# **GOVERNMENT OF INDIA**

# MINISTRY OF JAL SHAKTI,

# DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

# LOK SABHA

# **STARRED QUESTION NO. \*69**

ANSWERED ON 21.07.2022

# **Management and Control of Flood**

†\*69 SHRIMATI RAMA DEVI

MS. LOCKET CHATTERJEE:

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the details of project proposals pending or sanctioned by the Government for management and control of flood situation in parts of Bihar, Northern Odisha, West Bengal, Madhya Pradesh, Jammu & Kashmir and Jharkhand due to Bagmati, Budhi Gandak, Lal Bakiya, Kosi, Tawi and Subarnarekha rivers;
- (b) whether the Government has conducted any study to control and manage flood situation in the said rivers; and
- (c) if so, the details thereof along with the recommendations made in this regard and the reaction of the Government thereto?

### **ANSWER**

THE MINISTER OF JAL SHAKTI

(SHRI GAJENDRA SINGH SHEKHAWAT)

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

# STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO. \*69 TO BE ANSWERED IN LOK SABHA ON 21.07.2022 REGARDING "MANAGEMENT AND CONTROL OF FLOOD".

(a) Flood management, including erosion control, falls within the purview of the States. 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 also promotional financial assistance for management of floods in critical areas.

Flood protection and flood management measures are broadly classified as under-

- (i) Structural Measures The structural measures for flood control which bring relief to the flood prone areas by reducing flood flows and thereby reducing the flood levels.
- (ii) Non-Structural Measures- Facilitating timely evacuation of the people and shifting of their movable property to safer grounds by having advance warning of incoming flood through setting up a flood forecasting system. Discouraging creation of valuable assets/settlement of the people in the areas subject to frequent flooding i.e. enforcing flood plain zoning regulation.

Integrated flood approach aims at adopting judicious mix of structural and non-structural measures to provide a reasonable degree of protection against flood damages at economic cost..

To strengthen the structural measures of flood management, Government of India 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 has been further extended up to September 2022. So far Central Assistance amounting to Rs. 6,686.79 crore has been released to Union Territories/State Government under this programme since inception. The 415 projects completed projects under this programme have given protection to an area of around 4.99 mha and protected a population of about 52.21 million. The details of projects completed in the States of Bihar, Odisha, West Bengal, Jammu & Kashmir and Jharkhand under FMBAP (no project has been implemented in the State of Madhya Pradesh) are-

Sl. No	State	Projects in numbers		Population benefitted (In Lakh)
1	Bihar	42	28.67	223.46
2.	J&K	19	2.32	15.32
3.	Jharkhand	3	0.18	1.97
4.	Odisha	66	1.94	11.54
5.	West Bengal	16	0.94	23.57

For non structural measures, Central Water Commission (CWC) is the nodal organisation entrusted with the task of flood forecasting and early flood warnings in the country. Presently, CWC issues flood forecasts for 331 forecasting stations (199 river level forecast stations & 132 dam/ barrage inflow forecast stations). These stations cover 20 major river basins in 23 States and 2 Union Territories. In order to provide more lead time to the local authorities to plan evacuation of people & take other remedial measures, CWC has recently developed basin wise flood forecasting model for 5 days' advance flood forecast advisory at identified flood forecasting and inflow forecasting stations.

(b) & (c) In order to formulate the strategy for flood management works in the entire country and river management activities and works in the border areas, a Committee was constituted by NITI Aayog under the chairmanship of Vice Chairman, NITI Aayog with officials from various Departments/ Ministries of Government of India, experts from the field and Principal Secretaries from States of Jammu & Kashmir, Uttar Pradesh, Bihar, West Bengal, Punjab, Assam, Arunachal Pradesh, Tripura, Madhya Pradesh and Kerala were included as the members of this Committee. The Final Report of the Committee Constituted for Formulation of Strategy for Flood Management Works in Entire Country and River Management Activities and Works Related to Border Areas (2021–26) was issued by NITI Aayog during January 2021.

The major recommendations of the above committee are-

- o FMBAP scheme to be continued for the period 2021-26, i.e., co-terminus with the period of 15th Finance Commission with the provision of inclusion of new projects for funding under the scheme. The selection of the schemes will be undertaken in consultation with NITI Aayog and State Government.
- Continuous efforts to be made towards modernization in collection of hydrometeorological data, flood forecast formulation and forecast dissemination. Further simplified data dissemination policy for use of data by the States particularly regarding trans-boundary rivers to be developed.
- Focus on scientific research in development of model based system to forecast flash flood with sufficient lead time.
- o Preparation of Rule curve/ level for all reservoirs and updated accounting change in rainfall trend and changing demand over the years due to rapid increase of population, urbanisation and industrialisation.
- The long-term structural solution to floods lies in construction of large storage reservoirs which moderate flood peaks by adopting appropriate reservoir operation schedule.
- o To get benefit of flood control, it is essential to curb encroachment of natural basins and restore these basins to their natural state as a measure for flood control.
- o Taking up projects for interlinking of rivers for diversion of flood water to water scarce areas.
- Prohibition of reclamation of the existing wetlands/ natural depressions by State Governments and using them for flood moderation.
  - The above recommendations of NITI Aayog have been taken into consideration for implementation of FMBAP for the period 2021-26 and formulation of policies at Central Government level.