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Economic analysis of both actual and potential future benefits from space activities and applications to nations and peoples. (3)

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OPEN SPACE : A REVIEW OF POLICY MAKING AND PRIVATIZATION OF SPACE SECTOR IN INDIA

Abstract

The second half of the 20th century was marked by the beginning of space race by major technologically advanced nations across the globe. The initiation of space exploration by the socialist states like the USSR and capitalist economies like the USA were done by the formation of centralized government agencies to carry out space research. The goal was to ensure seamless access to the highly advanced and often sensitive technologies as well as funding for these programs. The Indian space program followed a similar model by the creation of ISRO in 1969 to bring space exploration to India. However, the major difference between the space policy of India and that of other major established space powers is that the Indian space policy deemed the technological requirements such as broadcasting services and remote sensing more essential for the growth of a developing country and were prioritized over missions aimed at answering questions of the scientific community. For developing these technologies, aid was taken from established space agencies. The turn of the 21st century brought various changes to this outlook. A paradigm shift in the approach of Indian policymakers was observed with the development of advanced indigenous technologies in rocketry as well as scientific space exploration. The rocket technology developed in India has been hailed as a cost-effective solution across the globe to place satellites in orbit and has become a source of revenue for the space program. Another interesting development in the space policy of India is the opening up of the space sector to private entities within the country, owing to the success of various such establishments present in the western nations. The country, usually known for a high degree of government control over industries, now boasts of having more than 100 startup companies directly associated with the space sector. This paper aims at exploring this shift in India's space policy making and its impact on the global space industry, as well as its socio-economic impact within the country. This paper will also provide an insight into the working and prospective business models of space-based startups in India with the help of case studies. The impact on the global space industry and a review of these developments can be used as a possible policy guide for upcoming space faring nations and entities.