

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 328
TO BE ANSWERED ON WEDNESDAY, 27TH NOVEMBER, 2024**

GLOBAL LEADERSHIP OF INDIA IN CLIMATE SCIENCE

328. SHRI ARUN BHARTI:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the details of the Mission Mausam initiatives, its objectives and scope;
- (b) whether Mission Mausam will strengthen India's ability to predict extreme weather events and mitigate their impact on agriculture, disaster management and public safety particularly in Bihar, if so, the details thereof;
- (c) whether this initiative is expected to contribute to India's global leadership in climate science and forecasting and if so, the steps taken/being taken by the Government in this regard; and
- (d) the timeline set for the completion of the said mission and the progress being monitored to ensure timely and successful implementation of the said Mission?

ANSWER

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

- (a) Mission Mausam is launched to make Bharat a "weather-ready and climate-smart" nation, with the following objectives:
 - Strengthening observations (in-situ & remote sensing) and improved model capability to be able to plan and protect life and property from extreme and high-impact weather.
 - Gaining a better understanding and use of Science, Innovation and Technology, and Data Science for societal benefit.
 - Improve our Model/Data Assimilation/HPC for giving accurate information to the Public and stakeholders (Numerical+AI/ML).
 - Trained Manpower in Earth System Science for today and tomorrow.
 - Forecast dissemination: Effective communication with Society: Early Warning for ALL.
- (b)-(c) Yes. The major aim of the scheme is to support various weather & climate-sensitive sectors like agriculture, power, irrigation, shipping, water resource management, health, aviation, transport sector, disaster management, off-shore oil management, public safety, etc., by mitigating the impact of climate change and extreme weather events and strengthen the resilience of the communities to severe weather phenomena like tropical cyclones, severe thunderstorms, dust storms, heavy rains and snowfall events, cold and heat waves, etc.

To achieve the above, much-needed activities such as augmentation of an observational network across the country, improving the resolution of the numerical weather prediction model along with data assimilation, implementation of Artificial Intelligence and Machine Learning (AI/ML), Internet of Things (IoT); upgraded Information & Communication Technology (ICT) for improved forecast products generation at granular level with more extended lead period and better accuracy required for socio-economic applications and further reduction in loss of lives and properties are planned towards rendering uniform focus over every parts of the country, including Bihar.

- (d) The Mission Mausam scheme will be implemented during 2024-26. The scheme will undergo continuous evaluation and monitoring by the heads of the respective institutes involved in its implementation. Additionally, the Project Management Council (PMC), chaired by the Secretary, MoES, will assess the progress and achievements of the scheme.
