# GOVERNMENT OF INDIA WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION LOK SABHA

UNSTARRED QUESTION NO:629 ANSWERED ON:23.07.2015 Depletion in Groundwater Level

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### Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:

- (a) the State-wise per capita availability of water at present and its expected availability by 2025 alongwith current status of groundwater resources in the country;
- (b) whether groundwater level is depleting rapidly in the country and if so, the reasons for the same and the current level of groundwater in each State:
- (c) the details of schemes/programmes/ projects launched to tackle the situation and the funds made available/utilised under each scheme/programme/project during each year of the last as well as current plan till date. State-wise:
- (d) whether the Government has constituted any committee to look into the matter and if so, the details thereof;
- (e) the action taken by the Government on the requests received from various States including Gujarat for grant of more funds to upgrade groundwater level in the current plan; and
- (f) the future plan of the Government to check depleting groundwater level, to recharge groundwater including identification of new water resources along with ensuring cent per cent water supply through pipelines to the citizens?

## **Answer**

#### **ANSWER**

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION (PROF. SANWAR LAL JAT)

- (a) The average annual per capita availability of water in the Country, as per year 2011 Census is 1545 cubic meters. Details of Statewise per capita availability of water are not available as surface water resources are estimated basin-wise.
- (b) Ground water is continuously being exploited due to growth in population, increased industrialization and irrigation as a result of which ground water levels in various parts of the Country are declining. 39% of the 13209 wells analyzed during pre-monsoon 2014, as compared to mean pre-monsoon (2004 to 2013) show a fall in groundwater level. The replenishable ground water resources, assessed by Central Ground Water Board (CGWB) are around 433 Billion Cubic Metres (BCM) and net annual ground water availability is 398 BCM. State/UT-wise details are given at Annexure-I. Contdâ€|p/2

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- (c) A Central Sector Scheme of 'Ground Water Management & Regulation' is operational for regulating the development of ground water. A component of Aquifer Mapping and Management Programme has been included in the Scheme during XII Plan for quantitative and qualitative characterisation of aquifers and development of aquifer-wise management plans. The total actual expenditure made under the Scheme during the last Plan Period and current Plan Period, years-wise is given at Annexure –II. CGWB had also undertaken a component of Demonstrative Rain Water Harvesting and Artificial Recharge Project during XI Plan under the above Scheme in priority areas. The project aimed at facilitating State Governments for replicating recharge projects in similar hydrogeological environment. During the XI Plan, 133 demonstrative recharge projects costing Rs. 99.87 crore were approved for construction of artificial recharge structures in 22 States. The component has been discontinued during the XII Plan period. However, funds are being released for spill over projects during XII Plan. State-wise and year-wise funds allocated & released for construction of recharge structures, during last and current Plan Period are given at Annexure-III.
- (d) A National Inter-departmental Steering Committee (NISC) has been constituted under the Chairmanship of Secretary, MoWR, RD &GR with members from concerned State Governments, representatives of Central Government departments and NITI Aayog, for sustainable ground water management as well as Aquifer Mapping and Management programme.
- (e) The Demonstrative Rain Water Harvesting and Artificial Recharge Projects under the Scheme of "Ground Water Management & Regulation" was operative only during XI Plan. The proposals received after XI Plan from States including Gujarat were not considered.
- (f) CGWB has taken up Aquifer Mapping and Management programme during XII Plan, under the scheme of Ground Water Management and Regulation. The Aquifer Mapping is aimed to delineate aquifer disposition and their characterization for preparation of aquifer/area specific ground water management plans. These management plans will be shared with the respective State Governments for community involvement. CGWB has also prepared a conceptual document entitled "Master Plan for Artificial Recharge to Ground Water in India" during the year 2013, which envisages construction of 1.11 crore rain water harvesting and artificial recharge structures in the Country, at an estimated cost of Rs. 79,178 crores to harness 85 BCM (Billion Cubic Metre) of water, in an area of 9,41,541 sq.km by harnessing surplus monsoon runoff to augment ground water resources. The Master Plan has

been circulated to all State Governments for implementation. The National Water Policy (2012), has been formulated by Ministry of Water Resources, RD & GR which, inter-alia, advocates conservation, promotion and protection of water and highlights the need for augmenting the availability of water through direct use of rainfall. The National Water Policy (2012) has been forwarded to all State/UT Governments and concerned Ministries/ Departments of Central Government for appropriate action. A National Water Mission has also been set up to, inter-alia, promote conservation of water resources.

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#### ANNEXURE - I

Annexure referred in reply to Lok Sabha Unstarred Question No. 629 to be answered on 23.07.2015 regarding "Depletion in Groundwater level"

State-Wise Ground Water Resources Availability and Stage of Development (Assessment Year 2011)

#### BCM A Billion Cubic Metre

S.No. States / Union Territories Total Annual Replenishable Ground Water Resource Net Annual Ground Water Availability Stage of Ground Water Development

12345

BCM/yr BCM/yr (%)

1 Andhra Pradesh 20.7892 18.8828 37

2 Telangana 15.0983 13.6845 54.8

3 Arunachal Pradesh 4.5100 4.0600 0.08

4 Assam 28.5200 25.7900 14

5 Bihar 29.3350 26.8645 44

6 Chhattisgarh 12.4200 11.6300 35

7 Delhi 0.3105 0.2871 137

8 Goa 0.2424 0.1454 28

9 Gujarat 18.5686 17.5854 67

10 Haryana 10.7800 9.7900 133

11 Himachal Pradesh 0.5590 0.5310 71

12 Jammu & Kashmir 4.2512 3.8261 21

13 Jharkhand 6.3100 5.7600 32

14 Karnataka 17.0266 14.8132 64

15 Kerala 6.6864 6.0730 47

16 Madhya Pradesh 35.0406 33.2886 57

17 Maharashtra 33.9474 32.1509 53

18 Manipur 0.4401 0.3961 1.02

19 Meghalaya 1.7805 1.6034 0.08

20 Mizoram 0.0304 0.0274 3.52

21 Nagaland 0.6159 0.5543 6.13

22 Odisha 17.7768 16.6910 28

23 Punjab 22.5300 20.3200 172

24 Rajasthan 11.9414 10.8289 137

25 Sikkim\* - 0.0440 26

26 Tamil Nadu 21.5326 19.3793 77

27 Tripura 2.5866 2.3580 7

28 Uttar Pradesh 77.1900 71.6600 74

29 Uttarakhand 2.0403 1.9954 57

30 West Bengal 29.2511 26.5823 40

Total (States) 432.1109 397.6026 62

Union Territories

1 Andaman & Nicobar 0.3080 0.2864 4.44

2 Chandigarh 0.0216 0.0194 0

3 Dadra & Nagar Haveli 0.0622 0.0591 22

4 Daman & Diu 0.0181 0.0169 97

5 Lakshadweep 0.0105 0.0035 67

6 Puducherry 0.1893 0.1703 90

Total (UTs) 0.6097 0.5556 36

Grand Total 432.7206 398.1582 62

\*Note: Net ground water availability in Sikkim has been estimated based on spring discharge and is not reflected in the corresponding column of total annual replenishable resource (column no.3). This results in a difference of 0.044 BCM in the State Total and Grand Total.

#### ANNEXURE - II

Annexure referred in reply to Lok Sabha Unstarred Question No. 629 to be answered on 23.07.2015 regarding "Depletion in Groundwater level"

YEAR-WISE EXPENDITURE UNDER GROUND WATER MANAGEMENT & REGULATION SCHEME

DURING XI AND XII PLAN

XI Plan XII Plan

Year 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15

Expenditure

(Rs. in Crore) 48.15 54.38 68.91 81.05 119.76 108.34 78.34 124.89

#### ANNEXURE - III

Annexure referred in reply to Lok Sabha Unstarred Question No. 629 to be answered on 23.07.2015 regarding "Depletion in Groundwater level"

State-Wise and Year-Wise Approved Cost and Funds Released during Last and Current Plan Period under the Demonstrative Rain Water Harvesting and Artificial Recharge Projects

(Rs. in Lakh)

S.No Name of

States / UTs Year 2008-09 Year 2009-10 Year 2010-11 Year 2011-12 Year 2012-13 Year

2013-14 Year 2014-15 Total

XI Plan\*\* XII Plan

Approved Cost Released Funds Approved Cost Released Funds Approved Cost Released Funds Approved Cost Released Funds Spill over 2ndInstalment Released Approved Cost Released Funds

- 1 Andhra Pradesh 130.02 91.01 39.01 130.02 130.02
- 2 Arunachal Pradesh 259.67 77.90 103.87 233.44 227.61 83.73 493.11 493.11
- 3 Bihar 96.01 67.21 28.80 96.01 96.01
- 4 Chandigarh 776.03 543.22 231.30 776.03 774.52
- 5 Chhattisgarh 268.80 150.40 108.45 268.80 258.85
- 6 Delhi 43.44 30.41 13.03 43.44 43.44
- 7 Gujarat 316.24 221.37 44.86 20.42 316.24 286.65
- 8 Himachal Pradesh 250.02 165.14 83.34 1.53 250.02 250.02
- 9 Jammu & Kashmir 143.47 91.28 16.66 28.76 143.47 136.70
- 10 Jharkhand 16.49 11.54 174.86 122.40 67.07 4.95 191.35 205.96
- 11 Karnataka 109.16 76.41 96.59 67.61 382.35 303.00 33.46 107.62 588.09 588.09
- 12 Kerala 39.05 11.72 10.82 55.09 55.07 4.05 94.14 81.65
- 13 Madhya Pradesh 431.86 302.30 429.05 331.07 38.75 60.75 860.91 732.88
- 14 Maharashtra 15.15 10.61 4.55 15.15 15.15
- 15 Nagaland 224.14 141.34 82.80 224.14 224.14
- 16 Odisha 464.36 325.04 139.32 464.36 464.36
- 17 Punjab 179.45 53.84 80.88 56.62 260.33 110.46
- 18 Rajasthan 404.78 235.06 10.28 38.80 58.62 404.78 342.76
- 19 Tamil Nadu 111.00 33.30 415.35 368.45 0.00 112.61 12.00 526.35 526.35
- 20 Telangana 75.18 52.64 368.21 255.03 135.71 443.39 443.39
- 21 Uttar Pradesh 720.06 504.44 1060.64 728.50 1505.53 1269.49 451.68 3286.23 2954.11
- 22 West Bengal 111.09 33.33 44.44 33.33 111.09 111.09

TOTAL 700.26 210.08 1374.59 1040.31 2788.18 2096.91 5124.42 4015.66 406.89 733.82 766.03 9987.44 9269.70