Syllabus subtopic: Science and Technology- developments and their applications and effects in everyday life; Achievements of Indians in science & technology; indigenization of technology and developing new technology.

Prelims and Mains focus: about SARAS aircraft and its significance; about UDAN scheme

News: The government needs to be the “launch customer” to make Saras Mk2 commercially viable, the National Aerospace Laboratory (NAL), which has developed the first indigenous light transport aircraft, told the Parliamentary Standing Committee on Science and Technology.

About Saras aircraft

- The 19seater aircraft, developed with a target cost of Rs. 50 crore, is at least 2025% lower in cost than other aircraft in the similar category.
- The aircraft has been in the making for long. The first prototype flew in 2004. But without the initial push from the government, the manufacturing capacity required for commercial production could not be set up, the NAL said.
- Presently, the NAL has only one order from the Indian Air Force for 15 aircraft.

Connecting SARAS to UDAN

- The NAL has been pitching Saras Mk2 for the government’s UDAN (Ude Desh Ka Aam Nagrik), since it has the capacity to operate in “ill-equipped”, “semiprepared” and “unpaved airstrips”.

About UDAN scheme

- UDAN is an acronym for “Ude Desh Ka Aam Nagrik”.
- It is a Regional Air Connectivity Scheme (RCS) which attempts to connect smaller towns with bigger cities to develop the regional aviation market.
- The scheme UDAN envisages providing connectivity to un-served and under-served airports of the country through revival of existing air-strips and airports.
- It will create affordable yet economically viable and profitable flights on
regional routes so that flying becomes affordable to the common man even in small towns.

- It was officially launched in 2016.
- Under the first two phases of UDAN, airlines are already operating on 120 routes to 37 un-served and underserved airports.

**UDAN Round 3:**

Under the latest round of the scheme, 73 proposals were awarded to 11 airlines that will connect a total of 39 airports. These include 16 unserved airports, 17 underserved airports and six water aerodromes.

**Key Features of UDAN 3 included –**

- Inclusion of Seaplanes for connecting Water Aerodromes,
- Inclusion of Tourism Routes suggested by the Ministry of Tourism and
- Bringing in a number of routes in the North-East Region under the ambit of UDAN.

**Way ahead**

- The NAL has said in its report that the government should be the “launch customer”, and place an order for at least 5060 aircraft, which can be used for VIP services or tackling emergencies in times of natural calamities.
- With the firm commitment for procurement from the government, industries will come forward to set up manufacturing infrastructure. This will also push the growth of the micro, small and medium enterprises and allied service sector.

**About NAL**

- National Aerospace Laboratories (NAL), is India’s second largest aerospace firm after Hindustan Aeronautics Limited (HAL).
- The Council of Scientific and Industrial Research (CSIR) established it in 1959 in Delhi and its headquarters was later moved to Bangalore in 1960.
- The firm closely operates with HAL, DRDO and ISRO and has prime responsibility of developing civilian aircraft in India.