

Depleting water level

2769. SHRI JESUDASU SEELAM: Will the Minister of WATER RESOURCES be pleased to state:

- (a) whether Government is aware of alarming decrease in the level of water in the water table in cities like Hyderabad, Bengaluru and New Delhi;
- (b) if so, the details thereof; and
- (c) the steps taken by Government to improve the depleting water table resources?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI VINCENT PALA): (a) Central Ground Water Board monitors ground water levels on regional scale through observation wells located in different parts of the country. Analysis of long term water level data collected during pre-monsoon period during the past decade (May, 2002-May, 2011) shows that there has been decline in ground water levels in some parts of cities of Hyderabad, Bengaluru and Delhi.

(b) City wise details of water level fluctuations during the past decade are given in Statement (*See below*).

(c) 'Water' being a state subject, necessary steps to improve depleting ground water levels are undertaken by the concerned State agencies. However, various steps taken by the Ministry of Water Resources to improve the depleting water table are as under:

- Ministry of Water Resources has circulated the Model Bill to regulate and control development and management of ground water. So far eleven States/UTs namely Andhra Pradesh, Bihar, Goa, Himachal Pradesh, Kerala, Tamil Nadu, West Bengal, Chandigarh, Dadra and Nagar Haveli, Lakshadweep and Puducherry have enacted ground water legislation.
- Central Ground Water Board has implemented demonstrative projects on rain water harvesting and artificial recharge during XI Plan. Projects costing Rs, 99.87 crore have been approved for construction of 1661 structures in 21 States namely Andhra Pradesh, Arunachal Pradesh, Bihar, Chandigarh, Chhattisgarh, Delhi, Gujarat, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Orissa, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal.
- Central Ground Water Board (CGWB) has prepared a Manual on artificial recharge to ground water which provides guidelines on investigated techniques for selection of sites, planning and design of artificial recharge structures, economic evaluation and monitoring of recharge facility. The manual has been circulated to user agencies.

- States have been advised for making rainwater harvesting mandatory. In pursuance thereof, 18 States and 4 UTs have made rain water harvesting mandatory under building bye-laws.
- Directions have been issued to Chief Secretaries/Administrators of all the States/Union Territories and Ministry of Urban Development to take necessary action to adopt rain water harvesting/artificial recharge on all the Government buildings.
- Directions have been issued to all the Residential Group Housing Societies/ Institutions/Schools/Hotels/Industrial Establishments falling in the over-exploited and critical areas (except in the water logged areas) in the country to adopt Roof Top Rain Water harvesting systems in their premises.
- Directions have been issued for Implementation of ground water recharge measures along all National Highways, State Highways and other major roads by CRRI, National Highways Authority of India, CPWD, State PWDs; along rail tracks by Indian Railways; in the Stadia by Sports Authority of India, BCCI, Departments of sports and Youth Affairs and in the Airports by Airport Authority of India, Ministry of Civil Aviation for Promoting Rain Water Harvesting/adoption of artificial Recharge to Ground Water in the country (except in the water logged areas).
- Government has constituted Advisory Council on Artificial Recharge to Ground Water in the year 2006 under the Chairmanship of Hon'ble Minister of Water Resources with the main objective of popularizing concept of artificial recharge among stakeholders as well as water managers.
- Central Ground Water Board organizes IEC activities like mass awareness and training programmes, painting completion, displaying models in exhibitions and fairs, printing of Meghdoot cards, display of hoardings at prominent public places etc.
- Central Ground Water Authority has notified 82 areas in the country including for regulation of ground water development and management. In these notified areas, installation of new ground water abstraction structures is not permitted without prior specific approval of the Authority/Authorized officer. For enforcement of the regulatory directions issued under Section 5 of EPA, 1986, concerned Deputy Commissioners/District Collectors have been authorized to take necessary action in case of violations of directives of CGWA in the notified areas.

Statement*Water level fluctuation and frequency distribution of different ranges from pre monsoon 2002 to Pre Monsoo 2011 in Hyderabad city*

Sl. No.	Name of Block	No. of wells Analysed	Range in m				Rise						Fall						Total			
			Rise		Fall		0-2 m		2-4 m		>4m		0-2 m		2-4 m		>4 m		Rise		Fall	
			Min	Max	Min	Max	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1.	Shaikipet	1	-	-	3.32	3.32	0	0.00	0	0.00	0	0.00	0	0.00	1	100.0	0	0.00	0	0.00	1	100.00
2.	Golconda	1	1.85	1.85	-	-	1	100.00	0	0.00	0	0.00		0.00		0.00	0	0.00	1	0.00	0	0.00
TOTAL		2					1	50.00	0	0.00	0	0.00	0	0.00	1	50.00	0	0.00	1	50.00	1	50.00

Water level fluctuation and frequency distribution of different ranges from pre monsoon 2002 to pre monsoon 2011 in Bangalore city

Sl. No.	Name of Block	No. of wells Analysed	Range in m				Rise						Fall						Total			
			Rise		Fall		0-2 m		2-4 m		>4m		0-2 m		2-4 m		>4 m		Rise		Fall	
			Min	Max	Min	Max	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1.	Ankel	2	1.14	1.14	7.28	7.28	1	50.00	0	0.00	0	0.00	0	0.00	0	0.00	1	50.00	1	50.00	1	50.00
2.	Bangalore North	8	0.07	1.40	6.04	17.89	4	50.00	0	0.00	0	0.00	1	12.50	0	0.00	3	37.50	4	50.00	4	50.00
3.	Bangalore South	3	0.10	8.33	-	-	2	66.67	1	33.33	0	0.00	0	0.00		0.00	0	0.00	3	100.0	0	0.00
TOTAL		13					7	53.85	1	7.69	0	0.00	1	7.69	0	0.00	4	30.77	8	61.54	5	38.46

Water level fluctuation and frequency distribution of different ranges from pre monsoon 2002 to pre monsoon 2011 in Delhi

Sl. No.	Name of Block	No. of wells Analysed	Range in m				Rise						Fall						Total			
			Rise		Fall		0-2 m		2-4 m		>4m		0-2 m		2-4 m		>4 m		Rise		Fall	
			Min	Max	Min	Max	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1.	Central	2	-	-	1.45	3.26	0	0.00	0	0.00	0	0.00	1	50.00	1	50.00	0	0.00	0	0.00	2	100.00
2.	East	1	0.80	0.80	-	-	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00
3.	New Delhi	10	0.70	4.76	2.05	8.76	2	20.00	1	10.00	1	10.00	0	0.00	3	30.00	3	30.00	4	40.00	6	60.00
4.	North	3	0.13	0.32	0.26	0.26	2	66.67	0	0.00	0	0.00	1	33.33	0	0.00	0	0.00	2	66.67	1	33.33
5.	North West	18	0.09	2.78	0.40	17.28	5	27.78	2	11.11	0	0.00	9	50.00	0	0.00	2	11.11	7	38.89	11	61.11
6.	South	5	2.04	2.97	1.55	13.40	0	0.00	2	40.00	0	0.00	1	20.00	0	0.00	2	40.00	2	40.00	3	60.00
7.	South West	12	0.86	5.37	0.27	16.99	2	16.67	0	0.00	1	8.33	4	33.33	0	0.00	5	41.67	3	25.00	9	75.00
8.	West	3	-	-	0.23	0.90	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	0	0.00	0	0.00	3	100.00
TOTAL		54					12	22.22	5	9.26	2	3.70	19	35.19	4	7.41	12	22.22	19	35.19	35	64.81

Government

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