

- (b) if so, the details thereof;
- (c) which source faces serious threat of extinction or drastic decrease; and
- (d) the steps adopted for protection of sources?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI VINCENT PALA): (a) and (b) Due to increase in water utilizations, river flows and ground water resources are observed to be decreasing.

(c) In some areas, due to over exploitation of ground water in excess of replenishable capacity, ground water levels are depleting.

(d) Several steps for augmentation, conservation and efficient management in order to ensure sustainability of water resources are taken up by the respective State Governments which include creation of storages, restoration of water bodies, rainwater harvesting, artificial recharge to ground water, adoption of better irrigation practices, etc. The Central Government supplements the efforts of the State Government through technical and financial assistance.

Improvement in water level

4956. SHRI BASAWARAJ PATIL: Will the Minister of WATER RESOURCES be pleased to state:

- (a) which are the five States where more bore-wells are being used for drinking water and for agricultural purposes;
- (b) the States where the bore-well system has become non-functional due to depleting water levels;
- (c) if so, the depth at which the water level has gone down in those States; and
- (d) the action taken by Government to improve water level in those States?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI VINCENT PALA): (a) As per 3rd Minor Irrigation Census, Uttar Pradesh, Punjab, Andhra Pradesh, Bihar and West Bengal are the five states using more bore wells for agricultural purpose. However, Ministry of Water Resources does not carry out census of wells used for drinking water.

(b) and (c) Statewise details of States where some borewells have become non-functional due to depleting water levels and the depth at which the water level has gone down in these States is given in the Statement (*See Below*)

(d) 'Water' being a state subject, necessary action to improve water level in these states are under taken by the State Governments. However, Central Ground Water Board and Ministry of Water Resources undertake the following measures for improvement of water levels:

- 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. Matter is being actively pursued with other States.
- 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.
- Central Ground Water Board (CGWB) has been implementing pilot/ demonstrative projects since VIII Plan for Rain Water Harvesting and Artificial Recharge to Ground Water in various states in the country for replication by the State Governments under similar hydrogeological environments.
- Based on various studies carried out to demarcate the areas where decline of ground water level is on continuous basis and identify areas feasible for recharge, a concept report titled 'Master Plan for Artificial Recharge to Ground Water' has been prepared, which has identified a total of 9.82 lakh sq.km. area in the country needing artificial recharge of ground water. It has been estimated that annually about 86 bcm of surplus monsoon runoff can be recharged to augment ground water. The document has been circulated to all the States/UTs.
- 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).
- CGWA has directed large and medium Industries using ground water in the over exploited and critical areas in the country (except in the water logged areas) to take up water conservation measures including recharge of ground water/rain water harvesting and adopt practices of treatment, recycle and reuse of waste water in their premises.
- 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.

Statement

State wise details of number of wells dried up (as per 3rd Minor Irrigation Census) and maximum depth to water level as observed during May, 2011

Sl.No.	State/UT	No. of irrigation wells dried up	Maximum depth to water level recorded during May 2011 (mbgl)
1	2	3	4
1.	Maharashtra	7240	62.58
2.	Odisha	1288	16.55

1	2	3	4
3.	Gujarat	4301	64.58
4.	Andhra Pradesh	13256	41.8
5.	Rajasthan	3218	111.7
6.	Haryana	4072	63.3
7.	Bihar	5964	15
8.	Jharkhand	11	19.8
9.	Tamil Nadu	1302	50.4
10.	Madhya Pradesh	1556	47
11.	Karnataka	2504	30.68
12.	Tripura	6	6.6
13.	Kerala	18	41.2
14.	Assam	162	19.58
15.	West Bengal	1098	24.9
16.	Chhattisgarh	130	24.9
17.	Uttaranchal	53	18.29
18.	Uttar Pradesh	3492	40.51
19.	Delhi	7	66.45
20.	Jammu and Kashmir	1	37.4
21.	Punjab	283	33
22.	Puducherry	1	3.66

Strengthening of kollidam river embankment

4957. SHRI MANI SHANKAR AIYAR: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the Central Water Commission is funding the strengthening of the Kollidam river embankment from Anaekaranchattiram to Kallani in Tamil Nadu at