

**NEXT IAS**

**DAILY EDITORIAL  
ANALYSIS**

*TOPIC*

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***RETHINKING INDIA'S FERTILISER  
POLICY & NEED FOR REFORM***

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## RETHINKING INDIA'S FERTILISER POLICY & NEED FOR REFORM

### Context

- Recently, Indian states imposed restrictions on the sale of several **non-subsidised speciality fertilisers**, raising **questions about policy coherence** in India's fertiliser sector, as Prime Minister of India has repeatedly emphasised the need to reduce chemical fertiliser consumption to promote sustainable agriculture and reduce import dependence.

### India's Fertiliser Challenge

- It lies in balancing three critical objectives simultaneously i.e. **ensuring food security, maintaining soil health**, and **reducing import dependence and subsidy burden**.
- Indian agriculture has become heavily dependent on chemical fertilisers, especially **urea** and **Di-Ammonium Phosphate (DAP)** since the Green Revolution.

### Major Dimensions of India's Fertiliser Challenge

- Excessive Dependence on Chemical Fertilisers:** India consumes **over 60 million tonnes of fertilisers annually**, and is among the world's largest consumers of fertilisers.
  - The **ideal Nitrogen-Phosphorus-Potassium (NPK) ratio** should be **4:2:1**, whereas in **many Indian states it exceeds 8:3:1** due to overuse of nitrogenous fertilisers.
- Economic Implications:** India remains heavily dependent on imports for fertilisers and fertiliser raw materials such as phosphate rock, potash, natural gas, and ammonia.
  - In 2025–26, fertiliser imports reportedly reached nearly **\$27.2 billion**.
  - Geopolitical tensions in West Asia and disruptions around the Strait of Hormuz could further escalate costs.
  - It creates **three major vulnerabilities** i.e. pressure on foreign exchange reserves, fiscal burden due to subsidies, and exposure to global supply shocks.
- Environmental Implications:** A large portion of fertilisers applied in fields is not absorbed by crops.
  - It leads to water pollution, soil degradation, greenhouse gas emissions, and decline in biodiversity.
  - Nitrogen leakage and groundwater contamination have become major ecological concerns.
- Regional Imbalance in Usage:** States like Punjab, Haryana, and Uttar Pradesh consume disproportionately high amounts of fertilisers due to intensive farming practices.
  - It has worsened soil fatigue, water depletion, and ecological stress.

### Evolution of India's Fertiliser Policy

- Green Revolution Phase:** During the 1960s and 1970s, the government promoted fertilizer use to increase crop productivity.
  - Objectives:** Achieve food self-sufficiency; support intensive agriculture; and ensure affordable fertilisers for farmers. It led to the introduction of fertiliser subsidies, controlled prices, and public sector participation.
- Retention Price Scheme (RPS):** The government compensated manufacturers for the difference between production cost and selling price.
  - Outcome:** Increased fertilizer availability, and high subsidy burden on government finances.
- Nutrient-Based Subsidy (NBS) Scheme, 2010:** The government shifted phosphatic and potassic fertilisers to a nutrient-based subsidy system.
  - Aim:** Promote balanced fertilizer use, and encourage competition and efficiency. However, urea remained outside NBS and continued under price control.

### Key Features of India's Current Fertiliser Policy

- **Heavy Subsidisation:** India provides one of the world's largest fertiliser subsidies.
  - ♦ **Major Subsidised Fertilisers:** Urea, Di-Ammonium Phosphate (DAP), Muriate of Potash (MOP).
  - ♦ The subsidy ensures affordable prices for farmers but distorts nutrient consumption patterns.
- **Urea Price Control:** Urea prices remain highly regulated and significantly cheaper than other fertilisers.
  - ♦ **Consequence:** Farmers disproportionately use urea, leading to nutrient imbalance.
- **Direct Benefit Transfer (DBT) System:** Introduced to improve transparency and reduce leakages.
  - ♦ **Features:** Subsidy transferred to fertiliser companies after sale; and Aadhaar-linked verification through PoS machines.

### Contradictory Policies of States

- **Ban on Speciality Fertilisers:** States such as Uttar Pradesh, Madhya Pradesh and Maharashtra have reportedly restricted the sale of **non-subsidised fertiliser products**, including nano fertilisers, bio-fertilisers, water-soluble fertilisers, liquid fertilisers, micronutrients, and bio-stimulants.
  - ♦ These products are generally **used for high-value horticultural crops** and are scientifically approved under the Fertiliser Control Order (FCO) after testing by ICAR.
- **Concerns:**
  - ♦ **Policy Inconsistency:** States are discouraging alternatives that improve nutrient efficiency, while the Union government advocates reduced dependence on conventional fertilisers.
  - ♦ **Discouragement to Innovation:** Companies invest heavily in research and development of advanced nutrient products. Restrictive policies reduce incentives for innovation and technological adoption.
  - ♦ **Impact on Ease of Doing Business:** The bans undermine regulatory certainty and negatively affect private sector participation in agricultural modernisation.

### Government Initiatives Toward Reform

- **PM-PRANAM Scheme:** The PM Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth incentivises states to reduce chemical fertiliser use.
  - ♦ **Objective:** Promote sustainable and balanced nutrient management.
- **Nano Urea Promotion:** IFFCO's nano urea initiative seeks to improve nutrient-use efficiency.
  - ♦ **Benefits:** Reduced fertilizer consumption, lower transportation cost, and improved nutrient absorption.
- **Neem-Coated Urea:** Introduced to reduce diversion and improve nitrogen efficiency.
  - ♦ **Impact:** Slower nitrogen release, and reduced wastage.
- **Soil Health Card Scheme:** Provides farmers with scientific recommendations for nutrient application.

### PM-Kisan 2.0: A Possible Alternative

- **Direct Income Support Instead of Product Subsidies:** India should gradually shift from fertiliser subsidies to direct income support for farmers through an expanded PM-Kisan framework.
  - ♦ Under such a model, fertiliser prices would become market-determined, farmers would receive assured income support, nutrient use decisions would become more rational, and market distortions would reduce.
- **Potential Benefits:**
  - ♦ **Efficient Fertiliser Use:** Farmers would adopt fertilisers based on crop requirements rather than subsidy distortions.
  - ♦ **Fiscal Prudence:** Leakages and excessive subsidy burdens could decline.
  - ♦ **Environmental Sustainability:** Balanced nutrient application would improve soil and water health.
  - ♦ **Farmer Empowerment:** Income support provides flexibility and choice to cultivators.

### Reforming India's Fertiliser Subsidy Regime

- India's fertiliser subsidy system remains product-specific and price-distorting. Subsidies are concentrated mainly on urea, making it artificially cheap compared to balanced nutrients.
  - ♦ It has led to overconsumption of subsidised fertilisers, soil nutrient imbalance, diversion and misuse, and rising subsidy burden on the exchequer.
- In recent years, fertiliser subsidy expenditure has crossed 2 lakh crore during periods of global price spikes.

### Way Forward: For Fertiliser Policy Reform

- **Shift from Product Subsidy to Income Support:** There is increasing support transitioning toward direct farmer income support models such as an expanded PM-Kisan framework.
  - ♦ **Advantages:** Rational fertiliser use, reduced subsidy distortions, and greater farmer choice.
- **Promote Balanced Nutrient Use:** Policy should encourage bio-fertilisers, nano fertilisers, organic manures, and micronutrients.
  - ♦ Balanced fertilisation improves both productivity and sustainability.
- **Encourage Precision Agriculture:** Technologies such as drip irrigation, fertigation, and foliar nutrient application can significantly reduce fertilizer wastage.
- **Reduce Import Dependence:** India needs to diversify import sources, strengthen domestic fertiliser production, and invest in green ammonia and alternative technologies.
- **Strengthen Cooperative Federalism:** State governments should align with national sustainability goals rather than restricting scientifically approved speciality fertilisers.

Source: IE

#### Daily Mains Practice Question

- [Q] India's fertiliser subsidy regime has led to ecological imbalance, fiscal stress, and inefficient nutrient usage. Comment and examine the need for reforms in India's fertiliser policy.