## Chandrayaan-3 success opens fresh opportunities for our businesses



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The success of Chandrayaan-3 mission is great publicity for the prowess of Indian scientists, engineers, entrepreneurs and businesses. It is bound to help the Indian Space Research Organisation (Isro) get more business from other countries for the services it offers. The favourable image of Indian manufacturing capability that the mission has demonstrated is bound to help our manufacturers exploit the global opportunities.

The Chandrayaan-3 success grabbed headlines around the world just when the leaders of Brazil, Russia, India, China, and South Africa (Brics) were discussing global issues at Johannesburg, South Africa. Many other developing countries attended the conference where the Brics countries decided to admit Saudi Arabia, Iran, Egypt, Argentina, Ethiopia and the United Arab Emirates into the grouping. The chess world cup contest at Azerbaijan at the same time saw the emergence of young Indian prodigies challenging well established players. At thesametimethetrade ministers of the G20 countries were discussing various trade and investment issues at Jaipur. Rajasthan. A couple of weeks later, global leaders will be at New Delhi for the G20 conference to discuss various political, economic, social, environmental and other issues. All these events are getting headlines across the world after the success of the Chandravaan-3 mission.

The world has taken note that India is the first country to land its equipment near the South Pole of the moon. It has also taken note that India is only the fourth country, behind the United States, Soviet Union and China to place its equipment on the surface of the moon and that the Russian mission to land its equipment on the

southern part of the moon failed. There couldn't have been a better advertisement for the capabilities of the Indian manufacturers to make sophisticated and hitech items.

Isro accomplished the Chandrayaan-3 mission within a limited budget of ₹615 crore (about \$75 million). That is far lesser than the amounts spent by the United States, Russia and China. It not only shows the relatively small compensation which our scientists receive but also their ability to work with the vendors for getting the components and materials required for making the spacecraft manufactured at lower costs. Naturally, many global companies planning their new research and development facilities will now give serious consideration to locating them in India.

A remarkable feature of the Indian space programme is the contribution of our domestic industry that has delivered most of the materials, mechanical, propulsion and structural sub-systems. Isro depends on imports only partially for avionics and satellite payloads. Technologies keep evolving in the areas of materials, processes. manufacturingand electronics and so. international co-operation and collaboration are essential. For the Chandrayaan-3 mission, European Space Agency is coordinating routine communication support complemented by support from the space agency of the United States and Isro's own stations.

It is now for the Indian businesses, Isro and other scientific establishments to capitalize on the well-publicized success of Chandrayaan-3. The government can examine in what way the efforts of these entities can be supported or complemented.

Agood start would be to identify the factors that adversely affect the competitiveness of the Indian producers and try to address those issues rather than adopt a protectionist trade policy based on apprehensions about the ability of Indian entities to compete in the global arena.

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