GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

LOK SABHA

UNSTARRED QUESTION **NO. 4067** TO BE ANSWERED **ON: 24.03.2023**

Effects of Chemicals and Fertilizers on Human Life

†4067. SHRI GUMAN SINGH DAMOR:

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

(a) whether there has been an authentic study of the adverse effects of chemicals and fertilizers on human life;
(b) if so, the details thereof along with the names of research institutes undertaking study in this regard and the outcome thereof;
(c) if not, whether any such study is likely to be conducted through research institutes;
(d) the names of the States using maximum quantity of chemicals and fertilizers in the country; and
(e) the details of impact on the quality of ground water by excessive use of chemicals and fertilizers?

ANSWER

MINISTER OF STATE FOR CHEMICALS & FERTILIZERS

(SHRI BHAGWANTH KHUBA)

(a) to (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): The details of top five states using maximum chemical fertilizers, i.e. Urea, DAP, MOP and NPK is as under:

Top five (5) States using maximum quantity of Chemicals Fertilizers 2022-23 (Upto Feb., 2023.)

(fig. in LMT)

S. No.	State	Urea	DAP	MOP	NPKS
1.	Uttar Pradesh	73.01	21.52	2.19	19.71
2.	Madhya Pradesh	31.90	13.64	1.55	15.75
3.	Punjab	28.89	8.33	1.34	12.95
4.	Rajasthan	24.88	7.02	1.31	12.55
5.	Gujarat	23.43	6.76	1.22	8.87

(e): Central Ground Water Board generates ground water quality data on a regional scale during various scientific studies and ground water quality monitoring throughout the country. These studies indicate the Nitrate contamination which can also be caused by excessive use of Nitrogenous fertilizers.

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