

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:554
ANSWERED ON:24.02.2011
DENSENESS OF FOG
Meghwal Shri Arjun Ram

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government is aware that the denseness of fog has increased 10 times;
- (b) if so, the details thereof and the reasons therefor; and
- (c) the adverse effect on 'Fog Warning System' due to increased denseness of fog?

Answer

MINISTER OF STATE IN THE MINISTRY OF PLANNING, MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS, MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI ASHWANI KUMAR)

(a)-(b) The increasing trend in fog hours is noticed in recent years and the evidence of 10 times increase in dense fog hours (having visibility of less than 200m) over Delhi Airport during December-January is based on the data analysis since 1981. Fog is largely prevalent over the north/north west India due to the stable atmospheric conditions locally that keeps the vehicular/industrial pollutants trapped in the lower atmosphere close to the surface. The increased quantum of vehicular traffic/rapid industrialization over the years is the main reason for the increased concentrations of the pollutants. Associated with the dropping of the night time /early morning ambient air temperature, the above increased density of suspended pollutant particles facilitates the condensation of moisture that leads to the fog formation.

(c) System of Air Quality Forecasting and Research (SAFAR) system that integrates components like Delhi urban area monitoring network consisting of online air pollution analyzers, automatic weather stations, emission inventory, activity data, 3 -D coupled atmospheric chemistry transport models to facilitate forecasting of several major air pollutants, is implemented over Delhi NCR region during Common Wealth Games – 2010 by the Ministry of Earth Sciences. The integrated assessment of the SAFAR system and the existing Fog Forecasting System implemented at Delhi Airport will be able to account for changes in the pollutant concentrations.