GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

LOK SABHA

UNSTARRED QUESTION NO. **2290** TO BE ANSWERED ON: **12.12.2025**

Excessive Use of Chemicals

†2290. Shri Narayandas Ahirwar:

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

(a) whether it is true that excessive use of chemical fertilizers is adversely affecting soil health,environment and water resources in the country;

(b) if so, the details thereof along with the steps taken by the Government to maintain the natural fertility of soil, address nutrient imbalances and reduce pollution and greenhouse gas emissions;

(c) whether the Government is considering to implement any new policy to reduce dependence on fertilizer imports, prevent misuse of the subsidy system and ensure timely and adequate availability of balanced fertilizers to farmers; and

(d) if so, the details thereof?

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

(a) & (b) The Indian Council of Agricultural Research (ICAR) has informed that their long-term experiments and related studies have shown that imbalanced and excessive use of chemical fertilizers, particularly without adequate organic matter, can deteriorate soil health (decline in soil organic carbon, micronutrient deficiencies, soil acidity/sodicity), contribute to water pollution through nutrient run-off and leaching (nitrate contamination, eutrophication), and increase nitrous oxide (N_2O) emissions, a potent greenhouse gas.

To address this, the Government, with ICAR's technical support, is promoting integrated nutrient management (balanced NPK use with farmyard manure, compost, green manures and biofertilizers), soil test–based fertilizer application through Soil Health Card schemes, site-specific nutrient management and neem-coated urea to improve nitrogen use efficiency, promotion of organic/natural farming and conservation agriculture practices, use of customized/slow-release fertilizers and 4R nutrient stewardship (right source, right dose, right time, right method), and capacity building/awareness programs to reduce nutrient losses, maintain soil fertility, correct nutrient imbalances, and lower pollution and greenhouse gas emissions.

Soil Health and Fertility Scheme is being implemented since 2014-15 to provide Soil Health Cards (SHCs) for all farm holdings and to promote balanced and integrated nutrient management for improving productivity and soil fertility by adopting the following:-

(i) Soil samples are processed as per standard procedures and analyzed for parameters such as pH, Electrical Conductivity, Organic Carbon, available Nitrogen, Phosphorus, Potassium, Sulphur, and micronutrients (Zinc, Copper, Iron, Manganese & Boron).

(ii) The diagnostic soil health assessment of farmer fields is taken up periodically so as to issue SHCs at least once in 3 years.

(iii) Since 2014-15, 25.61 crore Soil Health Cards have been generated/ distributed as on date across the country.

(iv) Total 8302 Soil Testing Labs (1082 Static Soil Testing Labs, 163 Mobile Soil Testing Labs, 6376 Mini Soil Testing Labs and 681 Village Level Soil Testing Labs) have been established across the country.

(v) In addition to state soil labs above, 1020 school mini soil labs are also established in the country under school soil health programme.

(vi) Under the scheme, Rs. 1970 Crore fund has been released so far since inception.

(vii) 93781 farmer’s trainings, 6.80 lakh demonstrations, 7425 farmer’s melas/ campaigns on soil health card recommendations have been organized across the country.

(c) and (d).

(i) **In order to reduce dependence on Fertilizer Imports, following policies are under implementation:-**

A. With regard to Urea Fertilizers, Government had announced New Investment Policy (NIP) – 2012 on 2nd January, 2013 and its amendment on 7th October, 2014 to facilitate fresh investment in the Urea sector and to make India self-sufficient in the Urea sector. Total 6 new Urea units have been set up under NIP-2012 which includes 4 Urea units set up through Joint Venture Companies (JVC) of nominated PSUs and 2 Urea units set up by the private companies. The units set up through JVC are Ramagundam Urea unit of Ramagundam Fertilizers and Chemicals Ltd (RFCL) in Telangana and 3 Urea units namely Gorakhpur, Sindri and Barauni of Hindustan Urvarak & Rasayan Limited (HURL) in Uttar Pradesh, Jharkhand and Bihar, respectively. The units set up by private companies are Panagarh Urea unit of Matix Fertilizers and Chemicals Ltd. (Matix) in West Bengal; and Gadepan-III Urea unit of Chambal Fertilizers and Chemicals Ltd. (CFCL) in Rajasthan. Each of these units has installed capacity of 12.7 Lakh Metric Tonne per annum (LMTPA). These units are highly energy efficient as they are based on latest technology. Therefore, these units have together added Urea production capacity of 76.2 LMTPA, thereby total indigenous Urea production capacity (Reassessed Capacity, RAC) has increased from 207.54 LMTPA during 2014-15 to 283.74 LMTPA during 2023-24. Further, an exclusive policy for the revival of Talcher unit of FCIL through JVC of nominated PSUs namely Talcher Fertilizers Limited (TFL) by setting up a new Greenfield Urea plant of 12.7 LMTPA at coal gasification route has also been approved. Recently, the Union Cabinet has also approved the proposal for setting up of a new Brownfield Ammonia-Urea Complex of 12.7 Lakh Metric Tonnes (LMT) annual capacity of Urea production within the existing premises of Brahmaputra Valley Fertilizer Corporation Limited (BVFCL), Namrup, Assam. In addition, the Government also notified the New Urea Policy (NUP) – 2015 on 25th May, 2015 for the existing 25 gas-based Urea units with one of the objectives of maximizing indigenous Urea production beyond RAC. The NUP-2015 has led to additional production of Urea by 20-25 LMT as compared to the production during 2014-15 annually.Above steps together have facilitated increase of Urea production from level of 225 LMT per annum during 2014-15 to 306.67 LMT of Urea during 2024-25.

B. With regard to P&K Fertilizers, Government has implemented Nutrient Based Subsidy (NBS) Scheme w.e.f. 01.04.2010 for Phosphatic and Potassic (P&K) Fertilizers. Under NBS Scheme, P&K fertilizers are covered under Open General License free (OGL) and companies are to import/manufacture these fertilizers as per their business dynamics. To increase domestic fertilizer production and make country self reliant the following measures have been taken by the Government:

- Based on the requests, the new manufacturing units or increase in manufacturing capacity of existing units have been recognized / taken on record under the NBS Scheme.
- The number of P&K fertilizers covered under NBS policy has increased from 22 grades in 2021 to 28 grades.
- Freight Subsidy on SSP, which is an indigenously manufactured fertilizer, has been approved since Kharif, 2022 to promote SSP usage for providing Phosphatic or 'P' nutrient to the soil.

(ii) **In order to prevent misuse of the subsidy system, the following measures are being taken :-**

Under the implementation of Direct Benefit Transfer (DBT) in Fertilizers, the subsidy is paid to the Fertilizer Company on weekly basis through DBT Bills only after the Aadhaar authentication based sale of fertilizers to buyer through Point of Sale (PoS) machine installed at retailer level. The movement of subsidised fertilizers from port/plant to PoS machine is being monitored throughout the country by online web based monitoring system called Integrated Fertilizer Management System (iFMS). iFMS launched in 2016 covers all functionalities in the fertilizer supply chain and maintain the fertilizers movement and sale data accurately in a secured manner.

(iii) Following steps are taken by the Government every season for ensuring timely and adequate availability of fertilizers in the country:

a. Before the commencement of each cropping season, Department of Agriculture and Farmers Welfare (DA&FW), in consultation with all the State Governments, assesses the State-wise & month-wise requirement of fertilizers.
b. On the basis of requirement projected by DA&FW, D/o Fertilizers allocates adequate quantities of fertilizers to States by issuing monthly supply plan and continuously monitors the availability.
c. The movement of all major subsidized fertilizers is monitored throughout the country by an on-line web-based monitoring system called integrated Fertilizer Monitoring System (iFMS).
d. The State Governments are regularly advised to coordinate with manufacturers and importers for streamlining the supplies through timely placement of indents.
e. Regular coordination meetings are held with Ministry of Railways for giving sufficient rakes with priority to fertilizers for timely evacuation of rakes for States.
f. The distribution of fertilizes within the State at district level is done by the concerned State government.

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