

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. 540
ANSWERED ON 04/12/2025

CLOUD-SEEDING OR WEATHER-MODIFICATION PROJECTS

540. SHRI SHAKTISINH GOHIL:
SHRI HARIS BEERAN:
SMT. RANJEET RANJAN:

Will the Minister of **EARTH SCIENCES** be pleased to state:

- (a) whether Government has planned or approved any cloud-seeding or weather-modification projects in the country and if so, the details thereof;
- (b) the agency-wise and head-wise expenditure incurred on cloud-seeding trial conducted in Delhi in October 2025;
- (c) the reasons for proceeding with the cloud seeding exercise, despite the Meteorological Department's warning of insufficient cloud cover for seeding; and
- (d) the cost incurred on cloud-seeding activities along with details of expenditure heads and the amount spent?

ANSWER

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

- (a) The Ministry of Earth Sciences (MoES) is not involved in the ongoing cloud seeding operations in various parts of the country. However, the Indian Institute of Tropical Meteorology (IITM) under the Ministry had conducted a research study on rain enhancement through cloud seeding in the rain shadow region of India during the period 2017-2019 through the Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX) Program. Details of this research project and the outcome of the study are available at <https://www.tropmet.res.in/~lip/Publication/Technical-Reports/CAIPEEX-Report-July2023.pdf>.

- (b)-(d) The question does not applicable in this scenario.
