

1.

With Indian space research organization being guiding body, India can now evolve as a space start-up hub for the world. Analyse?
India has a major opportunity in

emerging as a hub for space start-ups.
India's ISRO have end to end capabilities, still comparing to report showing global space market at \$400 Billion in which India contribution is less than 2%.

Privatizing space sector can be the sole solution for this.

Private players inclusion will lead to

↳ democratization of space usage over monopoly of state.

↳ Build commercial value by advancing new innovations.

India's minimal contribution:-

India's space sector is solely under public that is ISRO with minimal contribution from private players. According to reports in 2020 India's ISRO has established

INSPACE → which is single window nodal agency. Helps in promoting commercialization of space sector. It supplements ISRO.

Booth (NGSE) Non-Government space entities.

Bottlenecks

- Indian space frameworks have less transparency and clarity in laws.
- laws must be broken into various sections and each section to specify ^{about} ~~each~~ value chain.
- timeline in licensing.
- laws should be in accordance with Outer space treaty, 1967.

Way forward

- Privatizing is the best way. NASA, CNSA, Roscosmos in collaboration with private agency ~~sectors~~ like SpaceX, Boeing etc ~~are~~ are the great competitors in space race.
SpaceX, a private agency → built reusable launch vehicle, which ~~includes~~ saves time and money.
- India must keep a amount from its budget aside to incentivize ~~also~~ private players.
- Support in critical and major space related works rather than manufacturing components.
- Encourage for space missions.
- Bring a transparent regulatory reforms thus attracting private players.

Thus with ISRO being the guiding body, India can now evolve as a space start up hub for world. However, some Indian space start ups like Agni Cosmos, Skyroot technologies, Agnikol, Pixxel etc will help India evolve brighter in space sector.