

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS & FERTILIZERS
DEPARTMENT OF FERTILIZERS

LOK SABHA

UN STARRED QUESTION NO. 67 TO BE ANSWERED ON 02.02.2024

Excess use of Chemical Fertilizers

67. SHRI ASHOK MAHADEO RAONETE:

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

- (a) whether the Government has conducted any research to ascertain the fertility of land which is declining due to excess use of chemical fertilizers in the country;
- (b) if so, the details and outcome of the said research report thereof; and
- (c) the steps taken/proposed to be taken by the Government as per the said report?;

ANSWER

MINISTER OF STATE FOR CHEMICALS & FERTILIZERS

(SHRI BHAGWANTH KHUBA)

(a) to (c): The Indian Council of Agricultural Research (ICAR) has conducted long-term fertilizer experiment and soil test crop response under All India Coordinated Research Programme implemented by ICAR-IISS, Bhopal. The results indicated that imbalanced application of fertilizer nutrients resulted in reduced crop yield and low soil fertility levels. ICAR has undertaken surveying of the entire country (1:250,000) and published the soil resource map.

The long-term experiments conducted since 1973, have indicated no adverse effect of recommended dose of fertilizers on soil health. It has been found that the status of available Sulphur (S) and micronutrients in cultivated soils changed over the period. Inadequate and imbalanced application of plant nutrients through fertilizers/manures resulted in decline in availability of Sulphur (S) and micronutrients in some soils. Excessive use of fertilizers on soils where soil test does not recommend otherwise has been observed to cause significant monetary loss.

The Indian Council of Agricultural Research (ICAR) is recommending soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (manure, bio-fertilizers, green manuring, in-situ crop residue recycling etc.) of plant nutrients with 4R approach i.e., right quantity, right time, right mode and right type of fertilizer for judicious use of chemical fertilizers and to reduce use of chemical fertilizers. The ICAR also imparts trainings to different stakeholders, organizes front-line demonstrations, awareness programs etc. to educate farmers on all these aspects.

Moreover, the Cabinet Committee on Economic Affairs (CCEA) in its meeting held on 28th June, 2023 has approved the “PM Programme for Restoration, Awareness Generation, Nourishment, and Amelioration of Mother-Earth (PM-PRANAM)”. The initiative aims to complement the efforts initiated by States/UTs to save the health of Mother Earth by promoting sustainable and balanced use of fertilizers, adopting alternate fertilizers like nano/bio/organic fertilizers etc, promoting organic farming and implementing resource conservation technologies. Further, CCEA in its meeting held on 28th June, 2023 has approved the Market Development Assistance (MDA) @ Rs. 1500/MT to promote organic fertilizers.

Government of India is promoting Integrated Nutrient Management (INM) which includes soil test based balanced and integrated use of chemical fertilizers in conjunction with organic sources of nutrients like Farm Yard Manure (FYM), city compost, vermi-compost and bio-fertilizers that leads to saving in use of chemical fertilizers. INM is being promoted through implementation of Soil Health Card (SHC) scheme since 2015. Soil health card provides nutrient status of the soil along with prescription about balanced and integrated use of inorganic and organic fertilizers to maintain good soil health that results in increase in production.

Demonstrations about balanced use of fertilizers based on soil health card recommendations and training to the farmers on proper and integrated use of fertilizers are integral part of the scheme of Soil Health & Fertility. Financial assistance is provided to State Governments for training of farmers, demonstrations on farmer fields and organizing farmer melas.

For reducing the use of chemical fertilizers in agriculture, Government of India (GoI) is also promoting the balanced and judicious use of fertilizers based on soil test based recommendations in conjunction with organic fertilizer and bio-fertilizers under Soil Health & Fertility Scheme. Further, under organic schemes of Paramparagat Krishi Vikas Yojana (PKVY), Namami Gange, Bhartiya Prakritik Krishi Padhati (BPKP), Mission Organic Value Chain Development for North- Eastern Region (MOVCDNER), National Project on Organic Farming (NPOF) etc., farmers are provided assistance for use of organic and bio-fertilizers. Further, National Centre for Organic Farming (NCOF) is involved in awareness generation & training activities for promotion of organic farming.
