Concept Note

Advancement in the science and technological progress has become the precursor of the economic growth across the world. The ever-growing interactions on the S&T with diplomatic arrangements have laid the foundation of 'Science Diplomacy'. In recent decades, Science Diplomacy has emerged as a key policy instrument in foreign relations, particularly, in crafting diplomatic agreements on the global issues, ranging from climate change, cyber security, trade, nuclear science, space, biosafety and public health. With the realization of interdependence of S&T with the foreign policy- making, the idea of 'Science Diplomacy' has come into existence. The concept of Science Diplomacy has three dimensions— Science in Diplomacy, Diplomacy for Science and Science for Diplomacy. Science in Diplomacy is for providing inputs from the scientific community to foreign policy- makers, including MoUs, treaties and joint ventures for strategic S&T collaboration and S&T programmes as part of the Overseas Development Assistance. Diplomacy for Science enables scientific exchange and scientific cooperation, and Science for Diplomacy facilitates diplomacy through S&T and effectively deploys capacity in science for international relations.

In the Indian context, the interface between the Science and Diplomacy, foreign policy and development cooperation is becoming crucial and complex for the country, in particular, and the world at large. The challenges have grown multifold, and require greater co-ordination with the Ministry of External Affairs and other ministries, as well as their counterparts across the globe. The older framework of diplomacy and negotiation has proven to be insufficient in addressing S&T- related foreign negotiations and cooperation. Hence, Science Diplomacy would have a significant role in addressing issues to foster scientific advancement and sustainable development. With the idea to contribute to the theory and practice of Science Diplomacy in India, Research and Information System for Developing Countries (RIS) and the National Institute of Advanced Studies (NIAS) have launched **a Joint Programme on Science Diplomacy**, funded by the Department of Science and Technology (DST). Drawing on the capacities and strengths of these two institutions in the areas of their respective expertise, the programme is expected to meet three key objectives— Capacity- building in Science Diplomacy, Developing Networks, and Science Diplomacy for Strategic Thinking.

In the context of **Capacity- building in Science Diplomacy**, India's stature among the global comity of nations is acclaimed due to its impressive economic growth and technological capabilities. India's assistance to, *inter alia*, East Asia, South East Asia and Africa and application of S&T for development cooperation has redefined 'geopolitical' positioning of India as the locus of diplomatic deliberations *vis-à-vis* emerging technology and science frontiers. In space sciences, India has showcased extraordinary feat through numerous space programmes like Mangalyaan, Chandrayaan I and II, which has placed the country amidst developed countries in deploying space technologies. In the arena of health biotechnology and nanotechnology, applications developed in India are well equipped to meet the needs of many of the developing countries. India is also a major supplier of generics in the pharmaceutical sector; and the country's success in ICT and IT related services have received global recognition. The joint programme would undertake identification and mapping of priority areas for collaboration and involvement of stakeholders in policy- making and strategic engagements, including science counselors, Indian Diaspora, senior diplomats and academicians and experts.

The programme would **develop networks** and create potential linkages among scholars and relevant institutions in India and across the globe to provide policy inputs on issues related to science and technology policy deliberations. India's leadership role in International Solar Alliance and its commitment to promote renewable energy to support the Paris Climate Agreement goals have been recognized globally and appreciated. As part of the development co-operation, India has deployed its capabilities in space, informatics and telecommunications and in health in Africa and South Asia, and have undertaken S&T projects through BRICS and IBSA. Presently, India's bilateral and multilateral cooperation in S&T cover many important and emerging fields and research projects have been funded for addressing to the needs in food, energy, health and sanitation.. This Programme would facilitate developing networks for enabling India to apply effectively its capabilities in S&T in the global arena.

The objective of **the Science Diplomacy for Strategic Thinking** would include analysis of India's efforts on Science Diplomacy and would formulate a policy relevant output on strengthening and deepening Science Diplomacy; identify avenues for using Science Diplomacy in selected countries as well as in groupings like IBSA, BRICS, and conduct research on Science Diplomacy for the South-South Cooperation in the S&T. The joint endeavor would identify best practices and programmes in Science Diplomacy and develop programmes and practices for India in Science Diplomacy and initiate research on linking Science Diplomacy with trade and economic policies for development cooperation.

Developed countries, like the US and European Union, have deployed similar programmes and initiatives to use Science Diplomacy as part of their activities in the S&T co-operation, international aid and capacity- building. Royal Society and American Association for Advancement of Science (AAAS) are among the science bodies working on Science Diplomacy. Given the international dimensions of the S&T, the programme would contribute for effective utilization of Science Diplomacy by India and bring in a developing country perspective to the discourse and practice of Science Diplomacy. Keeping in view India's visions and goals of foreign policy and S&T cooperation, this programme would contribute in broadening the objectives and in realizing them, including Sustainable Development Goals (SDGs).