GOVERNMENT OF INDIA
WATER RESOURCES
LOK SABHA

UNSTARRED QUESTION NO:617
ANSWERED ON:24.02.2011
CONTAMINATION OF GROUND WATER
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Will the Minister of WATER RESOURCES be pleased to state:

(a) the areas of the country which are at risk due to excess fluoride and excess arsenic in drinking water;

(b) the estimated number of people who are at risk due to these contaminants;

(c) the remedial measures being taken for water treatment in affected areas;

(d) the main causes of contamination in water bodies across the country including ground water, State-wise, particularly U.P. and Maharashtra; and

(e) the programmes being implemented by the Government to prevent pollution in water bodies, including ground water?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF WATER RESOURCES & MINORITY AFFAIRS (SHRI VINCENT H. PALA)

(a) As per information received from Central Ground Water Board, occurrence of Fluoride and Arsenic has been reported beyond the permissible limits in some isolated pockets of the country. State-wise details of districts in parts of which problems of Arsenic and Fluoride contamination have been reported in ground water are given in Annexure-I.

(b) As per the report "Mitigation and Remedy of Groundwater Arsenic Menace in India: A Vision Document" prepared by National Institute of Hydrology and Central Ground Water Board, approximately 50 million people are at risk due to ground water arsenic contamination. As per the Eleventh Five Year Plan Document of Planning Commission, approximately 66 million people are at risk due to fluoride contaminated ground water.

(c) Remedial measures for water treatment in affected areas are 1) use of surface water sources for drinking purposes 2) exploring and harnessing alternate arsenic and fluoride free aquifers 3) removal of arsenic and fluoride from ground water using treatment plants/filters, 4) adopting rainwater harvesting/watershed management practices in affected area.

(d) The main causes of contamination in water bodies across the country including ground water,particularly in U.P. and Maharashtra are both anthropogenic and geo-genic. The main anthropogenic causes are discharge of untreated domestic waste water, industrial waste water and pollutants in agricultural drainage waters in to water bodies which inturn also pollute ground water. Salinity and contamination due to Iron, Arsenic and Fluoride of ground water are geogenic in origin, which is caused due to natural mechanism by which these elements present in the water bearing formation get mobilized under certain conditions and is released into the ground water.

(e) Central Ground Water Board and Central Water Commission are monitoring and assessing the groundwater and surface water quality in the country through a network of monitoring stations and publishing the data regularly in the form of scientific and technical reports. Mass awareness programmes are being conducted in the contaminated areas regarding health impacts of drinking contaminated water.