Science Policy & Diplomacy Meet: Key Takeaways

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Introduction

A "Science Policy and Diplomacy Meet" was organised on 16 September 2023 as a significant component of the One Week One Lab (OWOL) Programme of CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi, India. The hybrid event, live-streamed on Facebook and YouTube, aimed to strengthen networks between different science policy and diplomacy stakeholders and professionals in a multicultural and multidimensional space.

In her inaugural address, Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, underscored the importance of the OWOL Programme in fostering connections and stimulating discussions on critical topics such as science



First Session of the Event. From left: Dr Bhaskar Balakrishnan, Prof. Ranjana Aggarwal, Dr Philipp Ackermann, Dr Rama Swami Bansal

communication, science policy, knowledge-sharing, and science diplomacy, all essential for sustainable development. She highlighted CSIR-NIScPR's expertise in science communication, evidence-based science and technology studies, and its commitment to addressing socio-economic impact and strategic research areas. Mentioning that CSIR-NIScPR is bringing out a unique digest, "*Science Diplomacy*", since 2017, Prof. Aggarwal expressed eagerness to collaborate with policymakers and researchers to pursue sustainable development goals (SDGs) and other strategic research areas.

Dr Rama Swami Bansal, Head of the International S&T Affairs Directorate at CSIR, New Delhi, talking on "CSIR India and its global linkages", emphasised that presently, sustainable entrepreneurship needs to become the foundation for growth and here, science diplomacy can play a central role focusing on the global partnerships with a human-centric focus.

Dr Bhaskar Balakrishnan, former Ambassador of India and Science Diplomacy Fellow of Research and Information System for Developing Countries (RIS), New Delhi, stressed the importance of sustainability regarding technologies and innovations. He articulated that science policies seek to support S&T developments to cater to the nation's needs. Dr Balakrishnan outlined critical aspects for scientific development, including increasing higher educational institutes and R&D funding by the government as well as the private sector, strengthening R&D infrastructure and workforce/human resource enhancement, and improving the ease of doing R&D. Further, he discussed the three pillars of science diplomacy as defined by the Royal Society and the American Association for the Advancement of Science (AAAS): science in diplomacy, diplomacy for science, and science for diplomacy. He highlighted that global diplomacy for science should include capacity building of the national ecosystem, engagement with the STEM diaspora, and applying STI to achieve SDGs. Towards this, India needs to increase its Science Counsellor networks, and additionally, Foreign Service officers should also learn to handle S&T collaboration activities. Dr Balakrishnan emphasised that we must strengthen science in diplomacy by promoting collaborations between diplomats and the scientific fraternity, which is critical for international negotiations.

During the "Science Diplomacy for Sustainable Development" address, Dr Philipp Ackermann, German Ambassador to India and Bhutan, German Embassy, New Delhi, shared his deep admiration for India's scientific achievements and robust relationship with Germany. Commending CSIR's science communication programs, Dr Ackermann also applauded India's swift S&T evolvement and response to the COVID-19 pandemic. He highlighted a growing scepticism of S&T globally, especially during the pandemic and stressed the vital role of policy research and effective communication in shaping responses to global challenges. He advocated for international cooperation in scientific development and called for the firm implementation of G20 declarations.



Dr Philipp Ackermann, German Ambassador to India and Bhutan

The discussion session on "Science Diplomacy for Sustainable Development" was chaired by Prof. Madhav Govind, Chairperson, Centre for Studies in Science Policy, Jawaharlal Nehru University, New Delhi. The panellists included Mr R. Madhan, Director, Indo-German Science & Technology Centre, New Delhi; Dr Purnima Rupal, Former Director, Indo-French Centre for the Promotion of Advanced Research (IFCPAR/CEFIPRA) and Dr Dhoya Snijders, Innovation Counsellor for India, Embassy of the Kingdom of the Netherlands, New Delhi.



Panel Discussion. From left: Mr R. Madhan, Prof. Madhav Govind, Dr Dhoya Snijders, Dr Purnima Rupal

Prof. Govind facilitated conversations on India's achievements and challenges in the realm of sustainable development, particularly through Science and Technology. Prof. Govind pointed out that international collaborations are pushing towards basic research rather than applied research, recognising the broad-reaching benefits it can bring. He emphasised that science diplomacy can bring all the countries on the same platform and evolve an executable strategy.

Mr Madhan touched upon the distinctive rules and regulations that govern science diplomacy in various countries. He then underscored the striking similarities in the research landscape between India and Germany in the context of Ministries, R&D institutions, startup ecosystems, and funding mechanisms. He highlighted that science diplomacy needs networking as it enables sharing costs, infrastructure and human resources like India and Germany shared synchrotron facility through science diplomacy. Mr Madhan also emphasised the need for specialised programs aimed at enhancing networking capacity, fostering joint R&D efforts, promoting innovation, and facilitating the sharing of both workforce and infrastructure. Further, he acknowledged that one of the biggest challenges in science diplomacy lies in quantifying the outcomes of scientific collaborations.



Mr R. Madhan, Director, Indo-German Science & Technology Centre

Dr Snijders mentioned that the Netherlands has the biggest Indian diaspora in Europe. He highlighted that science diplomacy is facilitating the resources for fundamental research to support not any specific country but the whole global scientific community. There are many good opportunities available to everyone. Dr Snijders explained that his country now focuses on societal impact, science diplomacy, and multi-national scientific collaborations. He remarked that although both India and the Netherlands have bilateral associations of various scientific ministries, there is a need to include civil societies and the private sector.



Dr Dhoya Snijders, Innovation Counsellor for India, Embassy of the Kingdom of the Netherlands

Dr Rupal said that for science diplomacy, having science ministries on both sides is always an advantage for smooth operations in collaborative activities that impact international collaborations. India has been advocating science diplomacy for a very long time.

The thought-provoking talks led to an enthusiastic interaction between the panellists and the participants, covering topics such as science diplomacy's role in rare disease treatment, the impact of science communication, the difference between having scientists or economists/social scientists as science diplomats, and Netherlands' decision to appoint Innovation Counsellors instead of Science Counsellors. The event served as a platform for robust discussions on science diplomacy, science policy, and international collaborations, all contributing to advancing scientific knowledge and achieving SDGs.

Key learnings

- *Comprehensive and collaborative partnerships are required to tackle global issues like climate change, pollution, biodiversity conservation, and sustainable development to ensure knowledge and technology sharing*
- *For synergistic global scientific development and advancements, there is a need for an equal exchange of scientists and researchers among nations*
- *Science diplomacy has a critical role in realising international collaborative scientific research projects and initiatives*
- *Engagements and interactions at the level of ministries of different nations make science diplomacy easier*
- *Strengthening global science counsellor networks is of utmost importance for promoting and facilitating science diplomacy*
- *For science diplomacy to be effective, it is essential to understand a nation's STI ecosystem*
- *Intense discussions and deliberations on science diplomacy and its functionalities are required to forge meaningful national and international scientific collaborations*