

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 1756
TO BE ANSWERED ON WEDNESDAY, 13TH DECEMBER, 2023**

DISASTER DUE TO HEAT WAVES

1756. SHRI N.K. PREMACHANDRAN:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government proposes to address the rising frequency and intensity of heat waves in the Country;
- (b) if so, the details of action taken thereon;
- (c) whether the Government has assessed the gravity of disaster due to the heat waves;
- (d) if so, the details of action taken thereon;
- (e) whether the Government proposes to notify the disaster due to heat waves as the disaster entitled for sufficient funding for emergency response, relief and rehabilitation efforts from both National Disaster Response Fund and State Disaster Response Fund;
- (f) if so, the details of action taken thereon;
- (g) whether the Government proposes to equip the Disaster Management Authorities to address the challenges due to heat waves;
- (h) if so, the details of action taken thereon; and
- (i) if not, the reasons therefor?

ANSWER

THE MINISTER OF EARTH SCIENCES
(SHRI KIREN RIJJU)

- (a) Yes Sir.
- (b) India Meteorological Department (IMD) has taken up various steps to improve monitoring and timely early warning which helped minimizing loss of life due to the rising frequency and intensity of heat waves in the country. These include:
 - i. Introduction of seasonal, monthly, and extended-range forecasts of temperature, and heat wave condition
 - ii. Impact based forecast of heat wave condition at district levels
 - iii. Heat wave vulnerability Atlas over India to help State Government authorities and disaster management agencies in planning and taking appropriate action
 - iv. The hot weather hazard analysis over India that includes daily temperature, winds, and humidity condition
 - v. Heat index forecast for the entire country
 - vi. Real time heat wave information and warnings on the Web-GIS platform
 - vii. Heat Action Plans (HAPs) in 23 States jointly implemented byNDMAin collaboration with the State Governments.

viii. Improvement of warning dissemination services; using modern tools of dissemination systems for timely public outreach

- (c)-(d) Yes Sir. It is a fact that, annual temperature is increasing globally and the impact of the same is reflected in the increase in heat waves in various parts of the globe including India. In view of that, a study has been conducted by Public Health Foundation of India (PHFI) & National Disaster Management Authority (NDMA) on “Assessment of vulnerability and threshold of heat-related health hazards in four cities of India”. The four cities are Karimnagar, Kolkata, Ongole, and Angul from Telangana, West Bengal, Andhra Pradesh and Odisha, respectively. This study is focused on the vulnerabilities of the local population due to heat waves by looking at the exposure, sensitivity and coping capacities of the people. This study thus tries to capture the gamut of the vulnerabilities of the local population due to heat waves by looking at the exposure, sensitivity and coping capacities of the people. The study also looked at the threshold of heat wave related health hazards on multi-sectoral data with respect to morbidity and mortality.
- (e)-(f) No Sir. However, heat wave is a local disaster. The State disaster management authorities have their resources available through State disaster response fund (SDRF) and State disaster mitigation fund (SDMF) to support it. If there is a request from the States for financial assistance, the Central Government considers it in accordance with the relevant guidelines for national disaster response (NDRF) and national disaster mitigation fund (NDMF).
- (g)-(i) IMD issues forecasts and warnings related to severe weather events including heat waves in different spatial and temporal scales and share the same with public as well as disaster management authorities so as to initiate required mitigation measures. IMD in collaboration with State Governments and NDMA implemented HAPs in 23 States. Heat wave vulnerability atlas was published by IMD for necessary action of disaster managers. Also, IMD started issuing Impact Based Forecast (IBF) recently which give details of what the weather will do rather than what the weather will be.
