GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA STARRED QUESTION NO. 251 TO BE ANSWERED ON 07.08.2023

Excessive Rain

*251. SHRI ASADUDDIN OWAISI:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether after two cyclones in Southern States of the country rain in Northern States have caused havoc and if so, the details thereof;
- (b) the total loss suffered to forests, flora and fauna due to these natural calamities;
- (c) whether the Government has assessed the reasons for excessive rain in some parts and cyclone on the other from the environmental and climatic angle; and
- (d) if so, the details thereof and guidelines issued to States in such calamities?

ANSWER

MINISTER FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI BHUPENDER YADAV)

(a) to (d) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PART (a) TO (d) OF LOK SABHA STARRED QUESTION NO. 251 DUE FOR REPLY ON 07.08.2023 RAISED BY SHRI ASADUDDIN OWAISI ON "EXCESSIVE RAIN"

(a) As per the information from India Meteorological Department (IMD), most of the States/Union Territories of Northwest India have received 'Excess' or 'Large Excess' rainfall during the monsoon season 2023.

(b) The current practice of conducting post disaster assessment in India follows *inter alia*, the provisions and norms prescribed in the Disaster Management Act, 2005 and the guidelines, directives, and orders of the National Disaster Management Authority and the State Disaster Management Authorities. The primary responsibility for disaster management rests with the State Governments concerned. Specific loss suffered to forest areas due to cyclone have not been reported by the States.

(c) and (d) The synoptic situations causing excess rainfall over different parts of the country including that related to cyclones are always analysed and documented. With respect to the increase in extreme rainfall activities in view of changing climate scenarios, it is mentioned that Ministry of Earth Sciences (MoES) in 2020 has published 'Assessment of Climate Change over the Indian Region' which contains a comprehensive assessment of the impact of climate change upon the Indian subcontinent. The highlights of the report are. -

- i. India's average temperature has risen by around 0.7 degree Celsius during 1901-2018.
- ii. Frequency of daily precipitation extremes (rainfall intensities >150 mm per day) increased by about 75% during 1950-2015.
- iii. The frequency and spatial extent of droughts over India has increased significantly during 1951-2015.
- iv. Sea-level rise in the North Indian Ocean occurred at a rate of 3.3 mm per year in the last two and half decades (1993-2017).
- v. Frequency of Severe Cyclonic Storms over Arabian sea has increased during the post monsoon seasons of 1998-2018.

IMD has implemented Impact Based Forecast (IBF) in the recent past which gives details of what the weather will do rather than what the weather will be. It contains the details of impacts expected from the severe weather elements and guidelines to general public about do's and don'ts while getting exposed to severe weather. These guidelines are finalised in collaboration with National Disaster Management Authority (NDMA) and is already implemented successfully for cyclone, heat wave, thunderstorm and heavy rainfall.

Recently, IMD has brought out a web based online "Climate Hazard & Vulnerability Atlas of India" prepared for the thirteen most hazardous meteorological events, which cause extensive damages, economic, human, and animal losses. The Climate Hazard and vulnerability atlas will help state government authorities and Disaster Management Agencies for planning and taking appropriate action to tackle various extreme weather events. This atlas also helps IMD to issue impact based forecast for various extreme weather events.

The Disaster Management Act, 2005 also provides for the establishment of State Disaster Management Authority in each State and District Disaster Management Authority in each district. There are established institutional mechanisms at the National, State & District levels in the country for appropriate preparedness and taking prompt response measures for effective management of natural disasters.