

technology in the country for the socio-economic benefits.

Indian Space Research Organisation (ISRO) is the primary agency under the Department of Space for executing space programmes. During the early seventies, India undertook demonstration of space applications for communication, television broadcasting and remote sensing building experimental satellites namely, APPLE, Bhaskara - and experimental satellite launch vehicles, SLV-3 and ASLV.

Today, India has an impressive array of achievements with the largest constellation of domestic communication satellites called Indian National Satellite System (INSAT) in the Asia Pacific region with about 210 transponders in orbit. And, India has plans to augment the capacity with the launching of INSAT satellites and increase it to about 500 in 4-5 years to meet its growing needs.

India also has the largest constellation of earth observation satellites called Indian Remote Sensing (IRS) satellites with better than one meter resolution. IRS data is being used for a variety of applications such as crop yield estimation, drinking water missions, waste land development, forest cover mapping and a host of other applications benefiting the common man. Using INSATs, besides TV Broadcasting, telecommunications and meteorological applications societal applications such as tele-education, telemedicine applications have been operationalised. Village Resource Centres (VRCs) combining the services of IRS and INSAT satellites for providing an array of services have been established. India, to day is considered as a leader in the application of space technology. INSAT and IRS satellites are also providing invaluable services in disaster management.

To put the IRS and INSAT satellites into orbit India has developed two work horse launch vehicles namely the Polar Satellite Launch Vehicle (PSLV) and Geo-synchronous Satellite Launch Vehicle (GSLV). PSLV weighing about 300 tons at lift off has the capability to put 1500 kg satellite in polar sun-synchronous orbit. PSLV with eleven consecutively successful launches has demonstrated its high reliability. PSLV has launched eight satellites for various customers from abroad. GSLV with four successful flights is capable of launching 2200 kg satellites into geo-stationary Transfer Orbit. India has also created world class facilities at its space port in Sriharikota near Chennai with launch pads besides a host of test facilities for testing satellites and launch vehicle systems.



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