



No.BB/9273/15/19-22
Government of India
Ministry of Water Resources,
River Development & Ganga Rejuvenation
Brahmaputra Board



Basistha, Guwahati -29
Dated May 10, 2016

To,

The Commissioner (FM)
Ministry of Water Resources, RD&GR
8th Floor, Block No.11
CGO Complex, Lodhi Road
New Delhi-110 003

Sub : Representation received through CPGRAMS-regarding erosion caused by river Brahmaputra

Sir,

Kindly refer to MoWR,RD&GR letter No.F-11011/160/2015-Coord dated 10.12.2015 on the subject cited above. I am directed to furnish herewith the views/comments of Brahmaputra Board on representation received through CPGRAMS at Annexure-I.

Yours faithfully,

Enclo : As above


(J. C. Mazumdar)
Executive Engineer (HQ)

Copy for information to:-

1. The Commissioner (B&B), MoWR,RD&GR, 2nd Floor, Block No.3, CGO Complex, Lodhi Raod, New Delhi -110 003
2. The Under Secretary(Coord), MoWR,RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001
3. Shri Binod Kedia, Chief Adviser, Flood Erosion Resistance Struggle Forum, Sunder Complex, Gandhi Park Road, Tinsukia, Assam-786 125

Views / comments of Brahmaputra Board on “Erosion caused by river Brahmaputra” :

The issue raised by Shri Binod Kedia, Sundarpur Complex, Gandhi Park Road, Tinsukia, Assam are basically on :

- 1. That no proper study for control of erosion and flood in Brahmaputra has been done**
- 2. Erosion in Majuli**
- 3. Erosion in some areas of Tinsukia and Dibrugarh districts along south bank of Brahmaputra and**
- 4. Non-release of fund for the project “Integrated Flood and River Bank Management Works at Rohmaria”**

Issue No.1 :

It may be mentioned that a number of studies have been done by various agencies on Brahmaputra river in general and site specific problems of Brahmaputra in particular. Some of these are –

- a. A comprehensive study of entire problem and possible solutions have been studied in the Master Plan of Main Stem of Brahmaputra prepared by Brahmaputra Board in 1986.

Detail studies have been done by Brahmaputra Board in connection with preparation of the Master plans of Brahmaputra and its Tributaries and Barak river where it was concluded that amongst all measures, the single most important measure is the mitigation of flood through construction of storage reservoirs. In the Master Plan of Brahmaputra Basin (Main Stem) under Chapter XII on ‘Storage Dams’ at paragraph – 12.1 states that –‘The key to a long term, effective and reasonably permanent solution of the flood problem of the Brahmaputra Valley lies in constructing some large storage reservoirs. This is clearly established by the study and analysis of the hydro-meteorological, topographical and geological data. With the latest expertise on dam construction now available high dams on the major tributaries of the Brahmaputra are considered feasible. No other measures, be it embankments, afforestation or watershed management would independently contribute as much to the reduction of the flood problem of the valley.’

Further study and analysis of hydro-meteorological, topographical and geological data was done first by the Indian Institute of Management, Bangalore and subsequently, based upon change in parameters during the intervening period, by

Central Water and Power Research Station (CWPRS), Pune. Findings of the study established that the key to a long term, effective and reasonably permanent solution of the flood problem of the Brahmaputra Valley lies in constructing large storage reservoirs. It is seen from these studies that the reduction in peak flood heights at Pandu in 1976 and 1977 respectively would be (a) 1.75 m and 0.60 m with the Dihang Dam alone in position, (b) 0.60 m and 0.30 m with the Subansiri dam alone in position and (c) 2.15 m and 0.75 m with both the Dihang and Subansiri dams in position.

However, with disagreement amongst riparian states and difficulties in implementation of storage projects so far, no storage of any significance towards contribution to flood moderation has been implemented or in the pipeline.

Keeping conformity with the recommendations of National Water Policy and long term perspective, it is suggested that provision for dedicated flood storage may be made mandatory in all large dam projects planned for execution in NE region.

- b. Morphological study of Brahmaputra river was carried out by NEC through WAPCOS in 1992.
- c. Problem specific studies through model testing were done on Brahmaputra river by Brahmaputra Board for Majuli island and Phulbari area. Similarly, state Water Resources Department has carried out such study for Dhola Hatighuli area, Rohmaria area, Neemati area, Gumi Palasbari area etc.
- d. Asian Development Bank (ADB) has carried out comprehensive study on Brahmaputra to tackle erosion problem in Dibrugarh-Nagaghuli area, Kaziranga area, Gumi area etc.
- e. Brahmaputra Board is presently in the process of developing a mathematical model in collaboration with IIT, Guwahati for tackling flood and erosion problem of Brahmaputra.

Studies have been done on reduction of floods through construction of storage reservoirs in the main tributaries of Brahmaputra. The findings of the studies are included in the Master Plan of Brahmaputra Main Stem (Additional Volume). Two dams on the Siang and Subansiri rivers were considered in the study which would have reduced flood level by 1.6 m at Pandu. Later investigation was done on another two major tributaries i.e. on Lohit and Dibang rivers for construction of storage reservoirs by Brahmaputra Board. As per planning of Board, flood cushion was provided in the proposals which would have considerable positive impact on flood moderation of Sadiya area. Later, Dibang was handed over to NHPC and Lohit was handed over to private party as per decision of Government of India and Arunachal Pradesh Government respectively.

Issue No. 2 :

Brahmaputra Board took up the scheme of protection work of Majuli Island from flood and erosion in 2003. The scheme consisted of 3 phases – Ph-I, Ph-II

and Ph-III. Now, almost all the works are completed except the works of spur No.4 & 8. With the implementation of various measures adopted, Brahmaputra Board has been able to bring about positive changes in bank erosion. It is observed from assessment of satellite imagery that the total area of the land mass of Majuli main island was 502.21 sq km in 2004. Since the year 2004, with regular implementation of anti erosion / protection measures taken by Brahmaputra Board, the total area of Majuli island has increased to 524.29 sq km in February 2016. This, not only arrested overall erosion, but in fact the trend has been reversed.

Issue No. 3 :

Brahmaputra Board had taken up the scheme "Avulsion of Brahmaputra at Dholla-Hatighuli" (Restoration of Dibang and Lohit Rivers to their original courses) for protection of Hatighuli area from erosion of river Lohit and Dibang. This scheme has been executed by Brahmaputra Board phase wise. Already 4 phases (Ph-I, Ph-II, Ph-III & Ph-IV) of the scheme have been completed. With the implementation of Ph-I, Ph-II and Ph-III of "Restoration of Dibang and Lohit rivers to their original courses at Dholla Hatighuli" there has been appreciable achievement. However, a breach of 65 m had occurred in the tie bund on 15.05.2014 due to vandal activities. The breach got widened by scouring during the flood of 2014 & 2015. The work for plugging the breach is under consideration by Brahmaputra Board.

Issue No.4 :

The scheme "Emergent measures for protection of Rohmaria area in Dibrugarh District(Scheme code-85)" had been taken up for implementation by the Water Resources Department, Government of Assam with an estimated cost of Rs. 5986.47 lakh under the Flood Management Programme(FMP) during XI Five Year Plan. The scheme was started during the year 2010-11 and physically completed in March 2012. The scheme was financed under the FMP with funding pattern of 90%(CS):10(SS). The central share released for the scheme was Rs. 5383.003 lakh and the state share released was Rs. 598.642 lakh. The work was financially completed during the Financial Year 2014-15.