GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 1318

ANSWERED ON 27.07.2023

EROSION BY GANDAK RIVER

†1318. SHRI SUNIL KUMAR

Will the Minister of JAL SHAKTI be pleased to state:

(a) whether the Government is aware of the threat of displacement being felt by the people of urban area because of the erosion by Gandak river flowing in Valmiki Nagar Parliamentary Constituency;

(b) if so, whether the Government has conducted any review of the erosion caused by Gandak river;

(c) if so, the details thereof and if not, the reasons therefor; and

(d) the steps taken by the Government for resolving the issue?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

(a) to (c) Erosion, movement and deposition of sediment in a river are natural regulating functions of a river. Rivers tend to maintain a balance between the silt load carried & silt load deposited, maintaining a river regime. Soil erosion caused by heavy floods is a matter of concern as it leads to several associated problems like changes in river course, causing loss of land, etc. 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. The Government of India has been making continuous efforts to assist the State Governments in effective flood management and erosion control. Morphological Studies by various IITs and NITs have been carried out for major rivers like Brahmaputra, Ganga, Sharda, Rapti, Subansari, Krishna, Tungbhadra, Mahanadi, Mahananda, etc. These Studies play an important role in knowing the nature of rivers in a comprehensive manner and provide assessment of decadal bank-line movement, erosion & deposition in different reaches in respect of base year, derivation of reach-wise morphological indices and identification of critical reaches. The Morphological Study of River Gandak from India-Nepal border upto the confluence with river Ganga has been conducted by Central Water and Power Research Station (CWPRS), Pune utilizing satellite data for the years1988,1994,1999&2004 and maps of Survey of India. The entire study reach has been divided into seven zones from A to G. As per the study, the minimum rate of change in right bank is ranging from 4 m/year to 176 m/year and maximum rate of change is varying from 44 m/year to 876 m /year. Similarly, the minimum rate of change in left bank is ranging from 4 m/year to 220 m/year and maximum rate of change is varying from 40 m/year to 1132 m /year.

(d) Water Resource Department, Government of Bihar carries out anti erosion works before every monsoon period on River Gandak as per Standard Operating Procedure (SOP) of the Department. The works that have been executed by Government of Bihar in Valmikinagar constituency in recent past to control the erosion caused by Gandak river are mentioned at **Annexure.** The works related to maintenance of embankments on Gandak Barrage Project on Nepal side are funded through Flood Management and Border Areas Programme (FMBAP) of Department of Water Resources, River Development and Ganga Rejuvenation on the recommendation of India-Nepal Gandak High Level Standing Committee (GHLSC). The operation and maintenance issues of Gandak Barrage and its appurtenant structures are discussed in India-Nepal Joint Committee on Kosi and Gandak Projects (JCKGP).

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 1318 TO BE ANSWERED IN LOK SABHA ON 27.07.2023 REGARDING "EROSION BY GANDAK RIVER"

| S. No | Year | No of | Name of Work | Amount |
|-------|------|-------|--|---------------|
| | | Works | | (Rs. in Lakh) |
| 1 | 2012 | 1 | Bagaha town protection work with Crated Boulder (Phase-I) before flood 2012 Kalighat to Narayanapur and Shastrinagar to Goriyapatti. | 9078.10 |
| 2 | 2013 | 1 | Bagaha town protection work with Crated Boulder (Phase-II) before flood 2013 Goriyapatti to Dindayalnagar and Poorhouse. | 13202.24 |
| 3 | 2016 | 1 | Bagaha town protection work with Crated Boulder (Phase-III) before flood 2016 Magalpur to Kalighat and Ratanmala to Poorhouse. | 3525.23 |
| 4 | 2017 | 1 | Anti erosion work for protection of Valmikinagar forest on the left bank of river Gandak in d/s of Valmikinagar Barrage | 2593.09 |
| 5 | 2019 | 2 | Bagaha town protection work with Crated Boulder (Phase-IV A) before flood 2019 Ratanmala to Poorhouse. | 750.00 |
| | | | A.E. Work for Bagaha town Protection phase IV. | 472.57 |
| 6 | 2020 | 4 | A.E. Work for restoration of apron at Mangalpur on the Left bank of river Gandak. | 79.17 |
| | | | A.E. Work at Mangalpur on the Left bank of river Gandak. (Phase IV B) | 874.87 |
| | | | A.E. Work for protection of Madanpur forest on the Left bank of river Gandak. | 181.00 |
| | | | A.E. Work for restoration of damaged apron at Mirzatola on the Left bank of river Gandak. | 135.00 |
| 7 | 2021 | 2 | A.E. Work for restoration of slope and apron at Mangalpur on the Left bank of river Gandak. | 147.27 |
| | | | A.E. Work for restoration of damaged apron at Mirzatola on the Left bank of river Gandak. | 45.15 |
| 8 | 2022 | 2 | A.E. Work for restoration and protection of damaged apron, slope and E/W filling upto designed level of left guide bundh of DhanhaRatwal bridge with protection. | 1450.24 |
| | | | A.E. Work for for restoration of ten studs at left bank of river Gandak at Rajwatiyamela ground and damaged apron at Mirzatola on the Left bank of river Gandak and strengthening of Champaran embankment between 2.0 to 3.0 km and 5.0 to 7.0 km. | 473.86 |
| 9 | 2023 | 2 | Restoration of Anti Erosion Work at Parasnagar, Anandnagar and Shastrinagar site. | 989.22 |
| | | | Anti Erosion Work for Restoration of damaged apron and slope of DhanahaRatwal left guide bundh. | 132.24 |