

GOVERNMENT OF INDIA  
MINISTRY OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGA REJUVENATION  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 735**  
ANSWERED ON 07.02.2019

**STUDY ON RECENT FLOODS**

735.           ADV. JOICE GEORGE

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

- (a) whether the Union Government has studied or constituted an expert panel to study the recent flood induced aquatic changes in the State of Kerala;
- (b) if so, the details thereof;
- (c) whether the Union Government has received any requests in this regard from the State Government and the public;
- (d) if so, the details thereof; and
- (e) whether the Union Government has noted the issue with due importance and if so, the details thereof along with the steps taken to improve the situation?

**ANSWER**

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND  
GANGA REJUVENATION & PARLIAMENTARY AFFAIRS

(SHRI ARJUN RAM MEGHWAL)

(a) & (b) After the recent floods of August, 2018, a study on the hydrological processes of the flood has been carried out by Central Water Commission (CWC). As per the study, Kerala experienced an abnormally high rainfall from 1 June, 2018 to 19 August, 2018. As per Indian Meteorological Department (IMD) data, Kerala received 2346.6 mm of rainfall from 1 June, 2018 to 19 August, 2018 in contrast to an expected 1649.5 mm of rainfall. This rainfall was about 42% above the normal. Further, the rainfall over Kerala during 1st to 19<sup>th</sup> of August was 164% above normal. Due to heavy rainfall, the first onset of flooding occurred towards the end of July. A severe spell of rainfall was experienced at several places on the 8<sup>th</sup> and 9<sup>th</sup> of August, 2018. Another severe spell of rainfall started from the 14<sup>th</sup> of August and continued till the 19<sup>th</sup> of August, resulting in disastrous flooding in 13 out of 14 districts.

As informed by State Government of Kerala, the preliminary observation after the heavy floods is that the water level in some rivers have receded drastically, and sediments/ sands were deposited in the river itself and caused hindrance to the smooth flow in the river.

The preliminary assessment conducted by the Irrigation Department, Government of Kerala reveals that the topography of the land adjacent to rivers which were overflowing in the flood lost its topsoil and in some areas, the adjacent lands were totally washed away and river itself took a new course. As informed by State Government of Kerala, Haritha Keralam Mission in association with Kerala State Remote Sensing Agency has initiated a study on the morphological changes of the river bed.

(c) to (e) In order to explore the feasibility of development of flood forecasting/ early warning system and operation rules for reservoir operation, Ministry of Water Resources, River Development & Ganga Rejuvenation in August, 2018, constituted a Joint Team comprising of officials of Central Water Commission (CWC) and National Project Monitoring Unit (NPMU) of National Hydrology Project (NHP) with Chief Engineer, Cauvery and Southern Rivers Organisation, CWC, Coimbatore as Team Leader. The Joint Team visited Kerala during 24<sup>th</sup> to 27<sup>th</sup> September, 2018, had discussions with Kerala Government authorities and assessed the situation. After field visit and discussion, the relevant issues identified were studied in detail and the final report of the Committee was submitted to Government of Kerala in December, 2018 along with recommendations. During the interaction of the Joint Team and field visit in Kerala, Government of Kerala requested to explore the possibility of establishing flood forecasting stations in Kerala after the study. Accordingly, the team decided to study implementing of flood forecasting stations, initially in the three basins of Kerala i.e. (i) Pamba (ii) Periyar and (iii) Bharathapuzha.

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