

## **Bengaluru Space Expo 2010**

Notwithstanding the global economic meltdown, the space industry has been growing at a rapid pace. According to one estimate, governments across the globe have spent nearly US\$90 billion in 2009 on various space programmes and initiatives. The sheer size of the global space industry, which has generated nearly US\$ 176 billion in 2009, talks volumes about the prospects of the industry.

BSX 2010, the second edition of Asia's only dedicated exhibition on space technologies, products and innovations, showcased Asia's achievements and dreams for the space sector both in civil and commercial space industry. A parallel three day International Conference, "World Space-Biz" was concurrently organised to cover variety of topics including commercialisation of space, remote sensing, communication, surveillance and navigation. BSX 2010 provided unique opportunity for public and private sector industry to network with Indian and global space agencies.

The Indian space industry is also growing at a rapid pace. Today, some estimates point that, Indian space industry is worth US\$ 125 billion. These estimates only indicate the worth of Indian satellite programme. If all other ongoing programmes are taken into consideration, the worth of industry would be manifold. Space industry is one of the most promising industries in India as prospects of growth are fabulous. Antrix, the commercial arm/corporate front of Indian Space Research Organisation (ISRO), had more than one thousand crores of turnover during the last financial year which indicates double digit growth over previous years. The company is making more than Rs 150 crores of profit despite the global economic meltdown.

Space has increasingly gained prominence in almost all the walks of life. Space has not only emerged as the fourth dimension of the defence but

carries tremendous potential in socioeconomic field as well. It is often debated that all the major future wars will be fought in the space. It is easy to cripple the communication system of any nation just by targeting its high-value space assets. Developing countries like China has already got the potential to destroy satellites through missiles. The capability, it has showed more than once.

Satellites can monitor activities in any country to the utmost precision. This particular capability has enhanced battlefield transparency. Now modern militaries do not need to indulge in one-to-one combat and fight from a stand-off distances. However, few scholars criticise over-reliance on satellites for communication, surveillance and reconnaissance owing to the vulnerabilities involved.

For developing countries like India where majority of the population resides in rural areas, tele-medicine and tele-education have been proved to be a boon. Thanks to India's space programme. Besides, satellites are very useful tool in monitoring climatic changes in the areas which are inhospitable and uninhabited. Oceanic turbulences, ozone layer depletion, release of greenhouse gases, melting glaciers and effects of global warming can all be monitored by satellites.

BSX 2010 provided a common platform to scientists, manufacturers and policy makers to share their views on the latest developments in space. The exhibition has opened future avenues for industry participation both in India as well as from abroad.

Indian space capabilities have been recognised across the globe and several developing as well as developed countries are queuing up to collaborate with India. Indian space industry is globally competitive and provides cost effective products and services. Indian space programme has also attracted the interest of the US and Russia. National Space Agency (NASA) of the US has acknowledged the constructive role of ISRO in exploring the space and finding water on moon. Most of the

countries across the globe are focusing on space for various reasons ranging from communication to agricultural guidance services to disaster management or meteorological services. India has become the global hotspot for international space cooperation as it has already entered into formal agreement with more than thirty countries and few reputed regional space organisations. Several other countries are also looking towards India as it has emerged as a leader in this field. The demand for space technologies is high and India holds a good reputation.

Space industry has the potential to absorb a lot of investment and guarantee assured returns. There exist huge potential for innovation. Besides, space industry can create hundreds of thousands of new jobs. The future Indian space programme will also include space ports. Growth in the space industry will also demand increased number skilled work force. The demand of more skilled workers will require creation of large number of training institutes of excellence. Both public as well private As of now more than 500 Indian large, medium and small scale industries are in the loop of supply chain of Indian Space Research Institute (ISRO), Department of Space (DOS). With the increasing domestic and international demand, more private industries are likely to join this supply chain.



(From L-R) Mr Gurpal Singh, DDG CII, Mr Vikram Kirloskar, Charman CII National Committee on Technology, Mr KR Sridharamurthy, MD Antrix Corporation Ltd, Dr K Radhakrishnan, Chairman ISRO, H E M Abubakar, Hon'ble Minister for Science & Technology, Nigeria, Mr Rajive Kaul, Chairman CII Committee on Trade Fairs and Mr Virendra Gupta, Sr Director CII.



Dr K Radhakrishnan, Chairman ISRO and H E M Abubakar, Hon'ble Minister for Science & Technology, Nigeria at the inaugural ceremony of World Space Biz.



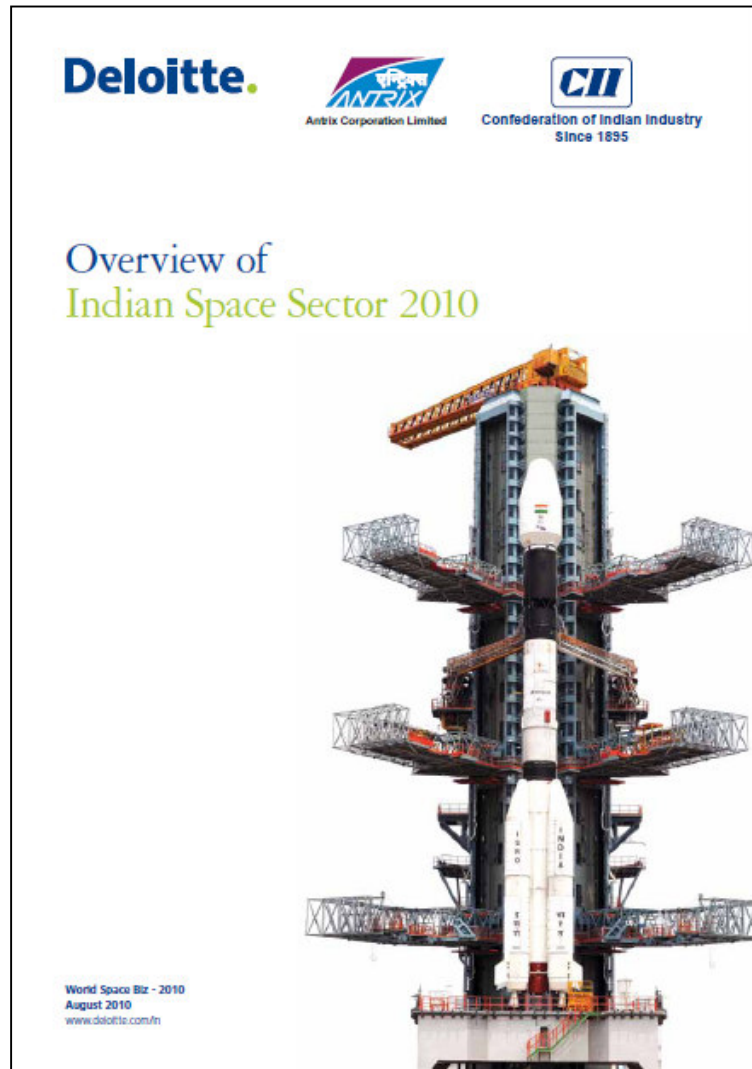


**H E M Abubakar, Hon'ble Minister for Science & Technology, Nigeria and Dr K Radhakrishnan, Chairman ISRO inaugurating the BSX 2010. Also in the picture is Mr Rajive Kaul, Chairman CII Committee on Trade Fairs.**



**Students from the National Academy of Learning who won the poster competition with theme "Space and the possibilities" The competition was organised by 'CII - Young Indians Bengaluru Chapter' from 21-25 August in Bangalore to promote children's interest in the space programme. The prizes were given away at the BSX 2010 by Mr Gurpal Singh DDG CII and Mr KR Sridharamurthy, MD, Antrix Corporation Limited.**

## A joint CII-Antrix-Deloitte Report on Overview of Indian Space Sector 2010



A joint CII-Antrix-Deloitte Report on Overview of Indian Space Sector 2010 was released during the BSX 2010. The report is first ever endeavour to give an overview of Indian space sector as it includes glimpses of international and Indian space scenario, trends of future development, the present state of Indian industry and the business potential for the industry.