

Having seeds of challenges and opportunities in outer space, demands urgent and sweeping reform by the country.

Outer space is the space immediately outside Earth's atmosphere.

The outer space cooperation of India with US and QUAD partners - Australia and Japan will help India in engaging a new emphasis in outer space domain which is evolving into a commercial and strategic platform.

New Delhi's strategic interest is based on 2 prominent factors (i) India being a part of emerging technology in shaping global position (ii) New rules, norms, guidelines are required for peace and stability in outer space.

Since technological cooperation has always been an important factor for both India and US, it will benefit India to widen its scope in our emerging space technology and also play a critical role in technological cooperation in advanced sectors.

2 important elements to achieve this are

(i) Commercial sector i.e. private sector in space technologies which should set pace for India's progress

(ii) Cross border collaboration among the QUAD countries

These factors will help India to outline the ambitious technological agenda from US.

There has been a drastic emergence of new technological domains like 'cyberspace'. But 'outer space' is a strategic domain where the world super powers are etching their place for various factors like weather, disaster and prevention, sustainable use of oceans and marine resources and responding to challenges in their respective territory.

Until now, maritime domain has dominated the bilateral relationship between India <sup>and</sup> US and also within QUAD.

eg: Annual Malabar Naval exercises. With China emerging as a civilian and <sup>power</sup> military in outspace as well as its projection of its maritime power ~~will~~ is reshaping the geopolitics and astropolitics.

Hence to deter china, outer space cooperation agenda will play a prominent role. The agenda involves SSA - Space Situation Awareness. Space Situation Awareness is collision avoidance manoeuvre. This helps to avoid satellite collision and also the collision of space debris. The new initiative of US called Artemis Accords is planned to find the activity in Moon and other planetary objects. Hence this will lead to new collaboration opportunities in outer space and share satellite data for peaceful purposes. India will have a greater opportunity to mark its resilience, and security power in outer space.

New policies are required to be formulated for India to step forth in the new domain. Therefore an urgent policies, norms, rules and guidelines are required to be formulated.

The highest political level can make this possible by mandating the laws similar to 2015, when Indian totally focussed in maritime affairs and accomplished its role prominently. Hence outer space is a most promising domain which will make India both commercially and military wise powerful.