

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 3661
TO BE ANSWERED ON WEDNESDAY, DECEMBER 07, 2016**

RESEARCH ON CLOUD SEEDING

**3661. SHRI RANJIT SINGH BRAHMPURA:
SHRI NANA PATOLE:**

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has conducted any research on cloud seeding;**
- (b) if so, the details thereof and the outcome thereof;**
- (c) whether any agreement is likely to be signed with foreign countries including China in this regard and if so, the details thereof;**
- (d) whether the Government proposes to implement cloud seeding technology to help the rain deficit areas; and**
- (e) if so, the details thereof and if not/ the reasons therefor?**

ANSWER

**MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)**

- (a-b) Yes Madam. Indian Institute of Tropical Meteorology (IITM) has implemented a program named Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX). Under this program aerosol-cloud interaction and rain formation over Indian region is studied. On the basis of observations, a cloud seeding experiment was conducted on the research mode over the rain shadow region of Indian peninsula to propose protocols for conducting cloud seeding. Past efforts could not give adequate samples for statistically significant results. It is proposed to conduct more aircraft based observations in 2018-19 monsoon season.**
- (c) No Madam.**
- (d) No Madam.**
- (e) The present scientific knowledge suggests artificial rain making techniques involving cloud seeding cannot be used as an alternate for bringing rain to rainfall deficit/drought areas. These techniques can only induce potential pre-existing clouds with adequate cloud development, to produce enhanced quantum of rain.**
