GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI,

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION LOK SABHA

UNSTARRED QUESTION NO. 656

ANSWERED ON 04.02.2021

RIVER EROSION IN ASSAM

656. SHRI PRADYUT BORDOLOI

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Government is planning to install advanced technologies for flood forecasting and Hydro Meteorological system, if so, the details thereof and the time by which advanced technologies are likely to be installed; and
- (b) the details of other measures or remedies taken by the Government to address the issue of river erosion due to flood across the Country including Assam?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI & SOCIAL JUSTICE AND EMPOWERMENT (SHRI RATTAN LAL KATARIA)

(a) For flood forecasting the Central Water Commission (CWC) uses the latest technology, including remote-sensing, Geographical Information System (GIS), Artificial Intelligence and Machine Learning in development/ running/ formulation and calibration of Mathematical models for providing Inundation Alerts. The techniques and methodologies used are at par with international standards.

Following steps have further been taken to strengthen the flood early warning system:

Expansion of Flood Forecasting Network:

Presently, CWC flood forecasting network has been expanded to 328 Flood Forecast Stations (198 Level Forecast for Villages/Town on the bank of the rivers and 130 Inflow Forecast Stations for Dams and Barrages) covering 23 States & 2 UTs, including NCT of Delhi, and 20 river basins for taking proper mitigation measures by respective State Governments.

Modernization of Data Collection:

The hydro-meteorological data collection and transmission is being modernized through the use of satellite based automatic data acquisition system.

Modernization of Flood Forecast Formulation:

CWC is formulating 3 day advisories of floods using Satellite based real time rainfall estimates and 3 day rainfall forecast through Numerical Weather Prediction models being shared by IMD on a seamless fashion. Mathematical model has been used for formulation of advisories, which are shared with stake holders through a dedicated website.

Modernization of dissemination of flood forecasts:

Dissemination of flood forecasts have been modernized by having a dedicated website. The information on floods is also loaded on Facebook Page, Twitter of CWC Flood Forecast dissemination system. Daily Flood Situation Report cum Advisory is also shared with all stake holders as well as general public using social media platforms and dedicated WhatsApp groups.

National Hydrology Project

Real Time Data Acquisition System (RTDAS) is part of the National Hydrology Project and will continue upto March 2024. Assam is also covered under this project.

(b) As per constitutional provisions, the subject of Flood Management, including erosion control, falls within the purview of the States. The flood management & anti-erosion schemes are planned, investigated and implemented by the State Governments with own resources as per priority within the State. The Union Government only renders assistance to States which is technical, advisory, catalytic and promotional in nature.

On 07.03.2019, Union Cabinet approved the comprehensive scheme titled "Flood Management and Border Areas Programme (FMBAP)" with an outlay of Rs.3342.00 Crore for period 2017-2020 with merged components from the existing Flood Management Programme (FMP) and River Management Activities & Works related to Border Areas (RMBA) schemes during XII Five Year Plan. The scheme has been extended till March, 2021.

A Central assistance of Rs.1558.90 Cr has been released during year 2017-21. Thus, since start of XI Plan, total Central Assistance of Rs.6431.97 Cr has been released. So far, central assistance amounting to Rs.1286.39 Cr has been released to the State of Assam since the start of Xl Plan under this Programme.

Further, Brahmaputra Board has taken up erosion protection works due to flood, including in the state of Assam. The details are as per **Annexure-I**.

Annexure referred to in reply to part (b) of Lok Sabha Unstarred Question No. 656 to be answered on 04.02.2021 regarding "River Erosion in Assam".

Details of erosion protection works due to flood, including those in the state of Assam, undertaken by Brahmaputra Board

S. No.	Name of the Scheme	Estt. Cost (Rs. Cr)	Benefit of the Schemes	Benefitted District/ State
1	Protection of Majuli Island from flood and erosion of river Brahmaputra	209.84	Area of 31921 Ha & Population 1,68,000 along with flood threat reduction to 22 cultural heritage centres	Majuli, Assam
2	Protection of Mankachar, Kalair- Alga International Border area from flood and erosion of river Brahmaputra	20.25	Protect Indo-Bangla Border (IBB) Connecting Road, IBB fencing and ShishumaraBOP	South Salmara Mankachar District, Assam
3	Anti-erosion measures in Masalabari area near International Border in Dhubri district of Assam	5.76	Protect Indo-Bangla Border{IBB) fencing	Dhubri, Assam
4	Restoration of Dibang and Lohit rivers to their original courses at Dhola-Hatighuli	103.54	18200 Ha of land	Tinsukia, Assam
5	Protection of Nagrijuli, Rangia Town, Mukalmua And Barbhagarea from floods and erosion of river Puthimari.	4.89	35.11 Ha of land	Baska District, Assam ',
6	Protection of Majuli Island from flood and erosion of river Brahmaputra funded by Ministry of DoNER	207	Area of 31 921 Ha &Population 1,15,000	Majuli, Assam
7	Protection of Balat village from erosion of river Umngi in West Khasi Hills district of Meghalaya- Phase- I	5.63	Area of land 300Ha &Population 3250	West Khasi Hills district, Meghalaya
8	Protection of Balat village from erosion of river Umngi in West si Hills district of Meghalaya- Phase - II	12.87	Area of land 300Ha &Population 3250	West Khasi Hills district, Meghalaya
9	Anti-Erosion measures for bank protection of Bhajaner Charra, Nishiganj area under Cooch Behar Block No.II along the left bank of River Mansai at Cooch Behar district in West Bengal.	4.90	Area benefitted 1 15 Ha and Population 2500	Cooch Behar district, West Bengal
10	Bank protection work at Bhogdebri area on the Right Bank of River Mansai in Cooch Behar district in West Bengal.	4.68	Area benefitted 128 Ha and Population 2000	Cooch Behar district, West Bengal