

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 2302

ANSWERED ON 16.12.2024

FLOODS IN THE COUNTRY

2302. SHRI AKHILESH PRASAD SINGH

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) the details regarding the floods in the country during the last five years, year-wise, region-wise;
- (b) whether Government has details regarding the floods during the last five years caused due to dams;
- (c) if so, the details thereof;
- (d) whether it is a fact that the country has 5745 dams of which 293 are more than 100 years old and 25 per cent of the dams are between 50 to 100 years old; and
- (e) if so, the details regarding the steps taken to make the dams better equipped to respond to climate change?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (c) Floods are primarily a natural calamity that India faces almost every year, in varying degrees of magnitude. Central Water Commission (CWC) is the nodal organisation for flood forecasting and flood monitoring in the country. CWC maintains two types of forecasting stations that operates across the country viz. Level Forecast and Inflow Forecast. The level forecasts help local administration and other agencies to decide on mitigating measures, such as evacuating people and their movable property to safer locations.

One of the functions of dams is to cater flood mitigation by providing flood cushion and regulating the flood intensity with the help of inflow forecast. CWC issues inflow forecast for various reservoirs and dams, once inflow exceeds a certain threshold value. This is used by project authorities for the optimum operation of reservoirs to ensure safe passage of floodwaters downstream and to ensure adequate storage in the reservoirs for meeting demand during the non-monsoon period.

As per CWC network, the details of Extreme floods (water level exceeding the previous highest flood level) in the last five years is given at **Annexure**.

(d) & (e) As per National Register of Large Dams (NRLD-2023 edition), compiled jointly by National Dam Safety Authority (NDSA) and CWC, there are 6138 constructed and 143 under construction dams which aggregate to total of 6281 large dams. Of these numbers, only 224 dams are

more than 100 years old and there are 1065 large dams which are 50 to 100 years old. The details of these large dams are available at <http://cwc.gov.in/publication/nrld>.

Further, Government of India has enacted Dam Safety Act, 2021. The act provides for the surveillance, inspection, operation, and maintenance of the specified dam for the prevention of dam failure-related disasters and to provide for institutional mechanisms to ensure their safe functioning and for matters connected therewith or incidental thereto.

Under the Act, two institutions at each Central (NCDS and NDSA) and State Level (SCDS and SDSO) has been established to monitor and safe upkeep of specified dams. To be better equipped to respond to climate change related dam safety issues, there is mandatory provision of Design Flood Review (DFR) of specified dams under section 38 of Dam Safety Act. Based on the revised value of DFR, the possible structural or non-structural measures are taken by dam owners for safe operation of dams.

As per notified regulations of National Dam Safety Authority: "The design flood review referred to in clause (b) of sub-section (2) of section 38 of the Act shall be carried out every ten years or such lesser period as may be determined by the National Dam Safety Authority".

Further, as per section 35 of Dam Safety Act, owner of the dam has mandatory obligation for establishment and running of the Early Warning System (EWS) for the exchange of real time hydrological and meteorological data and information related to the operation of reservoirs.

Further, DoWR, RD & GR, MoJS through CWC is implementing externally funded scheme DRIP Phase-II and III for rehabilitation of 736 selected dams of 19 States and 3 Central Agencies. Under the scheme, there is mandatory pre-requirement of Design Flood Review of dam before preparation of any rehabilitation works based on the inspection visit.

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (c) OF UNSTARRED QUESTION NO. 2302 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “FLOODS IN THE COUNTRY”.

Flood Forecasting Stations which experienced Extreme Flood Situation for the period 2020-2024

Year	State	District	River	Flood Forecasting Station
2020	Assam	Sivasagar	Dikhow	Sivasagar
	Bihar	Gopalganj	Gandak	Dumariaghat
		Muzzafarpur	Gandak	Rewaghat
		Samastipur	BurhiGandak	Rosera
	Odisha	Balasore	Jalaka	Mathani Road Bridge
	Andhra Pradesh	East Godavari	Sabri	Chinturu
	Karnataka	Gulbarga	Bhima	Deongaon Bridge
2021	Bihar	Patna	Ganga	Hatidah
		Bhagalpur	Ganga	Bhagalpur
	Uttar Pradesh	Auraiya	Yamuna	Auraiya
		Buduan	Ganga	Kachlabridge
		Siddharthnagar	Rapti	Bansi
	Odisha	Balasore	Jalaka	Mathani Road Bridge
	West Bengal	Coochbehar	Teesta	Mekhliganj(R/B)
Andhra Pradesh	Nellore	Pennar	Nellore Anicut	
2022	Assam	Nagaon	Kopili	Kampur
	Bihar	Kishanganj	Mahananda	Taibpur
		Supaul	Kosi	Basua
		Siwan	Ghagra	Darauli
	Telangana	Bhupalpally	Godavari	Kaleswaram
		Kumarambheem	Wardha	Sirpur(T)
	Andhra Pradesh	AlluriSitharamaraju	Sabri	Chinturu
	Rajasthan	Karauli	Chambal	Manderial
		Dholpur	Chambal	Dholpur
	Uttar Pradesh	Balrampur	Rapti	Balrampur
Siddharthnagar		Rapti	Bansi	
2023	NCT Delhi	North Delhi	Yamuna	Delhi Railway Bridge
	Uttar Pradesh	Budaun	Ganga	Kachlabridge
	Assam	Sivasagar	Dikhow	Sivasagar
	Telangana	Kumurambheem	Wardha	Sirpur Town
	Sikkim	South Sikkim	Teesta	Melli
2024 (till October)	Assam	Jorhat	Brahmaputra	Neamatighat
		Sonitpur	Jiabharali	Jia-Bharali NT Road Crossing
		Sivasagar	Dikhow	Sivasagar
		Dibrugarh	Buridehing	Khowang
Bihar	Sitamarhi	Bagmati	Dheng Bridge	
	Muzzafarpur	Bagmati	Runisaidpur	
