

**GOVERNMENT OF INDIA
WATER RESOURCES
LOK SABHA**

STARRED QUESTION NO:502

ANSWERED ON:02.05.2005

DEPLETION OF GROUND WATER RESOURCES

Patel Shri Kishanbhai Vestabhai;Tripathy Shri Braja Kishore

Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the Government has reviewed the report brought out by the International Water Management Institute during 2002 on depletion of ground water resources;

(b) if so, the details in this regard;

(c) whether the Government has taken any steps to improve the situation; and

(d) if so, the details thereof, State-wise?

Answer

THE MINISTER OF WATER RESOURCES (SHRI PRIYA RANJAN DASMUNSI)

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

STATEMENT REFERRED TO IN REPLY OF PARTS (a) TO (d) OF LOK SABHA STARRED QUESTION NO.502 FOR REPLY ON 02.05.2005 REGARDING DEPLETION OF GROUND WATER RESOURCES

Yes, Sir. The Government is aware about the report brought out by the International Water Management Institute (IWMI) during Annual Partners' Meet 2002, dealing with depletion of ground water resources in India. The report discusses three dominating problems of depletion, salinization and pollution, which have far reaching socio-economic and environmental consequences and suggests the following approach for the resource management:-

(a) Information Systems and Resource Planning:- To understand the ground water resource through appropriate systems for ground water monitoring on regular basis, and incorporating the monitoring data in planning the use of the resource. Also to undertake systematic and scientific research on occurrence, use and ways of augmenting and managing the ground water.

(b) Demand Side Management:- An effective system for regulating the withdrawals to sustainable levels; including registration of users through permit or license system; appropriate laws and regulatory mechanisms; systems of pricing, promotion of conjunctive use; precision irrigation and water saving crop production technologies and approach etc.

(c) Supply Side Management:- Augmenting ground water recharge through community based rain water harvesting and ground water recharge programmes, maximizing surface water use for recharge and improving incentives for water conservation and artificial recharge.

(d) Ground Water Management in the River Basin Context:- Ground water resource to be planned and managed for maximum basin level efficiency involving transbasin movement or dedicated surface water system for recharge.

"Water" being a State subject, it is primarily the responsibility of the concerned State Governments to take steps to improve the situation of depleting ground water resources. However, the following steps have been taken by the Union Government in this direction:-

Steps taken regarding Information Systems and Resource Planning:-

(i) Circulation of Manual/Guidelines on Artificial Recharge of Ground Water to the States/Union Territories to enable them to formulate area specific artificial recharge schemes to check the declining trend of ground water levels.

(ii) Central Ground Water Board (CGWB), under the Ministry of Water Resources, monitors the ground water level throughout the country through a network of about 15000 national monitoring stations.

(iii) Launching of a website on Roof Top Rain Water Harvesting (www.cgwb.net) to make aware and educate the public about various

techniques of harvesting rainwater and store it for future use.

(iv) Organisation of mass awareness programmes and training courses on rainwater harvesting and artificial recharge of ground water.

(v) Rain Water Harvesting campaign has been launched keeping in view the various target groups like youth and children, women, farmers and villagers, policy and opinion makers. Publicity through print media, telecasting of spots on the television, broadcasting messages on radio, holding of seminars, workshops, conferences etc., have been undertaken for the purpose.

Steps taken regarding Demand Side Management:-

(i) The Union Ministry of Water Resources has circulated a Model Bill in the year 1970, which was re-circulated in 1992 and again in 1996 to all the States/Union Territories to enable them to enact suitable legislation for regulation and control of ground water development. A revised Model Bill, 2005 to regulate and control the development and management of ground water has been again circulated to all the States/Union Territories.

(ii) Central Ground Water Authority (CGWA) constituted under the Environment (Protection) Act, 1986 has notified 11 critical areas on consideration of over-exploitation of ground water resources and 32 over-exploited areas for registration of ground water structures.

(iii) CGWA is regulating withdrawal of ground water by industries/projects. List of these critical areas has been circulated to the State Pollution Control Boards and the Ministry of Environment & Forests which refer the new industries/projects to CGWA for obtaining permission.

Steps taken regarding Supply Side Management:-

(i) Central Ministries/Departments of Railways, Defence, Posts, Telecommunications, Central Public Works Department and National Highways Authority of India have been requested to provide roof top rain water harvesting structures in the buildings under their control.

(ii) States/UTs have been requested to provide water harvesting structures in buildings under their administrative control.

(iii) All the States/Union Territories have been requested for advising the local bodies in their respective States/Union Territories to allow rebate in property tax to persons, who adopt roof top rainwater harvesting in their premises.

(iv) CGWB has provided technical guidance on rain water harvesting to around 1800 agencies, including State Government agencies, educational institutions, private entrepreneurs and individuals.

(v) The Ministry of Urban Development & Poverty Alleviation, Government of India have amended Building Bye-laws, 1983, making provision for water harvesting through storing of water run-off including rain water in all new buildings on plots of 100 square meters and above in Delhi mandatory. Similarly, State Governments of Tamil Nadu, Andhra Pradesh, Gujarat, Haryana, Rajasthan and Kerala have made roof top rain water harvesting mandatory in specified cases.

(vi) During the IX Plan, CGWB have implemented successfully artificial recharge projects under the Central Sector Scheme for "Study of Recharge to Ground Water" in 27 States/UTs in the country. The State-wise details are given at Annexure.

(vii) A scheme for "Artificial Recharge to Ground Water and Rain Water Harvesting" during the remaining part of the X Five Year Plan at an estimated cost of Rs. 175 crores is under consideration.

Steps taken regarding Ground Water Management in the River Basin Context:-

(i) Ministry of Rural Development (Department of Land Resources) and the Ministry of Agriculture are implementing area development programmes under which funds are allotted for various activities, which includes soil and water conservation works. However, funds are not exclusively allotted for checking declining ground water, which is a resultant activity of moisture conservation works undertaken for the development of watershed areas.

(ii) CGWB has prepared a report entitled "Master Plan for Artificial Recharge to Ground Water", which envisages recharge of 36453

Million Cubic Meter volume of surplus monsoon runoff, through construction of 39.25 lakhs artificial recharge and roof top rain water harvesting structures.

ANNEXURE

(REFERENCE LOK SABHA STARRED QUESTION NO.502 DATED 02.05.2005)

STATE-WISE DETAILS OF ARTIFICIAL RECHARGE PROJECTS IMPLEMENTED BY CGWB UNDER CENTRAL SECTOR SCHEME "STUDY OF RECHARGE TO GROUND WATER" DURING THE IX PLAN

Sl No	States/Union Territory	No. of projects sanctioned	Cost of projects approved (Rs. in lakh)
1	Andhra Pradesh	10	54.55
2	Arunachal Pradesh	1	20.00
3	Assam	1	63.50
4	Bihar	2	10.52
5	Chandigarh	7	64.23
6	Delhi	18	96.07
7	Gujarat	3	20.05
8	Haryana	8	107.17
9	Himachal Pradesh	6	81.65
10	Jammu & Kashmir	8	78.96
11	Jharkhand	5	25.73
12	Karnataka	2	43.30
13	Kerala	13	88.18
14	Madhya Pradesh	5	53.85
15	Maharashtra	4	126.63
16	Meghalaya	1	20.32
17	Mizoram	1	28.00
18	Nagaland	3	116.43
19	Orissa	8	1508.29
20	Punjab	17	361.92
21	Rajasthan	18	122.80
22	Tamil Nadu	10	161.14
23	Uttar Pradesh	10	139.07
24	Uttaranchal	1	2.00
25	West Bengal	7	154.09
26	A & N Islands	3	12.92
27	Lakshadweep	2	19.85
	TOTAL:	174	3581.22