About Hungarian Science Diplomacy and its Successes in India

Hilda Farkas
Counsellor (Science and Technology)
Embassy of Hungary, New Delhi, India
E-mail: hilda.farkas@mfa.gov.hu



Introduction

As one of the newest specialised fields of international relations, the connection of science and diplomacy for conscious and defined goals is a characteristically 21st-century development however, some of its elements appeared long ago. For instance, based on the initiative of scientists, diplomats and intellectuals from the European Intergovernmental Scientific Organisation, the European Organisation for Nuclear Research (CERN) was born in 1954. One of its goals was to establish international scientific cooperation based on the neutrality and universality of science. After World War II, the initiators specifically saw the chances of restoring relations between the countries in this cooperation. The initiative proved its viability, followed by many others.

Science diplomacy is, therefore, scientific cooperation between nations whipped up to resolve problems affecting two or more countries or the whole world (e.g., nuclear fusion research in ITER, Covid-19 pandemic) and to establish constructive international partnerships. Science diplomacy is an umbrella term that includes formal or informal relationships set up in various scientific, technological, research, development and innovation (RDI) fields. RDI policy using evidence-based science is becoming firmly embedded in foreign policies, economic diplomacy, and the system of bilateral and multilateral international cooperation of individual countries.

Institutional Framework of Science Diplomacy in Hungary

The crucial Hungarian players in science policy and science diplomacy are the Ministry of Culture and Innovation, the Hungarian Academy of Sciences, the National Research, Development and Innovation Office (NRDIO), the Eötvös Loránd Research Network and the Department of Culture and Science Diplomacy of the Ministry of Foreign Affairs and Trade.

In May 2022, the Government of Hungary assigned the tasks and powers of the minister responsible for culture and innovation to government science policy, higher education, and their coordination. Within this framework, it is also responsible for the financing of research, development and innovation programs.

The Hungarian Parliament approved an RDI law in 2014 about scientific research, development and innovation (Act2014/LXXVI), which laid down the principles and rules regarding the relationship between the state and those involved in RDI. It established a stable institutional system, NRDIO, for governmental coordination and financing of Hungarian RDI and the efficient and transparent use of available resources. It created a National Research, Development and Innovation Fund (NRDI Fund), which is a separate state fund.

The NRDIO is the primary executor body of the intergovernmental bilateral science and technology cooperation agreements, has cooperation agreements with numerous organisations responsible for RDI policy and funding, and participates in multilateral international STI cooperation (COST, EUREKA, ICGEB, EMBL, ESFRI, ITER, CERN, XFEL, ESS, OECD, TAFTIE, etc.). It has a coordinating role in professional tasks related to the Hungarian participation in international research infrastructures.

The Place of Science Diplomacy in the Hungarian Foreign Service

The Ministry of Foreign Affairs and Trade is primarily responsible for implementing science diplomacy goals in the Hungarian Government. The classical diplomatic and foreign trade activities of the ministry are organically connected with the knowledge-based, innovative approach and the international promotion of Hungarian RDI results. With the introduction of the integrated foreign representation system in 2014, covering science diplomacy became the task of all Hungarian foreign missions. The scientific and technological field is principally dealt with by those foreign missions where science and technology counsellor is designated. In the absence of an STI counsellor, these matters are the responsibility of economic and trade attachés. Hungary currently maintains intergovernmental bilateral STI cooperation with 36 countries and has signed inter-institutional scientific and technological agreements with another ten countries.

Tasks prioritised by science diplomacy appear along different centres of gravity for each region/ country and change dynamically over time, as they precisely follow the extremely fast-changing RDI trends. Presently in Hungary's foreign policy, the most prioritised areas for science diplomacy are:

- Industry 4.0
- Digitisation
- Start-ups
- Smart city developments
- Connected and self-driving vehicles, electromobility (ZalaZONE Science Park)
- The Szeged Laser Center (ELI-ALPS)
- National Laboratories Program
- Water innovation
- Agricultural innovation
- Healthcare innovation
- Creative industry, design
- Higher education mobility

The Department of Cultural and Science Diplomacy of the Ministry of Foreign Affairs and Trade shares the achievement of the defined goals of science diplomacy by informing government actors, providing professional guidelines for the science diplomats of foreign missions, as well as facilitating international collaborations (e.g., Visegrád4 partnership) and other thematic programs.

This Department organises a Scientific and Technological Conference every year, where the main objective is to provide a professional forum and discussion opportunity for the actors of science diplomacy, to share information on the current trends and priorities of science diplomacy, and to determine further direction of professional activity. The science diplomacy website, operating since 2016, is a public interface on which current events and news of Hungarian science diplomacy are reported. The Department supervises and coordinates the activities of Hungarian foreign missions, jointly operates the STI diplomatic network with NRDIO, and provides project financing. Currently, 14 STI diplomats are active in different locations, and the network is expanding each year.

In Hungary, one of the priority tasks is to develop RDI cooperation of the regional Visegrád4 Group (V4– Hungary, Poland, Slovakia and the Czech Republic) with other countries. Consequently, much successful collaborations have been made with Israel, Japan and Korea.

Hungarian Science Diplomacy in India

The Hungary-India bilateral cooperation is based on the science and technology agreement (1992), the implementation of which is the responsibility of the NRDIO and the Ministry of Science and Technology, India. This agreement gained real momentum when, during the Hungarian Prime Minister's visit to India in 2008, the two parties agreed to set up a Joint Strategic Research Fund. Subsequently, the countries advertise joint calls for research programs every two years. Since 2013, 29 projects have been supported. Within the framework, applied research projects receive support for a maximum of three years which can lead to innovative products, procedures and services in defined focus areas. The dynamically developing interest of Indian researchers in Hungary and India's spectacular research achievements encouraged Hungary to give further impetus to bilateral STI cooperation. Therefore, a Science Counsellor was appointed to New Delhi in March 2017. This has noticeably increased the activity in joint research programs, as nearly 100 applications were received in 2019.

Relations between inter-university and research institutes are also developing dynamically, which is demonstrated by the fact that 14 inter-institutional cooperation agreements were inked during 2018-2022 with the assistance of the Hungarian embassy in New Delhi. These MoUs primarily focus on joint research activities, knowledge sharing, scientific events, student and academic exchange programs, and lately, innovation activities and elaborating joint degree programs. Interest in joint participation in the EU's research framework program is growing too.

It must be noted that both governments signed their Cultural Agreement in 1962, and the bilateral Educational Exchange Program was concluded in November 2014. Now, it is in the process of being renewed. The program offers 200 Stipendium Hungaricum Scholarships to Indian students to pursue higher education studies in Hungary, in Hungarian or English. The program is quite popular, with almost 2,000 Indian students submitting their applications for the 2022-2023 academic year. Concomitantly, interest in self-financed education is growing, with approximately 1000 Indian students currently studying in Hungary.

The number of mutual visits and joint scientific programs is also growing, with an average of 50 such small and large events taking place annually in the Hungarian-Indian context. The Covid-19 pandemic could not reduce this trend, as the programs quickly shifted to the virtual space.

Conclusion

It is obvious that Hungary is striving to introduce the traditionally outstanding Hungarian scientific results into the international space. It is also clear that, for this purpose, our country is trying to use a wide range of science diplomacy tools, where India is one of the target areas. The size and population disparity between the two nations does not hinder this cooperation and offers a common advantage to both countries. Nonetheless, there are ample opportunities yet to be fully explored. Hence, the goal of Hungarian science diplomacy is to make the relations between the two countries as effective as possible through joint efforts in the international scientific and innovation ecosystem.