GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 2002

ANSWERED ON 07.08.2023

DAMS AND NATIONAL HYDROLOGY PROJECT

2002. SHRI BINOY VISWAM

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the number of dams operational across the country, State-wise details with capacity;
- (b) whether it is the role of Government to provide technical assistance in managing dams;
- (c) the fund sanctioned and utilised under the National Hydrology Project (NHP);
- (d) the number of instances wherein Government has issued a warning based on flood forecasting under NHP, and details thereof; and
- (e) the lists of training programmes provided to State Governments to manage flood-prone areas under NHP?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

- (a) As per the National Register of Large Dams compiled by the Central Water Commission, India has 5745 nos. of dams (5334 are completed and 411 are under construction stage). The State/UT-wise list of these large dams and total Gross capacities is enclosed as **Annexure-I**.
- (b) To safeguard the dams across the country, Dam Safety Act, 2021 has been enacted by the Union Government for proper surveillance, inspection, operation and maintenance of the specified dams. The Act aims for preventing dam failure related disasters and provide for institutional mechanism to ensure their safe functioning and for matters connected therewith or incidental thereto. As per the provisions of the Act; at national level, National Committee on Dam Safety (NCDS) has been constituted, whose functions inter alia are to evolve dam safety policies and recommend necessary regulations. Under this Act, a regulatory body i.e. National Dam Safety Authority has also been created, whose functions inter alia include implementing policies of the National Committee, providing technical assistance to State Dam Safety Organisations (SDSO), and resolving matters between SDSOs of States or between a SDSO and any dam owner in that State and to maintain liaison with the State Dam Safety Organisations and the owners of the specified dams for standardization of dam safety related data and practices, and related technical or managerial assistance.

Further, at the State level, Act provides for the constitution/establishment of the State Committee on Dam Safety and State Dam Safety Organisation by the State Government for the purpose of maintaining standards of dam safety and prevention of dam failure related disasters for the dams located in the State. Further, State Dam Safety Organisation shall have to render its instructions to the owner of a specified dam on the safety or the remedial measures required to be taken.

- (c) The National Hydrology Project (NHP) was approved by the Union Cabinet on 23.06.2016 for a total outlay of Rs 3679.76 Crores. There are four major components of NHP *i.e.*, (i) Water Resources Monitoring System, (ii) Water Resources Information System, (iii) Water Resources Operations and Planning System, and (iv) Institutional Capacity Enhancement. Till date, the expenditure incurred under NHP for carrying out the various activities is Rs. 1438.96 Crores.
- (d) NHP only supports the studies related to flood forecasting taken up by the Implementing agencies.
- (e) The lists of training programmes provided to State Governments to manage flood-prone areas under NHP is enclosed as **Annexure-II**.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2002 TO BE ANSWERED IN RAJYA SABHA ON 07.08.2023 REGARDING "DAMS AND NATIONAL HYDROLOGY PROJECT".

Sl. No.	State/UT	No. of Constructed Large Dams	No. of Under construction Large dams	Gross Storage Capacity (in MCM) of constructed dams
1.	Andauman and Nicobar	2	0	15.275
2.	Andhra Pradesh	149	17	15,920.152
3.	Arunachal Pradesh	1	3	6.170
4.	Assam	3	1	245.300
5.	Bihar	24	2	984.088
6.	Chhattisgarh	249	9	8,982.918
7.	Goa	5	0	299.614
8.	Gujarat	620	12	32,134.258
9.	Haryana	1	0	13.681
10.	Himachal Pradesh	19	1	19,613.391
11.	Jammu & Kashmir and Ladakh	15	2	872.215
12.	Jharkhand	55	24	5,881.914
13.	Karnataka	230	2	37,309.958
14.	Kerala	61	0	16,522.931
15.	Madhya Pradesh	899	7	35,311.771
16.	Maharashtra	2117	277	50,474.807
17.	Manipur	3	1	98.570
18.	Meghalaya	8	2	403.169
19.	Mizoram	1	0	1,400.000
20.	Nagaland	1	0	565.000
21.	Odisha	200	4	32,529.840
22.	Punjab	14	2	3,369.674
23.	Rajasthan	204	8	16,515.735
24.	Sikkim	2	0	10.661
25.	Tamil Nadu	118	0	7,195.992
26.	Tripura	1	0	20,077.356
27.	Telangana	168	16	0.329
28.	Uttar Pradesh	117	13	19,058.124
29.	Uttarakhand	17	8	4,760.771
30.	West Bengal	30	0	1,787.795
	Total	5334	411	332361.459

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 2002 TO BE ANSWERED IN RAJYA SABHA ON 07.08.2023 REGARDING "DAMS AND NATIONAL HYDROLOGY PROJECT".

Sl.No.	Agency name	Training	Venue	Start Date	End Date
1	NWA	Flood forecasting and mike modelling	Online Training	19/04/2021	30/04/2021
2	NWA	purpose-oriented training program through distance learning on flood assets mapping using GIS	Webinar	31/05/2021	04/06/2021
3	Andhra Pradesh SW	Design Flood Studies - Hands on " training using relevant software	Vijayawada	07/02/2023	11/02/2023
4	Assam	Flood forecast,-data requirement and reliability & applicability in Flood modelling with specific reference to Brahmaputra	Assam Water Research and Management Institute, Basistha, Guwahati-29	21/06/2018	22/06/2018
5	Kerala SW	Design Flood Hydrograph calculation using HEC HMS	Board Room, IDRB, Thiruvananthapuram	10/02/2023	10/02/2023
6	Kerala SW	Capacity Buidling Program as part of "Development of Flood Forecasting & Early Warning System (FFEWS) for Periyar and Chalakkudy basins under National Hydrology Project"		05/12/2022	08/12/2022
7	Maharashtra SW	Yield and Flood Estimation	Maharashtra Engineering Training Academy Nashik.	12/11/2018	16/11/2018
8	Meghalaya	Impact of Climate Change, Flood Mitigation and Drought Vulnerability' under the Purpose Driven Study entitled â€~Study on behaviour of flooding and unexpected drought like situation in Garo Hills Districts of Meghalaya	All Saints Cathedral Hall, IGP Point, Shillong, Meghalaya	04/10/2021	08/10/2021
9	Meghalaya	Training on Flood Plain Zoning for Senior and Middle-Level Officers of WRD Meghalaya.	Seminar Hall, Office of the Chief Engineer Water Resources Department, Meghalaya.	24/02/2022	25/02/2022
10	Odisha	Flood Forecasting	H.P Administrative Building, Unit-VIII, Bhubaneswar	22/11/2021	22/11/2021
11	Tripura	Development of Flood Warning System for Agartala and Kailashahar in Tripura	Conference Hall of PWD(W.R)	22/06/2023	23/06/2023
12	NIH	Workshop on "Hydrologic Forecasting for Flood & Water Management Purposes from 6th	NIH, Roorkee	06/03/2017	09/03/2017

		March to 9th March, 2017 at NIH, Roorkee organized by Bureau of Meteorology, Australia			
13	NIH	Workshop on Role of Hydrology in Urban Flood Management	NATIONAL INSTITUTE OF HYDROLOGY KAKINADA	06/02/2023	08/02/2023
14	NIH	Flood Forecasting Modelling using HEC-RTS (Exclusively for Maharashtra and Kerala only)	Webinar	05/07/2021	16/07/2021
15	NRSC	meeting with Stake holders on Spatial Flood Early Warning in Godavari and Tapi basins	Virtual Meeting	22/06/2021	22/06/2021
16	CWC	Virtual Training on flood forecasting Module in WIMS	Webinar	15/03/2021	15/03/2021
17	CWC	Virtual Training on flood forecasting Module in WIMS	Webinar	22/03/2021	22/03/2021
18	CWC	Virtual Training on Flood Forecasting Module in WIMS on 15th Feb 2021	Webinar	15/02/2021	15/02/2021
19	CWC	Virtual Training on flood forecasting Module in WIMS	Webinar	19/02/2021	19/02/2021
20	CWC	Virtual Training on flood forecasting Module in WIMS	Webinar	22/02/2021	22/02/2021
21	CWC	Virtual Training on flood forecasting Module in WIMS	Webinar	01/03/2021	01/03/2021
22	CWC	Virtual Training on flood forecasting Module in WIMS	Webinar	04/03/2021	04/03/2021
23	CWC	Virtual Training on flood forecasting Module in WIMS	Webinar	08/03/2021	08/03/2021
24	CWC	Virtual Training on flood forecasting Module in WIMS	Webinar	12/03/2021	12/03/2021
25	CWPRS	Application of GIS & Numerical modeling in flood management	CWPRS, PUNE	22/06/2023	23/06/2023
26	DOWR	National Conference on Flood Early Warning for Disaster Risk Reduction	Hyderabad	30/05/2019	31/05/2019
27	DOWR	Flood Forecasting Modelling 1D by DHI	NWA Pune	23/10/2017	27/10/2017
28	DOWR	Flood Hydrology: Measurement to Modelling	NWA Pune	07/05/2018	11/05/2018
29	DOWR	Flood Forecasting using Mike Hydro River and Mike Operations	NWA, Pune	12/02/2018	16/02/2018
30	DOWR	5 days Flood Forecasting and MIKE Modeling	NWA, Pune	06/01/2020	10/01/2020
31	DOWR	A webinar on "Flood Management in India"	Webinar	25/09/2020	25/09/2020