

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. 2129
ANSWERED ON 06/08/2026

HEATWAVE PREPAREDNESS

2129. SHRI G.C. CHANDRASHEKHAR:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether Government has evaluated the accuracy and district-wise coverage of heatwave forecasting during 2023-2026;
- (b) the reduction achieved in forecast error and increase in lead time; and
- (c) the details of States covered under impact-based heat action advisories?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR
MINISTRY OF SCIENCE AND TECHNOLOGY
AND EARTH SCIENCES
(DR. JITENDRA SINGH)

- (a)-(b) Yes. Heatwave forecasts issued by the India Meteorological Department (IMD), under the Ministry of Earth Sciences, for the meteorological subdivisions were verified for the period 2023–2026. Further, district-wise heatwave forecasts for the States are issued by the respective regional meteorological centres (RMCs) and meteorological centres (MCs) of the IMD. Through these RMCs and MCs, district-wise heatwave forecasts are provided for all districts across the country. There has been an improvement in the accuracy of heatwave forecasts over the past 4 years (2023-2026). In addition to improvements in forecast accuracy, the lead time for heatwave forecasts increased from 3 days to 5 days in 2015, and further to 7 days in 2025. The accuracy of the heatwave forecast for a 5-day lead period in 2026 (probability of detection is 60%) is equivalent to the accuracy of the heatwave forecast for a 3-day lead period in 2023.
- (c) The India Meteorological Department issued heatwave advisories in the form of impact-based forecasts and risk-based warnings at both the meteorological sub-division and district scales, following the heatwave guidelines published by the national disaster management authority. At present, IMD's heatwave impact-based forecast and risk-based warning services cover all States of the country at both the meteorological sub-division and district scales.
