GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 2404
TO BE ANSWERED ON THURSDAY, MARCH 23, 2017

PLANS FOR CLOUD SEEDING

2404. SHRI BHUPENDER YADAV:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) how many State have approved plans for cloud seeding to produce rain artificially in the coming year and the budget allocated therefor;
(b) the status of standardized scientific evaluation done on cloud seeding to gather full information of the process and its plausible efficient usages, if any;
(c) the details of major benefits of cloud seeding and side-effects, if any; and
(d) the details of the different methodologies of cloud seeding and the details of Country's preferred mode, if any?

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

(a) Sir, so far no one has approved cloud seeding plans.

(b-c) Indian Institute of Tropical Meteorology (IITM), Ministry of Earth Sciences 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.
Cloud seeding has the potential to stimulate precipitation and form rain when the clouds are in the development stage with a sufficient amount of moisture. There are no known side effects.

(d) Cloud seeding involves using either silver iodide or other hygroscopic particles for being dispensed on top or at the cloud base. The particles thus form cloud condensation nuclei and grow by condensation of water on a cloud droplet. Ultimately, they grow in size, by collecting more droplets to form rain drops of a few millimeter size, that fall out as precipitation

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