

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

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UNSTARRED QUESTION NO. 1305 TO BE ANSWERED ON : 01.08.2023

Prevention of harmful effects of chemical fertilizers and pesticides

1305. SHRI SATISH CHANDRA DUBEY:

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

- (a) the steps being taken by Government to prevent the harmful effects of chemical fertilizers and pesticides on human beings and animals used by the farmers;
- (b) whether it is proposed to create an effective monitoring mechanism to reduce the use of these pesticides in view of their side effects as the said substances are becoming a threat to life;
- (c) if so, the details thereof; and
- (d) if not, the reasons therefor?

ANSWER

MINISTER OF STATE FOR CHEMICALS & FERTILIZERS
(SHRI BHAGWANTH KHUBA)

(a): As such, there is no harmful effect of chemical fertilizers on human/animal health with soil test based balanced and judicious application of chemical fertilizers. However, there is 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 that has consequence on human/animal health if used for drinking purpose. The ICAR is recommending soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (manure, biofertilizers etc.) of plant nutrients with 4Rs approach i.e right quantity, right time, right mode and right type of fertilizer to ensure judicious use of chemical fertilizers preventing deterioration of soil health, environment and contamination of groundwater.

The ICAR also imparts training, organizes front-line demonstrations etc. to educate farmers on all these aspects.

The Ministry of Environment, Forests and Climate Change has notified effluent and emission discharge standards for pesticide and fertilizer industries vide GSR 446 (E), dated 13th June, 2011 and GSR 1607(E) dated December 29, 2017 respectively to prevent the harmful effects of chemical fertilizers and pesticides.

All the Pesticide and Fertilizer industries are required to comply with the notified emission & effluent and emission standards, besides any other specific conditions laid down by concerned State Pollution Control Boards (SPCBs) / Pollution Control Committees (PCCs) in their Consent to Operate, issued to individual industry under

Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981 and authorization Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Accordingly, Central Pollution Control Board (CPCB) / SPCBs / PCCs take action on those industries that fail to comply with the notified effluent and emission discharge standards / conditions stipulated in consent to operate.

CPCB has issued directions to all 17 categories of highly polluting industries including Fertilizer and Pesticide industries to install Online Continuous Effluent / Emission Monitoring System (OCEMS) with real time data connectivity to CPCB. CPCB conducts regular inspections of the industries based on exceedance alerts of OCEMS or offline OCEMS. Based on the observations of inspections, CPCB takes action on the defaulter industries as per extant rules.

Institute of Pesticide Formulation Technology (IPFT) is recognized by the Central Insecticide Board - Registration Committee (CIB-RC), M/o Agriculture & Farmers Welfare which is the regulatory agency for providing the license for production pesticides for testing of pesticides for bio-efficacy and phyto-toxicity studies. IPFT submits its detailed report for these studies for the sponsored projects before its registration.

IPFT, an Autonomous Body under the D/o Chemicals & Petrochemicals, M/o Chemicals & Fertilizers is engaged in research & development work on user & environment friendly new generation and bio- botanical formulations of pesticides. As one of the main objective of the Institute, to develop Eco & environment friendly bio-botanical pesticides we are developing bio-pesticides for commercial production and use in the country.

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 support the mass movement started by States/UTs to save the health of Mother Earth by promoting sustainable and balanced use of fertilizers, adopting alternate fertilizers, promoting organic farming and implementing resource conservation technologies.

Under the said scheme, it is proposed that 50% of the fertilizer subsidy saved by a State/UT in a particular financial year by way of reduction in consumption of chemical fertilizers (Urea, DAP, NPK, MOP) compared to previous 3 years' average consumption, will be passed on to that State/UT as Grant. The PM-PRANAM scheme is being implemented for a period of three years (FY 2023-24 to FY 2025-26). All states/UTs are eligible under the said scheme.

(b) to (d) : A Committee comprising members from CPCB, SPCBs and Directorate of Plant Protection Quarantine & Storage prepared a protocol for enhanced monitoring of pesticides and communicated to all the SPCBs / PCCs to ensure enhanced monitoring of pesticide, in compliance of Hon'ble National Green Tribunal (NGT) order in Original Application No. 46/2020 on 26.06.2020.

IPFT is one of the Nodal Agency and involved in the project entitled "Monitoring of pesticide residue at national level" is being executed by M/o Agriculture & Farmers welfare since 2006. The project aimed to monitor pesticide

residues in food commodities products is being done at Haryana State level. Samples are being collected from the local market and farming fields for its residue analysis. A Report for the same is submitted to the Government of India from time-to-time as per the schedule.

IPFT conducts training programmes for the betterment of farming community and income growth throughout the country. During 2022-23, Ten (10) such training programmes were conducted throughout the country. During these workshops the farmers were made about the disadvantages of excessive usage of pesticides to the crops as well as human life. Which will definitely help the farmers in minimization of risk and health hazards during the use of pesticides in agricultural crops. The programmes conducted for the farmers are as under:

- i. Promotion of use of botanical pesticides based on locally available plants/resources in zero budgeting organic farming for crop protection and enhancing crop productivity.
- ii. Safe and judicious use of Pesticides and application of new Generation formulation for crop protection in vegetable crops.

IPFT has planned to conduct 20 training programmes for the farmers during 2023-24 and these programmes will be conducted throughout the country with more and more participation of farming community at field level.
