GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 24
TO BE ANSWERED ON MONDAY, FEBRUARY 04, 2019

CLOUD SEEDING

24. SHRI MAHESH PODDAR:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether it is a fact that cloud seeding does not initiate rain but augments the volume, if it rains naturally, if so, the details thereof;
(b) whether cloud testing will be effective in large polluted regions like the Indo-Gangetic plain, since the concentrations of pollutants are built up again in a third of an hour of the exile of the airborne pollutants;
(c) whether the models of cloud and precipitation formation are valid for regions with higher water-vapour concentration; and
(d) If so, whether it is suitable to be performed in New Delhi?

ANSWER
MINISTER FOR SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)

(a) Cloud seeding can initiate rain and can augment volume under certain circumstances with suitable clouds. This is an active area of research and main hurdle is to separate the effect from artificial seeding from natural precipitation.

(b) Cloud droplets would evaporate in a dry and polluted environment and can grow in humid environment. Indo-Gangetic plains being a valley, pollutants can be trapped in the atmosphere.

(c) Yes, clouds form over regions where there is high water vapour content. As air rises, it cools and gets saturated and form clouds. If there is more water vapour available at higher altitudes, clouds may grow tall and make more rain.

(d) Any cloud seeding application can be successful only if suitable clouds with adequate development and cloud liquid water content are available.