GOVERNMENT OF INDIA MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

STARRED QUESTION NO. *161

ANSWERED ON 31.07.2025

FLOOD CONTROL IN KERALA

*161. ADV K. FRANCIS GEORGE

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Government has assessed the increased frequency and intensity of monsoon floods in Kerala during recent years including damage caused in districts such as Kottayam;
- (b) if so, the details thereof along with key findings on existing flood control infrastructure gaps;
- (c) whether any specific Central projects or financial assistance have been sanctioned during the last three years to strengthen river embankments, drainage systems and flood management infrastructure in Kerala; and
- (d) if so, the details of these projects along with their implementation status including financial allocation made, district-wise?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI C R PAATIL)

(a) to (d): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO. *161 TO BE ANSWERED ON 31.07.2025 IN LOK SABHA REGARDING "FLOOD CONTROL IN KERALA"

(a) to (d) Kerala has been experiencing varying degree of monsoon floods during recent years. Government of Kerala has informed that floods are often observed in western low-lying areas of Kottayam district especially in Kumarakom, Thiruvarpp and Aymanam Grama panchayaths. The flooding in eastern portion of Kottayam district occurred during the year 2018-2021 due to landslides associated with heavy rain falls and consequent silting up of rivers in this region. Flooding in the recent years have been caused from Meenachil, Muvattupuzha and Manimala rivers flowing through Kottayam district.

As per report of Central Water Commission on "Assessment of Area Affected Due to Floods in India (2024)" based on satellite imageries data from 1986 to 2022, the total flood affected areas in Kerala is assessed as 0.253 Mha and area protected through various steps taken for flood management by the Central/State Government is 0.346 Mha.

The district wise data on flood damages is not maintained centrally, however, state wise data on flood damages is compiled by Central Water Commission based on information received from concerned states. The flood damage data pertaining to Kerala for last 5 years i.e. 2018 to 2022 is given at **Annexure**.

Flood management and anti-erosion schemes are formulated and implemented by concerned State Governments as per their priority. The Union Government supplements the efforts of the States by providing technical guidance and promotional financial assistance for management of floods in critical areas. To strengthen the structural measures of flood management, Union Government had implemented Flood Management Programme (FMP) during XI & XII Plans for providing central assistance to States for works related to flood control, anti-erosion, drainage development, anti-sea erosion, etc. which is continued as a component of "Flood Management and Border Areas Programme (FMBAP)" during 2021-22 to 2025-26. In Kerala 4 Flood Management Schemes costing Rs 279.74 Crore were included under Central Sponsored scheme FMP/FMBAP during XI Plan. Till date central assistance amounting to Rs 137.95 Crore has been released against these 4 schemes.

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. In order to provide more lead time to the local authorities to plan evacuation of people & take other remedial measures, Central Water Commission (CWC) has developed basin wise flood forecasting model based on rainfall-runoff mathematical modelling for 7 days advance flood forecast advisory at identified flood forecasting and inflow forecasting stations. Central Water Commission maintains 06 Flood Forecasting stations in Kerala consisting of 4 level forecasting stations (Neeleswaram, Kumbidi, Malakkara & Muthankera) and 02 inflow forecasting stations (Idukki Reservoir & Idamalayar Reservoir).

The primary responsibility of disaster management rests with the State Government concerned. The Central Government supplements the efforts of the State Government and provides requisite logistics and financial support. The State Government undertakes assessment of damages caused due to 12 notified natural calamities including rain and floods and provide relief assistance from State Disaster Response Fund (SDRF) already placed at their disposal as per Government of India's approved norms. Additional financial assistance is provided from National Disaster Response Fund (NDRF), as per laid down procedure in case of disaster of 'severe nature' which includes an assessment based on the visit of an Inter-Ministerial Central Team (IMCT). The details of central share of SDRF released by Ministry of Home Affairs (MHA) during 2020-21 to 2024-25 is given as under:

Sl. No.	Year	Fund released under SDRF by MHA					
		(in Crore)					
1	2020-21	251.20					
2.	2021-22	251.20					
3.	2022-23	264.00					
4.	2023-24	277.60					
5.	2024-25	291.20					
	Total	1335.20					

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (d) OF LOK SABHA STARRED QUESTION NO. *161 TO BE ANSWERED ON 31.07.2025 REGARDING "FLOOD CONTROL IN KERALA"

STATEMENT SHOWING FLOOD DAM AGE DURING 2018 TO 2022

		Area		Dama	ge to	Damage			Human	Damage	
Sl. No.	Year		Popul	Crops	T	Houses	1		lives lost	to	damages
		d in (M.ha.)	ation affecte d in	(M.ha.	Value (Rs. Crore)	Nos.	Value	lost nos.	nos.		crops, houses& public utilities
			(millio n)								(Rs.Crore)
1	2	3	4	5	6	7	8	9	10	11	12
1	2018	3.15	5.41	0.09	168.48	324386	998.13	47953	450	2154.15	3320.76
2	2019	0.01	0.11	0.01		16543		11338	301		
3	2020	0.01	0.11	0.01		14016	0.00	2	14	0.00	0.00
4	2021	0.59	0.04	0.19	9256.30	9771	NR	NR	131	NR	9256.30
5	2022		0.15	0.11		2216		161	109		

NR- Not Reported
