

GOVERNMENT OF INDIA  
MINISTRY OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGA REJUVENATION  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 356**  
ANSWERED ON 19.07.2018

**PER CAPITA AVAILABILITY OF WATER**

356. SHRI MD. BADARUDDOZA KHAN

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

- (a) whether World Bank has indicated that by 2030 India's per capita water availability may shrink to half and push the country into water scarce category from the existing water stress category;
- (b) if so, the details thereof;
- (c) whether the Government has taken any new initiative/measures to overcome the existing water shortage problems in many States and to be ready for future; and
- (d) if so, the details thereof?

**ANSWER**

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION & PARLIAMENTARY AFFAIRS

(SHRI ARJUN RAM MEGHWAL)

(a) & (b) The World Bank has informed that they have not conducted any independent analysis to estimate current or projected per capita water availability in India and such information is typically drawn from reputable sources including Government of India and Food and Agriculture Organization.

The average annual water availability of any region or country is largely dependent upon hydro-meteorological and geological factors and is generally constant. As per National Commission on Integrated Water Resources Development (NCIWRD) report, the total water availability of India received through precipitation is about 4000 Billion Cubic Meter (BCM) per annum. After evaporation, 1869 BCM water is available as natural runoff. Due to geological and other factors, the utilizable water availability is limited to 1137 BCM per annum comprising 690 BCM of surface water and 447 BCM of replenishable ground water.

However, water available per person is dependent on population of the country and for India; water availability per capita is reducing progressively due to increase in population. The average annual per capita water availability in the years 2001 and 2011 was assessed as 1820 cubic meters and 1545 cubic meters respectively which may reduce further to 1340 and 1140 in the years 2025 and 2050 respectively. Annual per-capita water availability of less than 1700 cubic meters is considered as water stressed condition, whereas annual per-capita water availability below 1000 cubic meters is considered as a water scarcity condition. Due to high temporal and spatial variation of precipitation, the water availability of many region of the country is much below the national average and can be considered as water stressed / water scarce. Further, it is projected that in the year 2050, the country's total water demand is estimated at 1180 BCM, outstripping the total availability of 1137 BCM.

(c) & (d) Water being a State subject, steps for augmentation, conservation and efficient management of water resources to ensure sustainability and availability are primarily undertaken by the respective State Governments. In order to supplement their efforts, Central Government provides technical and financial assistance to State Governments through various schemes and programmes. Central

Government has taken various steps to tackle water crisis through various schemes like Pradhan Mantri Krishi Sinchayee Yojana, Accelerated Irrigation Benefits Programme, Repair, Renovation & Restoration of water bodies, implementation of new projects like Pancheshwar Dam, Polavaram Project, Interlinking of Rivers Project, Dam Rehabilitation & Improvement Project, etc. Additionally, non-structural measures have also been taken through the development and augmentation of National Hydrology Project, Flood Forecasting Stations, Hydrological Observation Stations, etc. Details of some of the schemes/programmes are given below:

- Central Government launched Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) in 2015-16 which aims to enhance physical access of water on farm and expand cultivable area under assured irrigation, improve on farm water use efficiency, introduce sustainable water conservation practices, etc., thus bringing much desired rural prosperity. It envisages end to end solution in irrigation supply chain viz. water resources, distribution, efficient application and extension services.
- During 2016-17, 99 on-going Major/Medium irrigation projects under PMKSY-Accelerated Irrigation Benefits Programme (AIBP) having potential of 76.03 lakh ha.were prioritized in consultation with States, for completion in phases up to December, 2019 along with their Command Area Development & Water Management (CADWM) works. The CADWM programme has been taken up to enhance utilization of irrigation potential created and improve agriculture production on a sustainable basis through Participatory Irrigation Management (PIM).
- The Government of India has also formulated a National Perspective Plan (NPP) for Water Resources Development which envisages transfer of water from surplus basins to water deficit basins. The inter-basin transfer proposals envisage additional utilization of available water to bring additional area under irrigation.
- Central Government has formulated National Water Policy (NWP), 2012 which inter-alia recommends conservation, promotion and protection of water and highlights the need for augmenting the availability of water through rain water harvesting, direct use of rainfall and other management measures. The NWP, 2012 has been sent to all States/ Union Territories and the concerned Central Ministries for appropriate action.
- Central Ground Water Board (CGWB) has prepared a conceptual document titled “Master Plan for Artificial Recharge to Ground Water – 2013” which provides information about area specific artificial recharge techniques to augment the ground water resources based on the availability of source water and capability of subsurface formations to accommodate it. The Master Plan envisages construction of about 1.11 crore artificial recharge structures in urban and rural areas. The Master Plan is available in public domain and has also been circulated to the State Governments for its implementation.
- CGWB has taken up Aquifer Mapping and Management programme (NAQUIM) 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.
- Government has proposed ‘Atal Bhujal Yojana (ABHY)’ with the aim to improve ground water management in select over-exploited and ground water stressed areas in identified priority States (Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh) through implementation of various interventions to ensure long-term sustainability of ground water resources with community participation.