

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

LOK SABHA

UNSTARRED QUESTION NO. 4748 TO BE ANSWERED ON: 28.03.2025

Effect of Usage of Chemical Fertilizers

4748: SMT. MANJU SHARMA:

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

- the quantity of chemical fertilizers made available in Rajasthan during the last three years;
- whether the Government has undertaken any research or collected any data/information to find out the damage caused to agricultural crop/land due to the increasing use of chemical fertilizers in the country;
- if so, the details thereof;
- whether the Government has taken any steps to minimize the use of chemical fertilizers to protect our environment; and
- if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF CHEMICALS & FERTILIZERS

(SMT. ANUPRIYA PATEL)

(a): The availability of fertilizers in the State of Rajasthan during the last three financial year is indicated in the table below:-

<Figures in LMT>

FINANCIAL YEAR 2023-24			
PRODUCT	REQUIREMENT	AVAILABILITY	SALES
UREA	24.28	29.23	25.39
DAP	8.95	9.80	9.37
MOP	0.23	0.20	0.15
NPKS	1.11	1.40	1.08

<Figures in LMT>

FINANCIAL YEAR 2022-23			
PRODUCT	REQUIREMENT	AVAILABILITY	SALES
UREA	21.50	27.91	25.17
DAP	7.40	9.70	8.47
MOP	0.30	0.18	0.14
NPKS	0.95	0.85	0.72

<Figures in LMT>

FINANCIAL YEAR 2021-22			
PRODUCT	REQUIREMENT	AVAILABILITY	SALES
UREA	21.00	25.43	22.59
DAP	7.70	6.59	6.10
MOP	0.30	0.31	0.24
NPKS	0.63	1.23	1.20

Note: Primary Indicator of comfortable availability: Availability > Requirement
Secondary Indicator of comfortable availability: Availability > Sales

(b) & (c): Yes. Investigations carried out under All India Coordinated Research Project on 'Long Term Fertilizer Experiments' by ICAR over five decades at fixed sites have indicated that continuous use of nitrogenous fertilizer alone had deleterious effects on soil health and crop productivity showing deficiencies of other major and micro nutrients. Even with recommended doses of NPK and more, deficiency of micro and secondary nutrients has become a yield limiting factor over the years. There is also a possibility of nitrate contamination in groundwater above the permissible limit of 10 mg NO₃-N/L due to excessive/over-use of nitrogenous fertilizers, particularly in light textured soils that has consequences on human/animal health if used for drinking purposes.

The ICAR suggests soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (manure, biofertilizers etc.) of plant nutrients with 4R approach i.e., right quantity, right time, right mode and right type of fertilizer to reduce the consumption of chemical fertilizers. In addition, growing leguminous crops and use of Resource Conservation Technologies (RCTs) are also advocated. The ICAR imparts training to educate farmers on all these aspects as and when required.

(d) & (e): The Government of India is advocating the concept of balanced and judicious use of fertilizers on Soil Health Card based recommendation. Under National Project on Soil Health & Fertility Scheme, the Soil Health Cards (SHCs) are used to improve soil health and to ensure judicious use of fertilizer including secondary and micro nutrients in conjunction with organic manures & bio-fertilizers. SHCs provide information on nutrient status of their soil and recommendation on appropriate dosage of nutrients to be applied for improving soil health and its fertility.

Government has been promoting organic farming in the country through Paramparagat Krishi Vikas Yojana (PKVY) in all the States/UTs other-than North Eastern States, and Mission Organic Value Chain Development for North Eastern Region (MOVCDNER) exclusively for North Eastern region.

Under PKVY, assistance of Rs. 31,500 per ha for a period of three years is provided for promotion of organic farming to cover different components like training & capacity building, data management, PGS (Participatory Guarantee System) Certification, value addition, marketing and publicity. Out of this, the assistance of Rs. 15,000 per ha for a period of three years is provided to farmers through DBT for on-farm /off –farm organic inputs.

Under MOVCDNER scheme, assistance of Rs. 46,500/ha for 3 years is provided for creation of Farmer Producer Organization, support to farmers for organic inputs, quality seeds/ planting material and training, hand holding and certification. Out of this, assistance of Rs. 32500/ ha for 3 years is provided to farmers (Rs. 15,000 as DBT to the farmers for off -farm /on –farm organic inputs and Rs. 17,500 for the planting material).

Further, The scheme on Natural Farming, i.e., National Mission on Natural Farming (NMNF), as approved by the Union Cabinet on 25th November 2024 focuses on the adoption of natural farming through package of practices such as use on-farm produced natural inputs such as Beejamrit, Jeevamrit, Dashparni, Neemastra, etc., multi-cropping systems, biomass mulching, etc. thereby reducing the dependence from externally purchased chemical inputs and reduce the input cost for cultivation. For easy availability of natural farming inputs for the farmers, 10,000 need-based Bio-input Resource Centres are envisaged to be set up under the Mission.
