

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 1817

ANSWERED ON 05.12.2024

STRENGTHEN FLOOD MANAGEMENT IN BIHAR

1817. SHRI SUDHAKAR SINGH

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

- (a) the steps taken/being taken by the Government to strengthen flood management in Bihar given its recurrent vulnerability to severe flooding;
- (b) the status of ongoing flood control projects in Bihar along with the specific measures taken/proposed to be taken by the Government to protect districts like Buxar, Darbhanga and Muzaffarpur facing frequent flood devastation;
- (c) whether the Government has conducted any studies or assessments on the effectiveness of existing flood management infrastructure such as embankments and drainage systems in Bihar and if so, the details thereof;
- (d) whether the Government has taken any new initiatives or planned collaborations with the State Government of Bihar to enhance early warning systems, disaster preparedness and the resilience of communities in flood-prone areas and if so, the details thereof; and
- (e) the strategy adopted by the Government for long-term flood mitigation in Bihar especially in the context of climate change and its impact on river systems in the region?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (c) Flood management projects are formulated and implemented by concerned State Governments from own resources as per their priority. The Union Government supplements the efforts of the States by providing technical guidance and also promotional financial assistance for management of floods in critical areas.

To strengthen the structural measures of flood management, Ministry had implemented during XI & XII Plan Flood Management Programme (FMP) for providing Central Assistance to States for works related to river management, flood control, anti-erosion, drainage development, anti-sea erosion, etc. which subsequently continued as a component of "Flood Management and Border Areas Programme" (FMBAP) for the period from 2017-18 to 2020-21 and further extended up to September 2022 with limited outlay. The Government has approved FMBAP with total outlay of Rs. 4,100 crore for a period of 5 years from 2021-22 to 2025-26. A central assistance of Rs 924.40 crore under FMP component and Rs 699.64 crore under RMBA component has been released to Bihar. The 42 projects completed under this Programme in the State of Bihar have provided reasonable protection to an area of around 28.67 Lakh hectares and protected a population of about 223.46 Lakh. State Government of Bihar has informed that embankments of length 3800.41 Km have been constructed on different Rivers in Bihar for flood protection.

Measures taken by the Govt. of Bihar to protect flood prone area in Buxer, Darbhanga and Muzaffarpur district in Bihar under Flood Management Programme (FMP) compoent of FMBAP is attached as **Annexure-**

I. Measures proposed to be taken to protect flood prone area in Buxer, Darbhanga and Muzaffarpur district in Bihar is attached as **Annexure-II**.

As part of monitoring of the centrally assisted projects, the concurrent evaluation studies during construction and performance evaluation after construction of flood management project are being done by the State Governments through third party.

(d) As a non-structural measure of flood management, Central Water Commission (CWC) issues flood forecasts at identified locations in consultation with State Governments. CWC also issues inflow forecasts to identified reservoirs for proper reservoir regulation. Presently in the State of **Bihar**, Central Water Commission maintain 43 FF station (40 Level Forecast Stations + 03 Inflow Forecast Stations).

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 in addition to short-range forecast having response time upto 24 hours. CWC flood forecasting services are also integrated with integrated alert dissemination platform Common Alert Protocol (CAP) issued to the State Disaster Management Authority (SDMA) of the respective States/ UTs, including State of Bihar.

National Disaster Management Authority (NDMA) implemented *Pilot Scheme namely Aapda Mitra* from 2016 to 2021 in 30 most flood prone Districts of 25 States/UTs, in order to train 6000 community volunteers (200 in each District) in disaster response with a focus on **flood**.

NDMA has also started *Yuva Aapda Mitra Scheme* from 2024-25 to train 2,37,326 volunteers from NCC, NSS, NYKS, and BS&G in disaster response covering all States (315 Districts) prone to landslide, cyclone, earthquake, and **floods** to provide them an Emergency Responder Kit.

BEFIQR app has been developed by Government of Bihar to disseminate flood related information to different stakeholders in real time.

(e) The main reason for floods in the State of Bihar is on account of increased discharge in rivers of North Bihar like Gandak, Burhi Gandak, Bagmati, Kamla, Kosi and Mahananda due to heavy rainfall in the upper catchment areas which mainly lie in Nepal. The related issues are discussed in the existing Indo-Nepal bilateral three tier mechanisms comprising of (i) Joint Ministerial Level Commission on Water Resources (JMCWR) (ii) Joint Committee on Water Resources (JCWR) and (iii) Joint Standing Technical Committee (JSTC). Government of India is having regular dialogue with the Government of Nepal for construction of dams for long-term flood mitigation on these rivers for mutual benefit of the two countries which includes flood control.

Apart from this, to reduce the impact of floods through barrages, a committee of officials of Central Water Commission, NWDA, Ganga Flood Control Commission and Water Resources Department, Government of Bihar was constituted by the Central Water Commission in June 2024. One of the barrages identified in the recommendation report of this committee is also on Kosi river, which is proposed in Dagmara of Supaul district. As per the recommendation of the committee, the work of studying the utility of this barrage in hydropower, flood control and irrigation and its technical feasibility has been identified by the Bihar government.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (c) OF UNSTARRED QUESTION NO. 1817 TO BE ANSWERED IN LOK SABHA ON 05.12.2024 REGARDING “STRENGTHEN FLOOD MANAGEMENT IN BIHAR”.

Measures taken by the Govt. to protect flood prone area in Buxer, Darbhanga and Muzafferpur district in Bihar under FMB component of FMBAP				
Sl. No.	Scheme Code	Title of Scheme	Estimated Cost (Crore)	District Benifitted
2	BR-02	Bagmati Flood Management, Embankment construction (l/b 17.55 to 56.97km, r/b 15.2 to 56.97 km)	135.16	Sitamadhi, Shivhar, Muzaffarpur, Darbhanga, Sitamadhi
4	BR-14	Raising and strengthening of right BurhiGandak embankment from 8.00 km u/s of Akharaghat to 39.00 km d/s of Akharaghat.	12.00	Muzaffarpur
5	BR-15	Darbhanga Town Protection Scheme Part- I	9.33	Darbhanga
6	BR-16	Darbhanga Town Protection Scheme Part- II	14.16	Darbhanga
7	BR-17	Darbhanga Town Protection Scheme Part- III	10.60	Darbhanga
9	BR-34	Anti erosion work at PaharpurManorath, Bangara, Barar, Gayeetola in between 5.00 to 6.00 mile of Tirhut embankment along river Gandak in Muzaffarpur district(Bihar)	8.13	Muzaffarpur
10	BR-36	Anti Erosion Work Between Ch 135 –160(Sector B) Near village Kewatia, 143 – 160.38Ch Near village Majharia& 1491 – 1505.75 Ch Near village Nainijore(Sector – C) of BKG Embankment on right bank of river Ganga In districts Bhojpur&Buxar in Bihar	7.55	Buxar&Bhojpur
11	BR-41	Extension of embankment on left and right bank of river Kamala Balan in lengths of 11.42 km and 5.00 km with brick soling road on top in left over reaches and protection work at two points on extended portion of right KamlaBalan embankment in DisttDarbhanga and Madhubani.	56.12	Madhubani, Darbhanga, Samastipur, Khagaria, Saharsa
12	BR-48	Bagmati Flood Management Scheme Phase-II, Sitamarhi, Darbhanga, Samastipur districts.	120.94	Sitamadhi, Muzaffarpur, Darbhanga, Samastipur
13	BR-49	Raising & Strengthening of Adhwara and Khiroi left embankment from RD 0.0 Km to RD 43.60 Km and from RD 44.00 Km to RD 90.50 Km and right embankment from RD 0.0 Km to RD 81.50 Km in Sitamarhi, Madhubani and Darbhanga districts of Bihar	167.03	Sitamadhi, Darbhanga, madhubani
Total estimated cost in Rs. Crore			541.02	

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (c) OF UNSTARRED QUESTION NO. 1817 TO BE ANSWERED IN LOK SABHA ON 05.12.2024 REGARDING “STRENGTHEN FLOOD MANAGEMENT IN BIHAR”.

Measures proposed to be taken by the Govt. to protect flood prone area inBuxer, Darbhanga and Muzafferpur district in Bihar

S.No.	Name of Scheme	Estd.Cost (in crore)
1.	Raising, Strengthenig and Puccikaran of Left KamlaBalan embankment &Right KamlaBalan embankment Phase-I(Pipraghat Bridge to Thangha bridge) LKBE between Km27.10 to km 66.30 & RKBE between km 23.20 to km 64.00	325.12
2.	Raising and strengthening and Puccikaran of left and right KamlaBalan embankment (Phase-II) from km 66.300 (FatkiKutti) to km 92.500 (Punach) of L.K.B.E. and from km 64.00 (Thengha) to km 94.00 (Palwa) of R.K.B.E.	297.08
3.	Raising, Strengthening and Puckkikaran of left and right KamlaBalan Embankment (Phase-III) from km 0.00 (Jainagar) to km 11.72(Kasama),km 21.50 (Pirahi) to km 27.10(Pipraghat) and km 92.50 (Punach) to km105.35(Ghoghepur) of Left KamlaBalan Embankment and from km 0.00(Jainagar) to km 23.20 (Bhatgama) and km 94.00 (Palwa) to km 111.29 (Phuhia) of Right KamlaBalan Embankment.	255.46
4.	Bagmati Flood Management Scheme-Phase-V(a)	338.69
	Total in Rs. Crore	1216.35
