

**GOVERNMENT OF INDIA
WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
LOK SABHA**

UNSTARRED QUESTION NO:2648
ANSWERED ON:12.03.2015
DATA ON FLOOD
Gogoi Shri Gaurav

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:

- (a) the details on the flooding patterns of the major rivers, State/UT-wise;
- (b) the details of research projects implemented/ to be implemented with international experts and research agencies, State-wise;
- (c) whether the Government has any data linking climate change in rainfall patterns with rising number of floods in the future, if so, the details thereof;
- (d) the efforts made/being made to boost the research capabilities of existing institutes, State/UT-wise; and
- (e) whether the Government has any plan to set up a major flood research and management institute in collaboration with foreign Governments, if so, the details thereof?

Answer

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION
(PROF.SANWAR LAL JAT)

(a) The flooding pattern of rivers is considered as the area affected due to floods. The XII Plan Working Group on Flood Management and Region Specific Issues set up the erstwhile Planning Commission had compiled the maximum flood affected area in the country as 49.815 million hectare (mha). State /UT wise details are given in Annex-1.

(b) The Ministry has taken up an `Operational Research to Support Mainstreaming of Integrated Flood Management under Climate Change` in Brahmani basin in Odisha State and Budhi-Gandak basin in Bihar State. Asian Development Bank (ADB) is providing Technical Assistance through National and International consultants for the operational research.

(c) The rainfall is observed by India Meteorological Department (IMD), Government of India. The State-wise annual and seasonal rainfall trends observed by IMD between the period from 1951 to 2010 are given in Annex-2.

In addition, this Ministry had conducted a study on `Support for the National Action Plan on Climate Change support to the National Water Mission` wherein ADB provided Technical Assistance. The study shows that there is a possibility of quantitative assessment of floods with medium confidence level of estimate for direction of change and low confidence level for magnitude of change. It also reflects that increased rainfall, runoff and sea level rise in coastal areas will increase flood risk due to climate change.

(d) The Ministry has drawn programmes for setting up of additional hydrological observation sites for assessment of impact of climate change, glacier and snowmelt on water resources. The Ministry has also established "Professorial Chairs" in the leading academic/research institutes viz. IITs, NITs and IISc (Bangalore) for related specific studies.

(e) No Madam.