GOVERNMENT OF INDIA MINISTRY OF CIVIL AVIATION

RAJYA SABHA

UNSTARRED QUESTION NO: 5 (TO BE ANSWERED ON THE 25th November 2024)

STATUS OF SUSTAINABLE AVIATION FUEL

5. SHRI SANJEEV ARORA

Will the Minister of CIVIL AVIATION be pleased to state:-

- (a) the status of pilot programs involving Sustainable Aviation Fuel (SAF) trials conducted with Indian airlines, including details of flight operations, SAF blends used, and the results in terms of fuel efficiency and emission reductions;
- (b) the framework established for the certification of SAF production facilities in the country, as well as the approval and blending process to ensure compliance with international safety and environmental standards; and
- (c) whether Government plans to facilitate SAF certification for both domestic and international flights, ensuring that SAF produced or imported in the country meets all necessary safety and emissions criteria?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF CIVIL AVIATION

(Shri Murlidhar Mohol)

(a) International Civil Aviation Organization (ICAO) has adopted a market based measure i.e. Carbon Offsetting Reduction Scheme for International Aviation (CORSIA) to reduce carbon emissions from international aviation. India, being a Member State of the ICAO, is under obligation to comply with the mandatory phase of CORSIA from 2027. Under the CORSIA scheme airlines are required to offset their emissions, above a set baseline.

CORSIA allows aircraft operators to reduce their offsetting requirements through the use of CORSIA eligible fuels, which include CORSIA sustainable aviation fuels (SAF) and CORSIA lower carbon aviation fuels (LCAF). An aeroplane operator, that intends to claim for emissions reductions from the use of CORSIA Eligible Fuels, is required to use a CORSIA Eligible Fuel that meets the CORSIA Sustainability Criteria, defined in the ICAO document, "CORSIA Sustainability Criteria for CORSIA Eligible Fuels".

Sustainable Aviation Fuel have same specifications/composition as Jet A1 fuels and are compatible with existing aircraft and fuel supply systems. To advance SAF

use, Indian carriers have operated following trial flights with blends of SAF with traditional Aviation Turbine Fuel (ATF):

- i. Ferry flight by Vistara of B787 from USA to India using 28% of SAF blended fuel and a Delhi-Mumbai flight on a Boeing 787 aircraft with a blend of 17% SAF. ii. Domestic commercial flight by Air Asia (Pune to Delhi) with 0.75% SAF blended fuel.
- iii. Flight by SpiceJet from Dehradun to Delhi with 25% SAF
- iv. All Airbus ferry flights with 5% SAF blended fuel from Toulouse to India

Results in terms of fuel efficiency and emission reductions for the above mentioned trial flights are not available with this Ministry. However, technical analysis done at ICAO shows that SAF has the greatest potential to reduce CO2 emissions from International Aviation.

(b) & (c) SAF must meet the requirements described in the relevant fuel specifications to be used on commercial aircraft. In order to become eligible, such fuels come from fuel producers that meet the criteria defined under ICAO CORSIA Sustainability Certification Scheme (SCS). These CORSIA eligible fuels can be produced and uplifted anywhere in the world. Currently three (03) Sustainability Certification Schemes are approved by the ICAO Council.

Further, the CORSIA scheme is applicable for international flights only. So far, no decision with respect to usage of SAF in domestic flights has been taken.
