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Author: Mr. K.R. Sridhara Murthi
NIAS, India

Dr. Narayan Prasad
Netherlands Antilles

Dr. Mukund Kadursrinivas Rao
Independent consultant, India

EMPOWERING INDIAN INDUSTRY: CRITICALITY OF A ROBUST DOMESTIC MARKET

Abstract

Till recent, Indian space was within the national space agency, ISRO, in areas of space transportation, satellites, national applications, missions for Moon/Mars and an emerging human space flight programme. While industrial interface was initiated, in 1980s, under a Technology Transfer (TT) programme and industrial contracting, it was in 1992 that Antrix opened up commercial space activities. In 2019, NewSpace India Limited (NSIL) started to commercially market the products and services of Indian Space and now the Indian National Space Promotion and Authorization Centre (IN-SPACE) enables non-government entities (NGEs) participation in space. Efforts for a national space legislation "Space Activities Bill 2017" have been made. Recently, liberalisation of Foreign Direct Investment (FDI) in Indian private sector for space could shore up expansion of private-muscle - also boosted by 200 space startups that have emerged in space sector. India also looks for an orbital Space Station and to land Indians on the Moon by 2040. These developments clearly underscore the unique technological prowess of Indian space and possibility to make India a formidable player in the global space arena.

Looking ahead, Space is even more vital for India - not just for national development and security but also to spur frontier indigenous technological capability; economic growth; private sector investments; international cooperation and building scientific excellence, apart from creating high-skill jobs and entrepreneurship.

We are of the view that, in achieving the above, a long-term perspective for Indian Space is most relevant now - the urgent need for long-term commitment of Government funding to build the domestic market structures on robust anchor-tenancy foundations; two-streaming of space for civilian and security needs; deepening utilisation of space for national building; phased operational missions from ISRO to industry through a risk-mitigation "buy-back" strategy; advanced technology development in planetary/science/HSF and innovative space missions; a long-term Indian presence in space and intensify space as a tool for bi-lateral and international relations. In this framework, the importance of domestic "market" must be red-lined as it is the bedrock that boosts industrial capability and frontier research and will also enable Indian industries to access the global market of space.

This paper discusses the framework, structural arrangements, critical reforms and outlines the shape of such a "domestic market". The paper outlines steps for the growth of the domestic industry and enhance its competitiveness on the global stage. The paper highlights ways to spur entrepreneurship, private investment, skill development and capacity building.