Strategic Autonomy and Science Diplomacy: India and the Path Ahead

Manoj Saxena*

In recent times, there has been a visible recognition of the importance of science diplomacy as an instrument of foreign policies of states in the international system. The concept had also formally seeped into New Delhi's state policy by 2013 when the Ministry of Science and Technology, Government of India (2013) stated its will to deploy 'Science Diplomacy, Technology Synergy and Technology Acquisition models', according to the multiple strategic partnerships as fielded by the South Asian power in the country's *Science, Technology and Innovation Policy 2013*.[1] However, science diplomacy — like other components of diplomacy such as cultural diplomacy and economic diplomacy — remains a component of a state's overall foreign policy, meant to serve national interests.

In India, the science diplomacy component has always been closely connected with its other foreign policy component of *strategic autonomy* — and its previous antecedent in the shape of non-alignment in the last century. In 1959, India's first Prime Minister Jawaharlal Nehru — the core architect of its non-alignment policy — stated that the country needed science to enable its rise but would not be drawn to either inter-state competition or rivalry in the process. Nehru (1959) further sought access to advances made in international science and technology but only in the spirit of cooperation.[2]

In international relations, it is given that a state's foreign policy— however well-intentioned — will be subjected to external turbulence from the International system. And India's case during the last century was no different. Independent India managed to gain early access to multiple sources of science and technology to address its national needs in areas as basic as industrialisation and as advanced as its nuclear or space programmes. However, following the first Chinese nuclear weapons test in 1964 — New Delhi was coerced to demonstrate its own nuclear weapons technology in the shape of Operation *Smiling Buddha* in 1974. This brought upon compelling US-led sanctions in the nuclear technology sphere — complicating India's overall position as both a recipient and a donor of science and technology in the international system. India's attempts to pursue missile technology would further be impeded by US sanctions in the 1990s. New Delhi was impelled to tilt towards Moscow and further received a sympathetic understanding from Paris — both India's only enduring strategic partners towards the end of the last century.

Whilst reiterating India's commitment to the ethical use of nuclear technology, India's President KR Narayanan asserted that all measures will be taken to preserve the country's strategic autonomy in his address to the parliament on 25 October 1999.[3] Given a thaw in Indo-US relations during the early half of this century, India was able to enter the global mainstream not only in the nuclear, space and missile technology domains but was also able to build science and technology relationships in other areas with states as diverse as ranging from Europe to the Gulf with strategic partnerships further emerging from varied sources like South Korea, Japan, Australia and the US itself.

* Manoj Saxena, PhD Contemporary India Research, King's College London, with thesis awarded in April 2022 on '*The Role of Science and Technology Diplomacy in Indian Foreign Policy: An Assessment of Issues and Opportunities*'. *Email: manoj.saxena@kcl.ac.uk*

More recently, India's Foreign Secretary Harsh Vardhan Shringla (2021) stated that 'the notion of national security has broadened beyond recognition. Strategic autonomy today is not just a political or military construct; it applies equally to dependencies in technology, supply chains, and critical commodities, including pharmaceuticals and medical equipment. These trendlines have sharpened during the Covid-19 pandemic'.[4] Foreign Secretary Shringla (2022) also placed India's strategic autonomy as 'not the same as a rigid, isolationist, ideological aversion to partnerships and alignments'.[5] India's incumbent External Affairs Minister, Dr S. Jaishankar situated post-COVID changes in the international system as having greater 'risk aversion in a world now clearly more insecure and encouraging strategic autonomy to address over-dependence'.[6]

However, turbulence from the external environment continues to haunt both India's science diplomacy and its strategic autonomy designs in the present day. Since the advent of the Russia-Ukraine crisis, Russia, India's most steadfast strategic partner in the international community, has been facing international sanctions — including those in the science diplomacy domain.[7] This presents obvious issues for India's science diplomacy, given the deep and abiding science and technology cooperation between the two states in the global system.[8] That India maintains multiple *strategic partnerships* but not treaty alliances in this century means that country has enough space to navigate through the troubled waters without reneging on its state-sanctioned commitments. But as events escalate, keeping a diverse set of strategic partnerships — with some states at discord with each other will have implications for India's existing science diplomacy endeavours.

Furthermore, the external environment by 2022 is turbulent, to state the very least. There is post-COVID-19 recovery; China's aggressive rise; a given hostility with Pakistan; and the erasure of Ukraine as a source of India's imports. India has long sought access to global sources of science and technology. But it has also sought *self-sufficiency* in all its formal science policies — that currently manifests as *Atmanirbhar Bharat* under the incumbent Narendra Modi administration. Given rivals in the shape of China and Pakistan at borders and its own strategic partners at war with each other — India's science diplomacy will increasingly rely on its strategic autonomy calculations in the days, months and possibly years ahead.

Both of India's foreign policy components of strategic autonomy and science diplomacy will now have to enter unseen circumstances. India's strategic partnership with Russia — now at war with Ukraine amid global sanctions — is perhaps one of the most solid inter-state relationships since the pre-Brexit US-UK partnership in the international system. Given the advent of the Russia-Ukraine crisis — amidst existing post-pandemic recovery and rivalries with China and Pakistan — all features of India's foreign policy will be tested.

As India takes over the presidency of the Group of Twenty (G20) from 1 December 2022 to 30 November 2023, the focus should be on conflict mitigation and maximum inter-state cooperation on the way ahead. India of 2022 remains the one state in the international system that fields multiple strategic partnerships despite its strategic partners being at inter-state discord even in fields as basic as science and technology. For this to manifest, the country's foreign policy personnel and its science and technology workforce will have to come together to not only answer national needs but also global issues and challenges to ensure that science diplomacy works in this century, however severe the inter-state discord.

References

1. Ministry of Science and Technology, Government of India (2013) Science, Technology and Innovation Policy 2013. http://dst.gov.in/sites/default/files/STI%20Policy%202013-English.pdf
2. Nehru J (1959) Text of Prime Minister's inaugural speech at the Indian Science Congress. https://archive.pib.gov.in/archive/ArchiveSecondPhase/EDUCATION/1959-JAN-APRIL-EDUCATION/PDF/EDU-1959-01-21_041.pdf
3. Narayanan KR (1999) Address by the President of India to Parliament. https://archive.pib.gov.in/archive/ArchiveSecondPhase/RASHTRAPATI%20BHAWAN/1999-JAN-DEC-NO-1-PRESIDENT-SECTT/PDF/RPB-1999-10-25_064.pdf

4. Shringla HV (2021) Foreign Secretary's concluding remarks at the Atal Bihari Vajpayee Memorial Lecture 2021. https://www.mea.gov.in/Speeches-Statements.htm?dtl/34725/foreign+secretarys+concluding+remarks+at+the+atal+bihari+vajpayee+memorial+lecture+2021
5. Shringla HV (2022) Remarks by Foreign Secretary at the inaugural dinner of the Raisina Dialogue 2022. https://www.mea.gov.in/Speeches-Statements.htm?dtl/35233/remarks+by+foreign+secretary+at+the+inaugural+dinner+of+the+raisina+dialogue+2022+april+25+2022
6. Jaishankar S (2021) Speech by External Affairs Minister at the 'Future of Asia' Conference organised by Nikkei. https://www.mea.gov.in/Speeches-Statements.htm?dtl/33870/speech+by+external+affairs+minister+at+the+future+of+asia+conference+organized+by+nikkei
7. Stone R (2022) Western nations cut ties with Russian science, even as some projects try to remain neutral. https://www.science.org/content/article/western-nations-cut-ties-russian-science-even-some-projects-try-remain-neutral
8. Ministry of External Affairs, Government of India (2022) India-Russia Relations. https://www.mea.gov.in/Portal/ForeignRelation/India-Russia-Relation-2022.pdf