

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 4307
ANSWERED ON 18.07.2019

GROUND WATER POLLUTION

4307. DR. SUJAY RADHAKRISHNA VIKHE PATIL

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether indiscriminate use of chemicals and fertilizers during the last three years is a major cause of rapidly increasing ground water pollution in the country;
- (b) if so, the details thereof; and
- (c) the steps taken by the Government to check the pollution of the ground water during the last three years?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI & SOCIAL JUSTICE AND EMPOWERMENT

(SHRI RATTAN LAL KATARIA)

(a) & (b) Central Ground Water Board (CGWB) generates ground water quality data of the country on a regional scale as part of its ground water quality monitoring program. State-wise details of contamination of ground water are given at **Annexure**. A study by the Indian Council of Agricultural Research (ICAR) indicated 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.

(c) Department of Agriculture, Cooperation & Farmers Welfare is implementing 'Per Drop More Crop' (PDMC) component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) which is operational since 2015-16 in the country. The PMKSY-PDMC focuses on water use efficiency at farm level through micro irrigation technologies viz. Drip and Sprinkler irrigation. Micro irrigation not only helps in water saving, but also in reducing fertilizer usage through fertigation, labour expenses and other inputs and input costs, besides sustaining soil health.

Further, ICAR has recommended soil test based balanced and Integrated Nutrient Management (INM) through conjunctive use of both inorganic and organic sources (manure, bio-fertilizers etc.) of plant nutrients to prevent/reduce excessive use of chemical fertilizers. In addition, split application and placement of fertilizers, use of slow releasing N-fertilizers and nitrification inhibitors, growing leguminous crops and use of Resource Conservation Technologies (RCTs) are also advocated. The ICAR also imparts training, organizes front-line demonstrations etc. to educate farmers on all these aspects.

The Government under the component of soil health management of National Mission for Sustainable Agriculture (NMSA) is promoting soil test based balanced and integrated nutrient management in the country through judicious use of chemical fertilizers including secondary and micro nutrients in conjunction with organic manures and bio-fertilizers for improving soil health and its productivity; up-gradation of skill and knowledge of soil testing laboratory staff, extension staff and farmers through training and demonstrations. Recently, a National Mission on Soil Health Card has been launched to provide soil test based fertilizer recommendations to all the farmers in the country.

The Government through soil health management component of National Mission for Sustainable Agriculture (NMSA) and National Mission on Soil Health Card is creating awareness amongst the farmers regarding the effects of imbalanced use of fertilizers including need to use conventional and harmless fertilizers. Similarly, farmers are being educated regarding benefits of organic farming through *Parampragat Krishi Vikas Yojana (PKVY)* and *Mission Organic Value Chain Development for North Eastern Region (MOVCDNER)* under NMSA. The Government is also implementing Nutrient Based Subsidy Scheme since 2010 and promoting customized and fortified fertilizers for balanced use of fertilizers.

Further, the efforts/initiatives of the Government to improve/conserves/harvest the ground water resource which is likely to reduce the impact of pollutants in groundwater are as under:

Hon'ble Prime Minister has written a letter to all Sarpanchs on 08.06.2019 regarding the importance of water conservation and rain harvesting and exhorted them to adopt all appropriate measures to make water conservation a mass movement.

The issue of water conservation/harvesting was discussed with the concerned Ministers and officials of the State Governments by Minister, Jal Shakti in a meeting held on 11.6.2019.

Government of India has launched the Jal Shakti Abhiyan which is a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed blocks.

An 'Inter Ministerial Committee' under the Chairmanship of Secretary (WR, RD & GR) has been constituted to take forward the subject of 'Water Conservation Related Activities for Optimum Utilization of Monsoon Rainfall' which meets from time to time to discuss the issue of water conservation. The Committee includes officers from different States/UTs. Last meeting of the Inter-Ministerial Committee was held on 01/05/2019.

Cabinet Secretary discussed the issue of water conservation/harvesting with the Chief Secretaries of the States through video-conference on 21.05.2019.

Annexure referred to in reply to part (a) & (b) of Unstarred Question No. 4307 to be answered in Lok Sabha on 18.07.2019 regarding “Ground Water Pollution”

States Wise Number of Partly Affected Districts with different Contaminants in Ground Water of India

S. No.	State/ UT	Salinity (EC above 3000 micro mhos/ cm) (EC : Electrical Conductivity)	Fluoride (above 1.5 mg/l)	Nitrate (above 45 mg/l)	Arsenic (above 0.01 mg/l)	Iron (above 1mg/l)	Lead (above 0.01 mg/l)	Cadmium (above 0.003 mg/l)	Chromium (above 0.05 mg/l)
1	Andhra Pradesh	12	12	13	3	7			
2	Telangana	8	10	10	1	8	2	1	1
3	Assam		9		19	18			
4	Arunachal Pradesh					4			
5	Bihar		13	10	22	19			
6	Chhattisgarh	1	19	12	1	17	1	1	1
7	Delhi	7	7	8	2		3	1	4
8	Goa					2			
9	Gujarat	21	22	24	12	10			
10	Haryana	18	21	21	15	17	17	7	1
11	Himachal Pradesh			6	1				
12	Jammu & Kashmir		2	6	3	9	3	1	
13	Jharkhand		12	11	2	6	1		
14	Karnataka	29	30	29	2	22			
15	Kerala	4	5	11		14	2		1
16	Madhya Pradesh	18	43	51	8	41	16		
17	Maharashtra	25	17	30		20	19		
18	Manipur		1		2	4			
19	Meghalaya		1			6			
20	Nagaland		1			1			
21	Odisha	17	26	28	1	30			1
22	Punjab	10	19	21	10	9	6	8	10
23	Rajasthan	30	33	33	1	33	3		
24	Tamil Nadu	28	25	29	9	2	3	1	5
25	Tripura					4			
26	Uttar Pradesh	13	34	59	28	15	10	2	3
27	Uttarakhand			4		5			
28	West Bengal	6	8	5	9	16	6	2	2
29	Andaman& Nicobar	1				2			
30	Daman & Diu	1		1	1				
31	Puducherry			1					
	Total	Parts of 249 districts in 18 states & UTs	Parts of 370 districts in 23 states & UTs	Parts of 423 districts in 23 states & UTs	Parts of 152 districts in 21 states & UTs	Parts of 341 districts in 27 states & UTs	Pb in parts of 92 districts in 14 states	Cd in parts of 24 districts in 9 states	Cr in parts of 29 districts in 10 states
