GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 4666

ANSWERED ON 21.08.2025

WATER RESOURCE MANAGEMENT

4666. THIRU ARUN NEHRU:

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Government has undertaken any steps to assess and plan for climate risks related to water availability especially in Tamil Nadu and if so, the details thereof;
- (b) the role of river basin planning, aquifer mapping and data sharing in water management;
- (c) whether hydrological forecasting and early warning systems are being developed in vulnerable areas like Perambalur in Tamil Nadu and if so, the details thereof;
- (d) the manner in which inter-State coordination is being promoted for equitable water distribution; and
- (e) the manner in which integrated water resource management strengthens climate resilience and rural development?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

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

The Central Ground Water Board (CGWB), under the Ground Water Management and Regulation (GWMR) Scheme, is carrying out nationwide activities such as groundwater exploration, monitoring of water levels and water quality, and assessment of groundwater resources to understand the broader impacts of climate variability and change. CGWB in consultation with State Government has been conducting the Dynamic Ground Water Resource Assessment annually since 2022 including Tamil Nadu to provide updated estimates of groundwater availability, extraction, and allocation, which are essential for assessing the impact of rainfall variability, droughts, and other climate-related stresses on water resources.

Under National Water Mission (NWM), States & UTs have been asked to prepare their State Specific Action Plans (SSAPs). SSAPs aim to recognize climate risks and strengthen integrated water resources management in the context of climate change. Financial assistance of Rs. 50 lakhs to major States and Rs. 30 lakhs to minor States, along with technical guidance from NIH, Roorkee, and NERIWALM, Tezpur is being provided to the States. State of Tamil Nadu has prepared first component of SSAP i.e. Draft Status Report (DSR), which has been approved by the competent authority.

(b) River basin planning, aquifer mapping and data sharing play a crucial role in water management. River basin planning promotes holistic management of surface and groundwater. Aquifer mapping,

being undertaken through the National Aquifer Mapping and Management Programme (NAQUIM) of the Central Ground Water Board (CGWB), provides detailed information on the geometry, characteristics, and potential of aquifers. On the basis of these maps, scientific management plans are prepared, which recommend both supply-side interventions such as artificial recharge and demand-side measures such as efficient irrigation practices. These plans enable States and Union Territories to adopt region-specific strategies for water conservation and sustainable groundwater development. Data sharing builds trust among riparian states and stakeholders and enables early warning systems and coordinated responses.

(c) As a non-structural measure of flood management, Central Water Commission (CWC) issues short-range flood forecasts with a lead time up to 24 hrs to concerned State Governments at identified locations. CWC also monitors and issues inflow forecasts to identified reservoirs for proper reservoir regulation. Presently, flood forecasts are issued by CWC at 350 stations (150 Inflow Forecast Stations + 200 Level Forecast Stations) as per Standard Operating Procedure. The network has been established in consultation with State Govt. /Project authorities. The details list of flood forecast stations in Tamil Nadu is provided in **Annexure.** During flood season 2024, total 398 number of forecast (20 Level and 378 Inflow) were issued for the State Tamil Nadu.

In Perambalur district, a Hydrological Observation (H.O.) site is located at V. Kalathur on the Swetha Nadi, a tributary of the Vellar River. V.Kalathur station is base station to Wellington reservoir (inflow forecast station). In addition to that, the Venganur & Melakalpoondi H.O. Sites also act as base station to the wellington reservoir which is located in the district of Cuddalore adjoining to Perambalur district.

(d) Inter-State coordination is being promoted through legal and institutional frameworks for equitable water distribution. Parliament has enacted Inter-State River Water Disputes (ISRWD) Act, 1956 for adjudication of water disputes. When any request under the said Act is received from any State Government in respect of any water dispute on the inter- State rivers and the Central Government is of the opinion that the water dispute cannot be settled by negotiations, the Central Government constitutes a Water Disputes Tribunal for adjudication.

There are various Boards/Authorities such as Krishna River Management Board (KRMB), Godavari River Management Board (GRMB), Betwa River Board (BRB), Upper Yamuna River Board (UYRB), Cauvery Water Management Authority (CWMA) etc to address inter-state issues and coordination among basin States. Further, inter-State matters are also discussed in respective Zonal Council meetings. There is proper representation of States in Committees constituted by Government of India on water related matters.

(e) Integrated Water Resource Management (IWRM) is a holistic approach that integrates water, land, and ecosystem management to promote sustainability. Through detailed aquifer mapping under NAQUIM, CGWB prepares scientific and area-specific groundwater management plans. These management plans emphasize judicious use of groundwater and recommends both supply-side and demand-side interventions which States can adopt to improve local water security and sustainable ground water development and management. Similarly, the annual Ground Water Resource Assessments provide updated information on groundwater availability and stress conditions, allowing for timely planning to withstand the impacts of climate variability and decentralized planning.

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 4666 TO BE ANSWERED IN LOK SABHA ON 21.08.2025 REGARDING "WATER RESOURCE MANAGEMENT".

DETAILS OF CWC FLOOD FORECASTING STATIONS IN TAMILNADU

Central Water Commission (CWC) maintains 17 Flood Forecasting (FF) stations in Tamil Nadu. Out of 17 forecasting Stations, 04 are level forecasting stations and 13 are inflow forecasting stations in river Cauvery and its tributaries basin.

Flood Forecasting (FF) stations in Tamil Nadu			
Sl.No	.Name of the river	Name of FF site	District
1	2	3	4
	Forecast	ha iva	lent 4.1 441
1	Cauvery	Musiri(Srirangam)	Tiruchirappalli
2	Cauvery	Kodumudi (Erode)	Erode
3	Bhavani	Savandapur (Bhavani)	Erode
4	Vaigai	Madurai	Madurai
	w Forecast	ht D	g 1
1	Cauvery	Mettur Dam	Salem
2	Bhavani	Bhavanisagar Dam	Erode
3	Cauvery	Grand Anicut	Thanjavur
4	Cauvery	Upper Anicut	Tiruchirappalli
5	Vaigai	Vaigai Dam	Theni
6	Kosasthaliyar	Poondi Satyamurthy Resvr	Tiruvallur
7	Kodaganar	Kodaganar Dam	Dindugul
8	Vellar	Gomukhi Dam	Villupuram
9	Periyar Odai	Wellington Dam	Cuddalore (adjoining Perambalur district)
10	Ponnaiyar	Sathanur Dam	Tiruvannamalai
11	Adyar	Chembarampakkam Lake	Tiruvallur
12	Thamirabharoni	Manimuthar Dam	Tirunelveli
13	Thenprnnai	Krishnagiri dam	krishnagiri

Source: Central Water Commission
