

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 992
TO BE ANSWERED ON FEBRUARY 07, 2020**

IMPACT OF AIR POLLUTION ON METEOROLOGICAL ISSUES

992. SHRI RAJESHBHAI CHUDASAMA:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether it is a fact that the Government proposes to buy aircraft to study impact of air pollution on the meteorological issues of the country;**
- (b) if so, whether the special plane will cover entire weather forecast and pollution level across the country and if so, the details thereof;**
- (c) whether the airborne research will also control the air pollution therein and if so, the details thereof; and**
- (d) the details of projects and its project liability costs along with the budget sanctioned for the purpose?**

ANSWER

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

- (a) Yes Sir. Ministry of Earth Sciences (MoES) proposes to buy an atmospheric research aircraft under the program National Facility for Airborne Research (NFAR) programme.**
- (b) This programme will also be useful in air pollution assessment over India and understanding of atmospheric constituents including clouds and their role in climate change.**
- (c) No Sir. The aircraft will be equipped with instruments to measure some specific air pollutants.**
- (d) This research aircraft will be utilised to undertake research in the areas of atmospheric aerosols, clouds, precipitation and their interactions as well as to study the atmospheric state parameters and trace gases. The data collected from the sophisticated scientific instrumentation on board the aircraft will be utilized to improve the weather prediction models in predicting different types of weather phenomena.**

The Major aims and objectives of NFAR programme are :

- **To procure an instrumented research aircraft as national facility for atmospheric studies.**
- **To make simultaneous measurements of aerosols, trace gases, cloud microphysics and large scale meteorological parameters at high temporal resolution and at different altitudes in different seasons over the Indian sub-continent.**
- **To study the cloud-aerosol interactions and the changes in the precipitation processes over different parts of the Indian monsoon region.**
- **To understand the interactions between the clouds and the largescale environment using the simultaneous measurements of clouds and large-scale meteorological parameters at high temporal resolution and using them in cloud resolving models.**
- **Aerosol and radiative effects and aerosol-radiation closure studies. Aerosol, cloud microphysical and dynamical data generated will be provided to researchers for developing the parameterization schemes for monsoon clouds.**

The budget sanctioned for the project is Rs. 184.67 Crores.
