

**GOVERNMENT OF INDIA
MINISTRY OF CIVIL AVIATION
LOK SABHA
UNSTARRED QUESTION NO. : 4713
(To be answered on the 15th December 2016)**

CARBON EMISSION FROM AVIATION SECTOR

**4713. SHRI BHARTRUHARI MAHTAB
SHRI SANJAY DHOTRE
DR. SATYAPAL SINGH**

**Will the Minister of CIVIL AVIATION
नागर विमानन मंत्री**

be pleased to state:-

- (a) whether carbon emission per aircraft has increased in the country during each of the last three years despite various circulars issued by the Directorate General of Civil Aviation (DGCA) in this regard;**
- (b) if so, the details thereof and the reasons therefor;**
- (c) whether the Government has conducted any study to reduce carbon emissions by aviation sector and its adverse effect on the environment in the country;**
- (d) if so, the details and outcome thereof and if not, the reasons therefor;**
- (e) the details of the carbon emission reported by Indian Aviation Sector vis-a-vis other major developed/developing countries; and**
- (f) the other steps taken/being taken by the Government to reduce carbon emission per aircraft in the country?**

ANSWER

**Minister of State in the Ministry of CIVIL AVIATION
नागर विमानन मंत्रालय में राज्य मंत्री**

(Shri Jayant Sinha)

(a) & (b): Madam, aircraft wise carbon emission data is not maintained, however, the carbon emission for Indian scheduled operators from domestic and international operations has increased from 11.95 million tonnes in 2013 to 14.63 million tonnes in 2015. Similarly, for foreign registered airlines, it has increased from 3.68 million tonnes in 2013 to 3.76 million tonnes in 2015. The increase is attributed to growth in traffic movements and introduction of new routes.

(c) & (d): No madam, no such study is conducted so far. However, various proactive initiatives have been taken to offset the carbon emissions and DGCA issues Civil Aviation Requirement(CAR) from time to time in this regard.

(e): The carbon emissions from Indian scheduled airline operators for the year 2015 is around 14.63 million tonnes. However, it is a limited quantitative data of scheduled operators and does not include non-scheduled operators, hence, cannot be compared with other countries.

(f): The Directorate General of Civil Aviation(DGCA) has issued a Civil Aviation Requirements (CAR) which provides guidelines to reduce carbon emissions for airlines and airport operators through various operational and other measures such as fuel management, restriction on unwanted dead weights on board, engine-out procedures, use of fixed electrical power at parking bay, use of renewable and solar energy, etc.
