

**Depletion of ground water**

601. SHRIMATI VASANTHI STANLEY: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the Ministry has conducted any study on the depleting level of ground water in the country recently;

(b) what are the steps the Ministry is taking to increase the ground water level; and

(c) whether Government has been successful in achieving 100 per cent rain water harvesting in Government buildings?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI VINCENT PALA): (a) Central Ground Water Board under Ministry of Water Resources regularly monitors ground water levels on regional scale through a network of 14966 observation wells located all over the country four times a year during the months of January, April/May, August and November. Analysis of long term water level data collected by Central Ground Water Board for the period May 2001 - May, 2011 has indicated that 43 % of the observation wells monitored throughout the country have registered decline in ground water levels and the remaining 57 % of the wells have registered rise.

(b) Various steps taken by Government to promote rain water harvesting and artificial recharge are as under:

- Ministry of Water Resources has circulated 'Model Bill' to enable States/Union Territories to enact suitable legislation for regulation and control of ground water development, which provides for making roof top rain water harvesting mandatory. So far as 11 States/Union Territories 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 (CGWB) has been implementing pilot/demonstrative projects 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.
- A concept report titled 'Master Plan for Artificial Recharge to Ground Water' has been prepared, which has identified a total of 4.5 lakh sq.km. area in the country needing artificial recharge of ground water. It has been estimated that annually about 36 bcm of surplus monsoon runoff can be recharged to augment ground water. The document has been circulated to all the States/UTs.
- 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 the concept of artificial recharge among stakeholders as well as water managers.
- 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).

(c) State wise details are given in Statement

**Statement**

*Various steps taken by State Governments for installation of rain water harvesting structures in Government buildings.*

| Sl.No. | States        | Steps taken by State Governments  |
|--------|---------------|---|
| 1.     | Bihar         | PHED installed rain water harvesting on 979 Government buildings.   |
| 2.     | Chhattisgarh  | PHED has installed rain water harvesting structures in 36 buildings.<br>PWD has installed rain water harvesting in 352 buildings.   |
| 3.     | Daman and Diu | PWD has installed rain water harvesting structures in 39 Government buildings   |
| 4.     | Delhi         | <ul style="list-style-type: none"> <li>• All Govt. departments advised to adopt rain water harvesting and waste water recycling system.</li> <li>• Education Department is implementing rain water harvesting in all schools under their control.</li> <li>• NDMC, MCD, DDA, PWD sanctioning plan by including rain water harvesting and also implementing rain water harvesting in their buildings.</li> </ul> |
| 5.     | Gujarat       | R and B Department, Govt. of Gujarat has made rain water harvesting mandatory for new Govt. building projects since July, 2003.   |

| Sl.No. | States           | Steps taken by State Governments  |
|--------|------------------|---|
|        |                  | About 8700 Govt. buildings including existing as well as new, are covered with rain water harvesting facility.  |
| 6.     | Haryana          | <p>HUDA has installed roof top rain water harvesting on 50 Government buildings.</p> <p>PHED installed rain water harvesting in 12 Government buildings.</p> <p>Under Accelerated Recharge of Groundwater scheme implemented scheme of Govt. of Haryana, Agriculture Department has installed 404 rain water harvesting structures on Government buildings.</p>         |
| 7.     | Himachal Pradesh | <ul style="list-style-type: none"> <li>• Provision of rain water harvesting made mandatory in all buildings in Municipal areas,</li> <li>• All Government departments directed to construct roof top rain water harvesting structures in Government buildings.</li> <li>• Education department asked to construct roof top rain water harvesting structures.</li> </ul> |
| 8.     | Jharkhand        | 110 structures installed by State Ground Water Department   |
| 9.     | Kerala           | <p>Kerala Rural Water Supply and Sanitation Agency : 663</p> <p>Public works Department: 166</p> <p>State Ground Water Department: 23</p>   |
| 10.    | Madhya Pradesh   | More than 3000 structures installed by PHED in rural areas.   |
| 11.    | Puducherry       | Installed on 150 Government buildings by UT Administration.   |
| 12.    | Punjab           | <p>PHED has installed rooftop rain water harvesting on 12 Government buildings.</p> <p>PUDA installed rain water harvesting structures in 5 Govt. buildings and have planned to install such structures in two more buildings.</p>  |
| 13.    | Rajasthan        | 36 rain water harvesting structures have been constructed in all Rajasthan Housing Board Buildings.   |
| 14.    | Tamil Nadu       | <ul style="list-style-type: none"> <li>• As per information provided by Chennai Metropolitan Water Supply and Sewerage Board, there are 2987 Govt. buildings in Chennai City and rain water harvesting system has been installed in all the buildings.</li> </ul>   |

| Sl.No. | States        | Steps taken by State Governments   |
|--------|---------------|--|
|        |               | <ul style="list-style-type: none"> <li>All the Government buildings both of Centre and State have been provided with roof top rain water harvesting structures.</li> </ul>   |
| 15.    | Uttar Pradesh | <ul style="list-style-type: none"> <li>In Govt. Buildings (both new as well as old), installation of rain water harvesting structures has been made mandatory.</li> <li>Rain water harvesting installed on 743 Primary Schools by UP Jal Nigam.</li> </ul>   |
| 16.    | Uttarakhand   | Roof top rain water harvesting structures constructed by State Government in 4 Govt. buildings   |
| 17.    | West Bengal   | <ul style="list-style-type: none"> <li>State Water investigation Dte. has constructed rain water harvesting structures in 19 government buildings.</li> <li>PHED has installed rain water harvesting structures in 24 buildings.</li> <li>Pollution Control Board has installed rain water harvesting structures in 50 schools and 1 college in collaboration with various government and non-government agencies funded by WBPCB.</li> <li>WBPCB has played a promotional role for installation of rain water harvesting structures in another 32 schools in different parts of the State.</li> </ul> |

#### Interlinking or rivers

602. SHRIMATI KUSUM RAI: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether Government has decided to interlink major rivers in the country, in view of the recent judgment of Supreme Court;

(b) if so, the details thereof including the number of such rivers proposed to be connected, so far;

(c) the details of the budgeted expenditure on linking of rivers; and

(d) by when all the rivers would be linked?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI VINCENT PALA): (a) and (b) The certified copy of the recent Judgment of the Hon'ble Supreme Court in this regard has so far not been received in Ministry of Water Resources. The Ministry of Water Resources (MoWR) (erstwhile Ministry of Irrigation) had formulated a National Perspective Plan (NPP) for Water Resources Development as early as 1980 envisaging inter-basin transfer of water from surplus basins to deficit basins/areas which comprises two components, namely, Himalayan