

[14th Feb, 2023]

[GS-2] - International Relations.

1. India-VSA cooperation is attaining new milestone in the field of space technology. Do you agree with this view? comment.

India & USA enlarged its cooperation in space, launched a programme - Initiative on Critical & Emerging → [ICET] technologies → umbrella programme for human space capabilities.

India - USA space cooperation.

Reasons for US - increased Engagement with India

1. TO distance itself from china, immediate adversary
2. Friendshoring policy of USA - engagement with friends. Thus India became natural partner

(Potential Areas of cooperation)

USA & India - private sector has enormous potential

& US's → Artemis program → Human space flight to moon through Orion spacecraft.

2. India → private - India national space center → launched ~~many~~ a few satellites. [INSPIRE]

India's - Gaganyaan - also flagship - similar theme - Human space flight. Hence similar areas of.

cooperation can be enhanced.

Challenges

2. Structural challenges

1. Different priorities

USA	INDIA
Though engage more in <u>sub earth orbit</u> , its <u>aspirations</u> are more on <u>outer orbit</u> eg: moon, mars etc.	India - focus more on ins <u>under earth orbit</u> . To <u>increase capabilities</u> in <u>Earth orbit</u> to capture with <u>space fairy nations</u> eg: china.

2. Asymmetric capabilities

USA	INDIA
Has <u>most number</u> of <u>registered satellites</u> in space.	<u>Less resource capability</u> compared to US.
Even <u>private space</u> - registered <u>61 launches</u> in <u>2022</u>	India - <u>Space Research Organisation (ISRO)</u> - <u>only 10 launches</u> in <u>2022</u>

Way ahead

Both countries need to ensure long term cooperation engagement of - State led entities, private & academia. Special engagement eg: NISAR program. training of Astronauts in private companies of US. Sharing expertise. for among themselves to expand to prevent competition in space.