GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS & FERTILIZERS
DEPARTMENT OF FERTILIZERS
LOK SABHA

UN STARRED QUESTION NO**. 713** TO BE ANSWERED ON **:26.07.2024**

IMPACT OF CHEMICALS AND FERTILIZERS ON SOIL IN PUNJAB

713. SHRI CHARANJIT SINGH CHANNI:

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

(a) whether the Government has any data regarding the impact of chemicals and fertilizers on soil in the State of Punjab and if so, the details thereof;

(b) whether the use of chemical fertilizers has impacted public health adversely;

(c) if so, the details thereof alongwith the scheme of the Government to counter the same;

(d) whether the government has considered providing organic fertilizers to farmers and if so, the details thereof; and

(e) whether the Government has given any subsidy on organic fertilizers during the last five years and if so, the details thereof, year-wise?

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

(a): Long term fertilizer experiment conducted by Indian Council of Agriculture Research (ICAR) at Ludhiana revealed that integrated nutrient management practices maintained the soil fertility status (organic carbon, available nitrogen, phosphorus, potassium with improved biological activity), and that imbalanced use of chemical fertilizers resulted in decrease in soil fertility.

Further, studies on rice-wheat system with integrated nutrient management for 30 years in Punjab indicated no negative effect on soil organic carbon, available nitrogen (N) and phosphorus (P). As such, there is no harmful effect of fertilizers on soil fertility, if applied in a balanced and judicious manner.

The fertility of soil is lost in certain situations mainly due to the imbalanced use of chemical fertilizers coupled with low use of organic manures.

(b) & (c)**:** The Ministry of Chemicals & Fertilizers does not conduct such type of study. However, Indian Council of Agriculture & Research (ICAR) furnished the following details:

"The nitrogen use efficiency of nitrogenous fertilizers varies between 30-50% depending on soil type and crop grown. Remaining nitrogen is lost mainly by way of nitrate leaching (causing nitrate contamination in ground water above the permissible limit of 10 mg NO_3-N /L).

Thus, ICAR is recommending soil test based balanced and integrated nutrient management practices through conjunctive use of both inorganic and organic sources (compost, bio-fertilizers, green manure etc.), split application and placement of nitrogenous fertilizers, use of slow releasing N-fertilizers, nitrification inhibitors and use of neem coated urea etc. to avoid such situation."

(d) & (e): Government is implementing dedicated schemes for promotion of organic farming in the country viz. Paramparagat Krishi Vikas Yojana (PKVY) and Mission Organic Value Chain Development in North East Region (MOVCDNER) since 2015-16. Under these schemes, farmers are encouraged to take up organic cultivation using organic inputs and the schemes provide end to end support to farmers' i.e. from production to marketing of organic produce. Hands-on training to farmers about on-farm production of organic fertilizers and its use are integral part of these schemes. Farmers are provided a subsidy of Rs 15000/ ha / 3 years under PKVY and 15000/ ha/ 3 years under MOVCDNER for various organic inputs including bio-fertiliozers and organic manure.

Further, the Government has approved the Market Development Assistance (MDA) @ ₹ 1,500/MT to promote organic fertilizers i.e., manure produced at plants under GOBARdhan initiative covering different biogas/CBG support schemes/programmes of stakeholders Ministries/ Departments at the total outlay of₹1,451.84 crore (FY 2023-24 to 2025-26), which includes a corpus of ₹ 360 crore for research gap funding etc.

The PM-PRANAM 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, promoting organic & natural farming etc.

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