GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 1242
ANSWERED ON 09.02.2017

WATER SECURITY

1242. SHRI BADRUDDIN AJMAL

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

(a) whether due to lack of proper security measure for water it is becoming a scarce commodity in various parts of the country which may result in crisis for food production;

(b) if so, the details of the cities/places where availability of water is less than requirement; and

(c) the measures taken by the Government to ensure the water security?

ANSWER

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

(DR. SANJEEV KUMAR BALYAN)

(a) & (b) The average annual water availability of any region or country is largely dependent upon hydro-meteorological and other 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 topographical and other factors, the utilizable water availability is limited to 1123 BCM per annum, comprising of 690 BCM of surface water and 433 BCM of replenishable ground water.

In view of growing population, the per capita water availability in India is reducing progressively. 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 1341 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. Further, total water requirement for irrigation purpose in the country for the years 2025 and 2050 are estimated to be 311 BCM and 807 BCM respectively.

River basin being the natural hydrological unit, total water resources availability is assessed river basin wise. The details of the basin-wise average annual water resources availability (or potential) assessed by Central Water Commission in 1993 is at **Annexure I.**

Contd. P2/-

(c) Water being a State Subject, State Governments undertake several measures for augmenting, conserving and utilizing water resources which inter-alia include conservation of water resources in reservoirs and traditional water bodies, rain water harvesting and artificial recharge of ground water. This Ministry provides technical and financial assistance to the State Governments through various schemes and programmes viz. Accelerated Irrigation Benefits Programme, Scheme for Repair, Renovation & Restoration of Water-bodies etc.

Some of such initiatives taken by Central Government to ensure water security are as follows:

- A National Perspective Plan (NPP) envisaging inter-basin transfer of water has been formulated by this Ministry to improve water security in the country. The implementation of NPP would give added benefits of approximately 35 million hectare of additional irrigation potential, 34000 mega watts (MW) hydro power generation, flood moderation, navigation, drinking and industrial water supply, fisheries, salinity and pollution control etc.
- Central Ground Water Board, under this Ministry has prepared a conceptual document entitled "Master Plan for Artificial Recharge to Ground Water in India" during the year 2013 envisaging construction of 1.11 crore Rainwater Harvesting and Artificial Recharge structures in the country to harness 85 BCM (Billion Cubic Meters) of water. The augmented ground water resources will enhance the availability of water for drinking, domestic, industrial and irrigation purposes. The Master Plan has been circulated to all State Governments for implementation.
- Central Government has launched the National Water Mission with the objective of conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management. One of the goals of National Water Mission is increasing water use efficiency by 20%.
- Improved water use efficiency in different sectors such as in irrigation (through micro-irrigation, e.g., drip, sprinkler etc.), industry and households is being encouraged through various initiatives, programmes/ schemes of the Government.
- Central Government has launched Pradhan Mantri Krishi Sinchai Yojana (PMKSY) with the vision of extending the coverage of irrigation **'Har Khet ko Pani'** and improving water use efficiency **'More crop per drop'** in a focused manner with end to end solution on source creation, distribution, management, field application and extension activities.
- Water conservation and water harvesting structures to augment ground water constitute a special focus area for MGNREGA works and about 2/3rd of the expenditure is directly related to construction of such structures.
- Recycle and reuse of water, after treatment to specified standards, rainwater harvesting and artificial recharge are being incentivized through various initiatives, programmes/ schemes of the Government.
- This Ministry has launched Jal Kranti Abhiyan (2015-16 to 2017-18) in order to consolidate water conservation and management in the country through a holistic and integrated approach involving all stakeholders, making it a mass movement.

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Annexure-I

(Annexure referred to in reply to parts (a) & (b) of the Lok Sabha Unstarred Question No. 1242 to be answered on 09.02.2017 regarding "Water Security")

WATER RESOURCES AVAILABILITY (POTENTIAL) OF RIVER BASINS OF INDIA (YEAR 1993)

Sl. No.	**River Basin**	**Average Water Resources Potential** (In Billion Cubic Meter)
1	Indus	73.3
2	Ganga-Brahmaputra-Meghna	
	(a) Ganga	525.0
	(b) Brahmaputra	537.2
	(c) Barak & others	48.4
3	Godavari	110.5
4	Krishna	78.1
5	Cauvery	21.4
6	Subernarekha	12.4
7	Brahmani-Baitarni	28.5
8	Mahanadi	66.9
9	Pennar	6.3
10	Mahi	11.0
11	Sabarmati	3.8
12	Narmada	45.6
13	Tapi	14.9
14	West Flowing Rivers from Tapi to Tadri	87.4
15	West Flowing Rivers from Tadri to Kanyakumari	113.5
16	East Flowing Rivers between Mahanadi and Pennar	22.5
17	East Flowing Rivers between Pennar & Kanyakumari	16.5
18	West Flowing Rivers of Kutch and Saurashtra including Luni	15.1
19	Area of Inland Drainage in Rajasthan	Negligible
20	Minor Rivers draining into Myanmar (Burma) and Bangladesh	31.0
	Total	**1,869.4**