

**GOVERNMENT OF INDIA  
WATER RESOURCES  
LOK SABHA**

STARRED QUESTION NO:257  
ANSWERED ON:14.03.2013  
CONTAMINATION OF GROUNDWATER  
Abdulrahman Shri ;M.Thambidurai Dr.

**Will the Minister of WATER RESOURCES be pleased to state:**

- (a) whether the presence of fluoride, iron, arsenic, nitrate and carcinogenic contaminants in the ground water in many States are several times above the permissible limits set by the World Health Organisation (WHO);
- (b) if so, whether the Government has conducted any survey on the ground water quality in various parts of the country;
- (c) if so, the details thereof including the permissible and present limit of each of the contaminants, State/UT-wise; and
- (d) the other steps taken/proposed to be taken by the Government in this regard?

**Answer**

THE MINISTER OF WATER RESOURCES (SHRI HARISH RAWAT)

(a) to (d). A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO. 257 TO BE ANSWERED ON 14.03.2013 IN LOK SABHA REGARDING "CONTAMINATION OF GROUNDWATER" ASKED BY SHRI ABDUL RAHMAN AND DR. M. THAMBIDURAI, M.Ps, LOK SABHA:

(a) to (c) Central Ground Water Board (CGWB) under the Ministry of Water Resources regularly monitors ground water quality of shallow aquifers on regional scale once every year during April/May through an network of 10714 observation wells located through out the country. Analysis of Ground Water samples by CGWB, revealed presence of fluoride, arsenic and other toxic and carcinogenic substance like lead, cadmium, chromium etc. in excess of permissible limits of World Health Organization (WHO) norms. According to the findings of the CGWB, 8 States have excess concentration of arsenic against WHO norm of 0.01 mg/ litre, 19 States have excess concentration of fluoride against WHO norm of 1.5 mg/ litre, 20 States have excess concentration of nitrate against WHO norm of 50 mg/ litre and 23 States have excess concentration of iron beyond permissible BIS norms of 1.0 mg/litre. Besides, in case of State of Karnataka, a study conducted by Rural Development & Panchayati Raj Department, Karnataka revealed presence of arsenic above the maximum permissible limit prescribed by BIS of more than 0.05 mg/l. There are also reports of sporadic occurrence of heavy metals like lead, chromium and cadmium in the ground water of 13 States. Arsenic, fluoride and iron contamination are mostly of natural geological occurrence. Nitrate and heavy metals are both due to natural geological occurrence and man-made activities like mining, industry and waste disposal. The details are enclosed in Annexure. Chemical analysis data from CGWB indicates that ground water contaminants such as arsenic, fluoride, nitrate, iron and heavy metals have not been reported from the States/UTs of Arunachal Pradesh, Mizoram, Nagaland, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep and Puducherry.

(d) Ministry of Drinking Water & Sanitation has informed that 20% of the allocated funds under the National Rural Drinking Water Programme (NRDWP) are earmarked for water quality problems. Further, it is indicated that the States may utilize up to 65% of funds released under NRDWP for improving water quality of ground and surface water. Since in-situ treatment of contaminated aquifers due to presence of arsenic, fluoride, iron, nitrate and heavy metals is difficult, remedial measures are concentrated on providing alternate sources of water supply. The CGWB assists in identifying aquifers which are free from contaminants.