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The ‘South Asia Satellite’:

India’s Space Programme as a Regional Policy Tool

The recent successful launch of the ‘South Asia Satellite’ is yet another feather in the cap of India’s space industry. From a broader outlook, India’s burgeoning space expertise can be a potentially useful instrument to enhance relations with its regional neighbours. However, by staying out, Pakistan has shown that the Indian strategy of achieving regional cooperation under Indian leadership is not going to be easy.

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Introduction

On 5 May 2017, India launched a geosynchronous satellite (GSAT 9) which has been termed a ‘South Asia Satellite’ by the government. The project, which cost over 2 billion Rupees (\$\$43.7 million), follows the successful completion of other Indian endeavours such as the Mars Orbiter Mission (‘Mangalyaan’) in 2014 and the more recent launches of over 100 satellites in February this year as well as 20 satellites last year. Notably, five of the eight members of the South Asian Association for Regional Cooperation (SAARC), namely, Nepal, Bhutan, Bangladesh, Sri Lanka and the Maldives have supported India on the project.

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Afghanistan is yet to come on board due to certain technical snags. Pakistan has outright refused to be a part of the project, citing the presence of its own space programme. However, barring Pakistan's participation, GSAT 9 appears to be a deft diplomatic move on the part of the Indian government to secure goodwill among its regional partners.

Indian Space Industry: Potential for Regional Leverage

The success of the GSAT 9 launch marks another milestone for the Indian Space Research Organisation (ISRO) which has arguably been a model of success for space research in developing countries and has been much lauded for its ambitious scope and cost-effectiveness. The director of ISRO has indicated that the organisation plans to launch five communication satellites by the end of the year² and it has been estimated that certain satellites launched using India's Polar Satellite Launch Vehicle cost half the price of those launched by the American SpaceX organisation.³ Furthermore, the satellites launched in February 2017 included one belonging to the tech giant, Google, which indicates that the Indian space industry is respectable and of a high calibre. The incumbent Indian government also appears committed to the field of space research and related activities, with the budget for ISRO increasing by about 15 billion Rupees (\$327.6 million) from 2014/15 to 2016/17.⁴

The launch of GSAT 9, as a satellite for the region at large, naturally plays into the context of South Asian relations. The idea of a satellite serving regional purposes was actually proposed by Indian Prime Minister Narendra Modi at the 18th SAARC Summit in Nepal in 2014. At the time, Prime Minister Modi remarked that India's 'gift' of the satellite would benefit the entire region. The GSAT 9 will provide data and contribute to the fields of education, connectivity, mapping of natural resources and 'tele-medicine' for South Asia. It will also provide every partner country access to at least one of its 12 transponders for programming use alongside regional programming.

² The Hindu, '5 new satellites this year to raise ISRO capacity', available at <http://www.thehindu.com/news/national/5-new-satellites-this-year-to-raise-isro-capacity/article17740909>. ece. Accessed on 3 May 2017.

³ Bloomberg, 'The Cheapest Trip to Mars Leaves From This Tiny Island', available at <https://www.bloomberg.com/graphics/2016-asia-space-race/india.html> . Accessed on 3 May 2017.

⁴ The Straits Times, 'India's space industry flying high on the world stage', available at <http://www.straitstimes.com/asia/south-asia/indias-space-industry-flying-high-on-the-world-stage>. Accessed on 3 May 2017.

With regard to other regional space programmes, Bangladesh has scheduled a launch of its indigenous communications satellite (Bangabandhu 1) for the end of the year, with American cooperation on the project. Nepal's Telecommunication Authority too has invited tenders for the launch of an orbital satellite as per the co-ordinates allocated by the International Telecommunication Union.⁵ The launch of the South Asian Satellite thus provides a stage to India for further productive use of its expertise in a sector that is technically complex, commercially potent and (perhaps crucially) regionally underdeveloped.

South Asian Space Industry: The China Factor

Another undeniable factor which adds an interesting political twist to the South Asian space industry is the pre-existing presence of China in the region. Notwithstanding ISRO's progress, space research has traditionally been, and continues to be, a difficult field for countries to develop indigenously. Even today, only six governmental space agencies across the globe possess the capacity for full launches, three of which are Asian: India, China and Japan. China's space industry is arguably several steps ahead of that of India and it has been a relatively active player in South Asia's space aspirations. Pakistan's first satellite was launched by the Chinese in 1990 and the two countries have signed an agreement for further launches as well. Sri Lanka's space programme had also co-opted China for the launch of its satellite, although the launch has yet to occur. The Asia-Pacific Space Cooperation Organization (APSCO), headquartered in Beijing, also counts Bangladesh and Pakistan among its members. With China being the only member of the group with a developed space programme, APSCO functions as a useful platform for China to spread its influence in the two South Asian states.

In contrast, prior to the 5 May 2017 launch, India had not launched any satellites belonging to or shared by its neighbours, despite having launched 180 satellites of 23 different countries since 1999.⁶ India's space budget is also comparatively lower than that of China, though this can be attributed to economic reasons. Indian wariness about Chinese economic influence in its neighbourhood could spur it to engage in greater regional 'space diplomacy'. While it might

⁵ Nepal Telecommunications Authority, <http://www.nta.gov.np/en/public-notice-en/532-invitation-for-expression-of-interest-eoi-for-launching-satellite-in-the-orbital-positions-allocated-to-nepal-by-itu>. Accessed on 3 May 2017.

⁶ Indian Space Research Organization, http://www.isro.gov.in/sites/default/files/article-files/about-isro/180_foreign_satellites.pdf. Accessed on 4 May 2017.

not be able to match Chinese investment in the field, India's low cost initiatives and proximity to other South Asian states could help it gain ground in acting as a regional space leader. For its part, China too appears to have observed India's progress with a measure of concern. The state-backed Chinese media outlet, 'Global Times', noted and even praised the GSAT 9 launch but simultaneously underscored Chinese superiority in the field and emphasised that India has been unreceptive to bilateral space cooperation.⁷

Conclusion

India's space programme, which is nearing a half century of operations, has seen substantial successes, particularly in indigenous capacity building. Barring India's tenuous relationship with Pakistan, the programme can act be a useful proponent of the government's 'neighbourhood first' policy. The Indian prime minister, in his recent radio address to the nation, stressed that the government's rhetoric of '*sabka saath, sabka vikas*' (collective efforts, inclusive growth) extended beyond domestic considerations to the outside world and especially India's immediate neighbourhood. From an economic viewpoint as well, the space industry presents several opportunities. The Space Foundation's 2016 Space Report valued the global space industry at US\$322 billion for the year 2015.⁸ India's 'small satellite' market has also been estimated to grow to a value of US\$16 billion⁹ in the coming years. Through a broader perspective, the advent of the so-called 'Fourth Industrial Revolution' and the 'Internet of Things' will naturally engender an enhanced reliance on telecommunications and satellite based technology. The rapid growth of South Asia will in turn translate into a greater regional focus on these areas. Therefore, by dint of being the regional leader in the space industry, India can certainly leverage its capacities into tangible regional policy outcomes.

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⁷ Global Times 'Cooperation with China should not be left behind as India boosts space program', available at <http://www.globaltimes.cn/content/1045069.shtml> . Accessed on 4 May 2017.

⁸ The Space Foundation, https://www.spacefoundation.org/sites/default/files/downloads/The_Space_Report_2016_OVERVIEW.pdf. Accessed on 4 May 2017.

⁹ The Times of India, 'Small is big for the Indian space industry', available at <http://timesofindia.indiatimes.com/city/bengaluru/Small-is-big-for-the-Indian-space-industry/articleshow/53933330.cms>. Accessed on 4 May 2017.