

**GOVERNMENT OF INDIA**  
**MINISTRY OF WATER RESOURCES**  
**RAJYA SABHA**  
**QUESTION NO 07.03.2011**  
**ANSWERED ON**

**CLIMATE CHANGE AND HYDROLOGIC RESPONSE OF RIVER SYSTEM .**

1237

Shri Birendra Prasad Baishya

Will the Minister of COALWATER RESOURCES be pleased to state :-

- (a) whether the Central Government proposes to study climate change and hydrologic response of river system in the country including NER;
- (b) if so, the details of study of major rivers in the country;
- (c) whether latest study on river channelisation, flood control, river management for stream bank erosion, catchment area processes and stream flow of all the major rivers including Brahmaputra and Barak have been done by the Ministry; and
- (d) if so, the details thereof?

**ANSWER**

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES & MINORITY AFFAIRS. ( SHRI VINCENT H. PALA)

(a) & (b) Yes, Sir. One of the strategies of the National Water Mission under National Action Plan on Climate Change is research and studies on all aspects related to impact of climate change on water resources including quality aspects of water resources with active collaboration of all research organizations working in the area of climate change. Studies related to impact of climate change on water resources have been taken up jointly by National Institute of Hydrology (NIH), Central Water Commission (CWC), Central Ground Water Board and Brahmaputra Board with participation of Indian Institute of Technology (IIT), Guwahati, IIT, Kanpur, IIT, Kharagpur and IIT, Roorkee and National Institute of Technology (NIT), Patna and NIT, Srinagar. A "Preliminary Consolidated Report on Effect of Climate Change on Water Resources" has been brought out by NIH and CWC.

Studies have been undertaken by Indian Institute of Science, Bangalore on "Assessment of Water Resources under Climatic Scenario of the River Basin Scales". CWC has undertaken pilot studies for water assessment of Godavari and Brahmani-Baitarni jointly with National Remote Sensing Centre, Hyderabad.

(c) & (d) Various studies on river channelisation, flood control, river management for stream bank erosion, catchment area processes and stream flow of all the major rivers including Brahmaputra and Barak have been undertaken from time to time by State Governments and other research Institutions as per their requirement. Ministry of Water Resources also undertakes related studies through National Institute of Hydrology, Central Water & Power Research Station and other research institutions under its Research & Development Programme.

Brahmaputra Board has prepared 44 numbers Master Plans for Brahmaputra & Barak rivers and their tributaries which give due considerations to the flood control, river training, watershed management, erosion control etc. In addition, Brahmaputra Board also carried out studies in respect of the bank-line shift/erosion in collaboration with Space Application Centre, Ahmedabad. The studies identified bank-line shift/erosion along Brahmaputra river in Dholla- Dibrugarh reach, Dhemaji area, Majuli island area, Kaziranga national park reach, stretch between Tezpur and Mangaldoi, Palasbari-Goalpara reach, downstream of Goalpara and Dhubri area. Among the tributaries, bank line shift/erosion is identified on the banks of Beki, Manas, Aie, Jiadhal, Jiabhareli, Puthimari and Pagladia rivers.