



## Rise in Consumption of Urea and Di-Ammonium Phosphate (DAP) | Haryana | 01 Mar 2025

### Why in News?

[The Ministry of Agriculture and Farmers Welfare](#) has expressed concern over the sharp increase in [urea](#) and [di-ammonium phosphate \(DAP\)](#) consumption during the ongoing [rabi season \(2024-25\)](#) in multiple states, including Haryana, Gujarat, Bihar, Jharkhand, Chhattisgarh, Himachal Pradesh, Karnataka, and J&K.

### Key Points

- **Rising Urea and DAP Consumption:**
  - Urea and DAP are essential for agricultural productivity, and India relies on imports to meet domestic demand.
  - The Agriculture Secretary in a letter to Haryana's Chief Secretary highlighted excessive fertiliser consumption in some districts.
  - He noted that usage had surpassed both the assessed monthly requirement and the previous year's figures, indicating an imbalance.
- **Urea Consumption Trends:**
  - Haryana's urea usage **rose by 18% compared to the past three-year average**, reaching 11,07,205 metric tonnes (MT) from 9,40,549 MT.
  - Highest increases were recorded in:
    - Charkhi Dadri - 107%
    - Yamunanagar - 32%
    - Sonapat - 30%
  - **Other states** also recorded significant increases in urea consumption:
    - Jharkhand - 35%
    - Chhattisgarh - 37%
    - J&K - 24%
    - Karnataka - 20%
    - Bihar - 17%
    - Gujarat - 2%
- **DAP Consumption Trends:**
  - Haryana's DAP **usage increased by 18%**, reaching 3,25,416 MT from the previous three-year average of 2,75,934 MT.
  - Districts with the highest surge:
    - Charkhi Dadri - 184%
    - Mahendragarh - 65%
    - Yamunanagar - 55%
    - Ambala - 48%
    - Panchkula - 39%
    - Rewari - 34%
    - Jhajjar - 30%
  - Other states also saw notable increases in DAP usage:
    - Chhattisgarh - 30%
    - Gujarat - 25%
    - Bihar - 17%
- **Concerns Over Fertiliser Diversion:**

- The Ministry of Chemicals and Fertilisers flagged potential diversions in January.
- Haryana's Director of Agriculture, Rajnarayan Kaushik, acknowledged that urea might be diverted to industries.
- **Factors Driving Increased Usage:**
  - **Paddy Stubble Management:** Farmers now use 25-45 kg of urea per acre to manage paddy stubble.
  - **Nitrogen (N), phosphorus (P), and potassium (K) Fertiliser Usage:**
    - Consumption rose from 26,000 MT last year to 66,000 MT this season.
    - Since NPK has lower nitrogen content than DAP, farmers compensate by using additional urea.
  - **High-Nitrogen Wheat Varieties:**
    - **Wheat varieties** like WH 1270, DBW 187, 303, and 327 require 1.5 times more nitrogen than older varieties.
    - Farmers, expecting higher yields, tend to use more urea.
    - These varieties now cover an estimated 2.50 lakh acres in Haryana.
  - **Inter-State Fertiliser Movement:**
    - Reports **indicate fertilisers** are being **transported to Punjab and Uttar Pradesh from Haryana.**
    - Some fertilisers are also being diverted to the plywood industry, claimed Rakesh Bains of **the Bhartiya Kisan Union (Charuni group).**

## DAP (Di-Ammonium Phosphate)

- DAP is the second most commonly used fertilizer in India after urea.
- DAP is a preferred fertilizer in India because it contains both **Nitrogen and Phosphorus** which are primary macro-nutrients and **part of 18 essential plant nutrients.**
- Fertilizer grade DAP **contains 18% Nitrogen and 46% Phosphorus.** It is manufactured by **reacting Ammonia with Phosphoric acid** under controlled conditions in fertilizer plants.

## Urea

- Urea is a **white crystalline compound** commonly used as a **synthetic fertilizers** in agriculture.
- When applied to the soil or crops, **urea is broken down by enzymes into ammonia and carbon dioxide.**
  - The **ammonia then gets converted into ammonium ions,** which can be **taken up by plant roots and used for growth and development.**