

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 1038
TO BE ANSWERED ON FRIDAY, SEPTEMBER 18, 2020

SPECIAL AIRCRAFT FOR WEATHER FORECAST

1038. SHRI SHANMUGA SUNDARAM K.:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether his Ministry is considering any proposal to purchase dedicated aircraft to carry out experiments related to weather forecast;
- (b) if so, the details thereof;
- (c) the cost of the special aircraft to be purchased and the benefits likely to be accrued therefrom;
- (d) the details of organisation which will be the Nodal Agency to maintain and provide information to the public; and
- (e) whether these aircrafts can be utilized for other purposes and if so, the details thereof?

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

- (a) Yes Sir. Ministry of Earth Sciences (MoES) is considering to procure an instrumented research aircraft for atmospheric process studies in the country.
- (b) MoES envisages the establishment of a *National Facility for Airborne Research (NFAR)* in India to cater the scientific needs of the research community in the country for the advancement of atmospheric process studies to improve the skills of weather and climate models. The facility is likely to comprise an Instrumented Aircraft System equipped with a suite of scientific instrumentation for the measurements of different atmospheric parameters of meteorology, cloud physics, aerosols and air chemistry.
- (c) The cost of the instrumented aircraft system could be approximately Rs. 250 crores. The aircraft is likely to be utilized for addressing various atmospheric research problems in different seasons/environments, at different parts of the country. A wealth of meteorological, aerosol and cloud physics data generated might be useful to validate the cloud schemes for improving the model physics of the monsoon/tropical clouds. Also it will be useful for addressing air pollution assessment and associated impacts over India (health, visibility, climate), environmental and hydrological studies. This facility is likely to enhance the research and developmental activity (human resources and technology), and also create opportunities for national/international collaborations.
- (d) Indian Institute of Tropical Meteorology (IITM), Pune an autonomous institution under the MoES, will act as the Nodal Agency to maintain and provide information to the public.
- (e) The proposed aircraft is envisaged only for research purposes.
