

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

RAJYA SABHA

UNSTARRED QUESTION NO. 1197 TO BE ANSWERED ON: 10.02.2026

Promotion of balanced fertilizer use and soil health

1197 Shri S Niranjan Reddy:

Will the Minister of **CHEMICALS AND FERTILIZERS** be pleased to state:

- (a) whether Government is promoting balanced nutrient use including the use of organic and bio-fertilizers as part of the PM-PRANAM and related schemes to reduce over-dependence on chemical fertilizers;
- (b) the measures taken to encourage farmers to adopt neem-coated urea and other efficient nutrient products to improve efficiency of nitrogen use;
- (c) whether Government is using blockchain technology to provide fertilizer subsidy management; and
- (d) whether these initiatives have shown measurable improvement in soil health and fertilizer use patterns?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS
(SMT. ANUPRIYA PATEL)

(a) The Government is promoting balanced nutrient use, including the use of organic and biofertilisers, through various schemes and programmes such as the Soil Health Card (SHC) scheme, Paramparagat Krishi Vikas Yojana (PKVY), Mission Organic Value Chain Development for North Eastern Region (MOVCDNER), Bharatiya Prakritik Krishi Paddhati (BPKP), and the National Mission on Natural Farming (NMNF), with the objective of reducing over-dependence on chemical fertilisers.

Additionally, the Cabinet Committee on Economic Affairs (CCEA), on June 28, 2023, approved the "PM Programme for Restoration, Awareness Generation, Nourishment, and Amelioration of Mother-Earth (PM-PRANAM). The initiative aims to support the mass movement initiated by States and Union Territories (UTs) to preserve the health of Mother Earth through the promotion of sustainable and balanced fertilizer use, adoption of alternative fertilizers, promotion of organic farming, and implementation of resource conservation technologies. All States/UTs are covered under the PM-PRANAM scheme.

Furthermore, Government promotes judicious use of fertilizer through Soil Health & Fertility scheme. The scheme is being implemented since 2014-15 to provide Soil Health Cards (SHCs) for all farm holdings, to promote balanced and integrated nutrient management for improving productivity and soil fertility.

In addition to this, the Indian council of Agricultural Research (ICAR) also suggests soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (manure, biofertilizers etc.) of plant nutrients to improve soil health and fertility. In addition, split application and placement of fertilizers, use of slow releasing N-fertilizers including neem-coated urea, growing leguminous crops and use of Resource Conservation Technologies (RCTs) are also advocated.

(b) To promote the adoption of neem-coated urea and other efficient nutrient products for enhancing nitrogen use efficiency, the Government has undertaken the following measures:

- Promotion of soil test-based balanced and integrated nutrient management by ICAR, including split application, proper placement of fertilizers, use of slow-release nitrogen fertilizers such as neem-coated urea, Sulphur coated urea, inclusion of legumes, and adoption of resource conservation technologies.
- Awareness generation through regular farmer meetings, training programmes and demonstrations conducted by fertilizer companies in collaboration with Krishi Vigyan Kendras (KVKs) and Agricultural Universities.
- Dissemination of information through farmer training centres and agricultural publications to highlight the agronomic benefits of coated urea products.
- Capacity building of farmers and other stakeholders through trainings and demonstrations to improve soil health and fertilizer use efficiency.

(c) No. At present, the Government is not using blockchain technology for fertilizer subsidy management.

(d) The initiatives have shown measurable improvements in both soil health and fertilizer use patterns. A study conducted by the National Productivity Council (NPC), New Delhi, titled "Soil Testing Infrastructure for Faster Delivery of SHC in India" (2017), covering 76 districts across 19 States, 170 soil testing laboratories, and 1,700 farmers, found that fertilizer and micronutrient application as per Soil Health Card (SHC) recommendations led to an 8-10% reduction in chemical fertilizer use and an overall 5-6% increase in crop yields.

Further, an impact study by the National Institute of Agricultural Extension Management (MANAGE), Hyderabad reported that about 62.8% of farmers follow SHC recommendations, resulting in a 4-10% reduction in fertilizer costs per acre and moderate increases in crop yields. The study also observed a 9% reduction in urea use and a 7% reduction in DAP/SSP in paddy, along with a 20% increase in potassium use, reflecting more balanced fertilizer application and improved soil nutrient management.
