has allocated close to Rs 80,000 crore.

Issues related to NBS:

NBS has so far failed to fulfil its promises. The issues plaguing NBS are as follows:

Urea Under-priced:

- The basic MRP of urea hasn't been revised at all in its nearly six-and-a-half years. So, less cost leads to more consumption.
- Since April 2010, the maximum retail price (MRP) of urea has been raised by hardly 11 per cent. Between 2009-10 and 2019-20, urea consumption increased.

Failure to bring urea under NBS:

- India, while self-sufficient in urea, imports P and K. Under the NBS, the government decontrolled prices of P and K, but not urea.
- This would have pushed up its MRP thereby encouraging farmers for balanced use of fertilisers.

Failed policy approach:

- Even, the measures taken to prevent over use of Urea merely address the issue of subsidised fertilisers,

especially urea, getting diverted to bulk buyers/traders or even non-agricultural users.

- It does not address overuse by farmers themselves.

Lacks Focus on MicroNutrients:

- Focus of NBS is more on macro nutrients. However, the need for soil micronutrients remains neglected.
- The fertiliser ministry simply does not collect data on micronutrient consumption.
- However, data collated by industry body **Fertiliser Association of India (FAI)** shows a puzzling trend.
- The consumption of zinc, ferrous and copper sulphates showed a modest rise over the last seven years, but that did not hold good for nutrients such as manganese sulphate, borax acid and molybdenum.

Present Administrative Setup:

- The subsidy is passed onto companies manufacturing fertilizers so that farmers get the fertilizers at subsidized MRP.
- The quantum of subsidy varies with type of fertilizer like Urea, DAP etc. The subsidy is given only to those fertilizers which meet the standards laid down by the government.
- The appointment of dealers and retailers who supply fertilizers to farmers is done by companies and licensing of these dealers & retailers is done by the state governments.
- Their availability & supply within the state is monitored by the state governments.
- The state governments are required to prepare a monthly estimate of the amount of fertilizers required and submit it to the Department of Agriculture which in turns coordinates with the Department of Fertilizers.
- The Department of Fertilizers prepares the monthly supply plan after consultations with manufacturers and

importers to meet the demands projected by the agriculture department.

DBT in Fertilizer Subsidy:

- Under the Direct Benefit transfer (DBT) system in fertilizer subsidies, the farmers/beneficiaries will continue to receive Urea at statutory subsidised prices and P&K fertilizers at subsidized prices in the market.
- The fertilizer companies which used to receive subsidy on receipt of fertilizers at the district, will now get subsidy after the fertilizers are sold to farmers/beneficiaries by the retailers through Point of Sale (PoS) machines through biometric authentication.
- Fertiliser companies receive subsidies after the actual sales of fertilisers to farmers.
- 2.3 lakh retailers have point-of-sale (PoS) machines and the PoS machines are linked to the Department of Fertilisers' e-Urvarak DBT portal.
- Anyone buying fertilisers have to provide their Aadhaar unique identity or Kisan Credit Card number.
- The present system of delivering subsidies is through Direct Benefit Transfer to the manufacturer.
- The system is such that a farmer identifies themselves with Aadhar biometric at the time of purchasing the fertilizer at subsidized rate. The subsidy amount is then paid to the company by the government.

Way forward:

- Urea should be brought under Nutrient Based Subsidy (NBS) and its MRP should be hiked. In 2012, a Sharad Pawar Committee recommended to include urea under NBS
- The price of other components phosphorus, potash and sulphur should be reduced.
- A flat per-acre cash subsidy can be implemented that could be used to purchase any fertiliser including

value-added and customised products.

- A cap on the total number of subsidised fertiliser bags that any person can buy during an entire kharif or rabi cropping season should be implemented.
- The subsidy under the NBS should be extended to organic manures and all encompassing, instead of restricting it to a few micronutrients.

A **parliamentary standing committee** submitted its report on the **'study of the system of fertilizer subsidy' in March 2020**. As a measure to reduce the overuse by farmers and to push manufacturers to take up more efficient production methods, it advocated for DBT of fertilizer subsidy to the farmer instead of the manufacturer.

Mould your thought: What are the issues plaguing fertilizer subsidies in India? Identify the steps taken by the government so far and suggest measures to address the problems.

Approach to the answer:

- Introduction
- Discuss the history of fertilizer subsidy in India
- Discuss about Urea Policy and NBS
- Discuss the problems created by the Urea policy and the problems with NBS
- Suggest the way forward
- Conclusion