

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE, COOPERATION AND FARMERS WELFARE

LOK SABHA
UNSTARRED QUESTION NO. 1206
TO BE ANSWERED ON THE 27TH JULY, 2021

EXCESSIVE USE OF CHEMICAL FERTILIZERS

1206. SHRI RITESH PANDEY:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether any study has revealed that most of the serious ailments are occurring due to excessive use of chemical fertilizers and insecticides, if so, whether the Government has formulated any concrete programme for conducting a study in this regard;
- (b) whether the Government proposes to promote the use of bio-fertilizers in view of the adverse effect of chemical fertilizers and pesticides on human health and if so, the details thereof;
- (c) whether the Government proposes to promote production/research work on such bio-fertilizers so as to ensure that there is no shortage of bio-fertilizers and their production remains unaffected and cost-effective and if so, the details thereof; and
- (d) whether the Government has conducted any study on the effect of bio-fertilizers on the agricultural output and if so, the outcome thereof?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

(a): As such, there is no harmful effect of chemical fertilizers and insecticides with balanced and judicious use as per recommendation. However, imbalanced use of chemical fertilizers coupled with low addition of organic matter over years may cause

multi-nutrient deficiencies in soil. There is also possibility of nitrate contamination in groundwater above the permissible limit of 10 mg NO₃-N/L due to excessive use of nitrogenous fertilizers particularly in light textured soils.

(b) & (c): Government of India has been promoting production and use of bio-fertilizers under various schemes/ programmes given below:

- **Capital Investment Subsidy Scheme (CISS):** Credit linked back ended subsidy is provided to individuals/ private agencies through NABARD for setting up of Bio-fertilizer production units @ 25% of cost limited to Rs.40 lakhs /unit. State and Central Government agencies are provided 100% assistance with maximum limit of Rs 160.00 lakh per unit of 200 Ton Per Annum (TPA) capacity.
- **Paramparagat Krishi Vikas Yojana (PKVY):** Assistance of Rs. 31,000/ ha/3 years is provided to the farmers directly through DBT, for inputs including bio-fertilizers, bio pesticides, vermi-compost, botanical extracts etc
- **Mission Organic Value Chain Development for North Eastern Region (MOVCDNER):** Farmers are given assistance of Rs15000/ ha/ 3 years for both on-farm & off-farm organic input.
- **National Mission on Oilseeds and Oil Palm (NMOOP):** Financial assistance@ 50% subsidy to the tune of Rs. 300/- per ha is being provided for different components including bio-fertilizers, supply of Rhizobium culture/Phosphate Solubilising Bacteria (PSB)/ Zinc Solubilising Bacteria(ZSB)/ Azatobacter/ Mycorrhiza and vermi compost.
- **National Food Security Mission (NFSM):** Under NFSM, financial assistance is provided for promotion of Bio-Fertilizer (Rhizobium/ PSB) @50% of the cost limited to Rs.300 per ha.
- **Network project on Soil biodiversity- Bio-fertilizers:** The Indian Council of Agriculture Research (ICAR) under Network project on Soil biodiversity- Bio-fertilizers has developed improved and efficient strains of bio-fertilizers and tested on different crops and soil types to promote use of bio-fertilizers.

(d): The study of Indian Council of Agriculture Research (ICAR) - "Network project on soil biodiversity- bio fertilizers" indicates that bio-fertilizers can improve crop yields by 10-25% and supplement costly chemical fertilizer (N, P) by nearly 20-25% in most of the cases when used along with the chemical fertilizers. Bio-fertilizers when applied along with compost @ 5t/ha or vermi-compost @ 2t/ha, fertilizer saving is almost 50%.
