

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 517
ANSWERED ON 22.07.2021

FLOODS IN BIHAR

517. DR. ALOK KUMAR SUMAN

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether it is a fact that the floods are natural calamity which can not be controlled permanently despite technological advancement;
- (b) if so, the details thereof, especially in Bihar including Gopalganj district;
- (c) whether it is fact that the main reason for floods in the State of Bihar is increased discharge in rivers of North Bihar like Gandak, Burhi Gandak, Bagmati, Kamla, Kosi and Mahananda due to heavy rainfall in the upper catchment areas mainly lying in Nepal;
- (d) if so, the steps taken to control floods in North Bihar including Gopalganj district; and
- (e) the details of total number of representations received and the action taken for flood control in Bihar including district Gopalganj?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI GAJENDRA SINGH SHEKHAWAT)

(a) & (b) Floods are natural calamity that the country faces almost every year, in varying degrees of magnitude. The occurrence of floods can be attributed to various factors, including wide variations in rainfall both in time and space with frequent departures from the normal pattern, inadequate carrying capacities of rivers, river bank erosion and silting of river beds, landslides, poor natural drainage in flood prone areas, snowmelt and glacial lake out-bursts. Water Resource Department, Government of Bihar has reported severe erosion on the embankments of River Gandak in Gopalganj District of Bihar due to heavy rainfall in catchment area of River Gandak in Nepal during monsoon year of 2020. Several breaches in embankment along River Gandak occurred in Gopalganj District of Bihar at Bhaisahi Purrena Charki, Saramn, Bandhauri Shitalpur Faizullahpur Jamindari Bundh, and Baikunthpur Retired Line.

(c) Main reason for floods in the State of Bihar is on account of increased discharge in rivers of North Bihar like Gandak, Burhi Gandak and Bagmati, Kamla, Kosi and Mahananda due to heavy rainfall in the upper catchment areas which mainly lie in Nepal. The management of floods due to these rivers has been a concern. The related issues are discussed in the existing Indo-Nepal bilateral mechanisms comprising of (i) Joint Ministerial Level Commission on Water Resources (JMCWR) (ii) Joint Committee on Water

Resources (JCWR) (iii) Joint Standing Technical Committee (JSTC), (iv) Joint Committee on Gandak & Kosi Projects (JCKGP) and (v) Joint Committee on Inundation and Flood management (JCIFM). Government of India is having regular dialogue with the Government of Nepal for construction of dams on these rivers for mutual benefit of the two countries which includes flood control.

(d) & (e) Flood management 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. However, as a non-structural measure of flood management, Central Water Commission (CWC) issues flood forecasts for rivers common to Nepal and India namely Sharda, Ghaghra, Rapti, Gandak, Burhi Gandak, Bagmati, Kamala, Kosi and Mahananda using meteorological and hydro-meteorological data available in the website of Department of Hydrology & Meteorology, Government of Nepal. At present, CWC has 40 level forecasting stations (for villages/towns on the bank of the rivers) and 3 inflow forecasting stations (for Dams/ Barrages) in the State of Bihar. During monsoon season of year 2020 ending 31st December 2020, a total of 3223 forecasts have been issued for Bihar State out of which 3192 have been found to be within the accuracy limit which works out to 99.04%.

CWC is maintaining a level forecasting station at Dumariaghat on Gandak River in Gopalganj District of Bihar. This station flowed in Extreme Flood Situation during 2020 when the River flowed above Highest Flood Level and Severe Flood Situations were witnessed during the last 5 years including this year when the River flowed above Danger Level. CWC is formulating 5 day advisories for flood using real time rainfall estimates and 5 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 and these advisories are shared with stake holders using dedicated website.
