Potential for Sri Lanka's Science Diplomacy: Scientific Collaborations 2010 – 2015

Kandanamulla. K. A .T. K. G.
National Science Foundation
Colombo
kandanamulla@yahoo.com
Dissanayake.V. H. W.
Human Genetics Unit
Faculty of Medicine
University of Colombo
vajirahwd@hotmail.com
Cooke.G.
Ministry of Foreign Affairs
Colombo
georgecooke6@gmail.com

Introduction

Interactions among the global community through science has become ever more important with the challenges of the world today such as climate change, ensuring food security and the alleviation of widespread poverty. A holistic approach to solve such problems would be one where science frequently collaborates with diplomacy. These interactions between science and diplomacy are explained by 'Science Diplomacy'. Science Diplomacy is the use of scientific collaborations among nations to address common problems and to build constructive international partnerships (Fedoroff, 2008).

Research Question

Even though Sri Lanka is involved in international scientific cooperation facilitated by diplomatic channels, 'Science Diplomacy' by Sri Lanka is in its infancy and the awareness level of the concept within the country is very low. Thus, it is an area which is less well studied by the scientific/ diplomatic/ research community, which has inevitably created a knowledge gap. Bridging such a gap of knowledge would be valuable for the identification, prioritization and facilitation of international scientific collaborations and to establish a mechanism for continuous interaction between the fields of science and diplomacy, with the ultimate goal of developing our country. In such a context, identification of the policies and practices related to Science Diplomacy, implemented and carried out by our nation during the recent past (2005-2015) and seeking the potential to streamline them was focused by this research study so that suggestions could be provided to establish a formalized system of Science Diplomacy.

Objectives

Hence, this study aims to identify how Sri Lanka has practiced Science Diplomacy during the period from 2010 to 2015. For that purpose, it is sought to understand the foreign policy of Sri Lanka, in relation to Science Diplomacy as well as the Science and Technology Policies of Sri Lanka, in relation to Science Diplomacy. Further, it seeks to identify the factors that affect the success or failure of Science Diplomacy related activities and to make suggestions and recommendations to improve Science Diplomacy by Sri Lanka.

Summary of Literature

Sri Lanka has been involved in forming international scientific partnerships at the government/institutional level as well as individual scientists' or technologists' level. Bilateral agreements containing the 'science and technology component' have been signed with countries such as USA, India, Thailand, Bulgaria, Cuba, Yugoslavia, Rumania, etc. Ministry of Foreign Affairs plays an active role in terms of co-ordinating some scientific activities, even though that is not done under the label of 'Scientific Affairs' or 'Scientific Coordination'. Universities and Research Institutes too, carry out scientific collaborations.

Science diplomacy is a fluid concept but can usefully be applied to the role of science, technology and innovation in three dimensions of policy, viz.:

- Facilitation of international science cooperation (Diplomacy for Science)
- Informing foreign policy objectives with scientific advice (Science in Diplomacy)
- Using science cooperation to improve international relations between countries (Science for Diplomacy) (Royal Society, 2010)

According to Flink & Schreiterer (2010), there are three main objectives of science diplomacy. They are access, promotion and influence.

As knowledge based industries backed by advanced science and technology are leading the world today (National Science, Technology and Innovation Strategy, 2011), there is a high potential to gain benefits of science diplomacy for economic development through international cooperation.

Methodology

This study was focused on science related policies and foreign policy of Sri Lanka which had been practiced from 2010 to 2015 in relation to Science Diplomacy. Also, the potential to develop Science Diplomacy by Sri Lanka has been analyzed.

Data necessary for the study were collected from primary as well as secondary sources. Interviews with relevant personnel from the Ministry of Technology and Research, National Science Foundation (NSF), Ministry of Foreign Affairs, Coordinating Secretariat for Science, Technology and Innovation (COSTI), International Research Units of the Universities of Colombo and Peradeniya and some other related individuals (i.e. journalists, policy makers and officials from scientific organizations) were the primary

sources. Secondary sources were the databases, books, past annual reports of scientific institutions and universities, policy documents, as well as journals, websites, etc.

Data collected were analyzed quantitatively as well as qualitatively in a theoretical and descriptive manner to identify how Sri Lanka has fared in utilizing policies to facilitate science diplomacy during the past decade. Potential to develop Science Diplomacy by Sri Lanka was assessed and recommendations were made towards improving Science Diplomacy, thereby improving international cooperation and achieving national development. The main constraint for this study could be identified as the limitation of time.

Discussion and Conclusions

The Ministry of Foreign Affairs of Sri Lanka has three Divisions which are mainly involved with science related activities. They are the UN Division (mainly involving multilateral affairs), East Asia and Pacific Division (mainly involving bilateral affairs) and the Economic Affairs Division. However, there is no separate division for 'Scientific Affairs'. Even though the Ministry has no exclusive involvement in science policy per se, with scientific backing, it presents the country's stands with reference to climate change, ocean, environment, biodiversity, intellectual property rights, etc. Those are instances where 'Science in Diplomacy' is practiced. Further, the Ministry of Foreign Affairs plays a major role along with the Ministry of Science, Technology and Research, Institutes under the said Ministry as well as other relevant Ministries in initiating Memoranda of Understanding (MoUs) and Agreements on Bilateral and Multilateral Scientific Cooperation. These can be given as examples for 'Diplomacy for Science'.

Individual scientists as well as scientific institutions too, play a greater role in Science Diplomacy, though not under that label. Scientists and researchers who participate at the international collaborative research programmes, training programmes as well as international scientific fora initiate linkages with individual scientists, technologists and alike of other countries which ultimately lead to strengthened cooperation between the respective countries. Such an involvement is a good example for 'Science for Diplomacy'. The government science funding bodies such as the National Science Foundation (NSF) and the higher education funding bodies such as the University Grants Commission (UGC) play key roles in facilitating such cooperation through the award of necessary grants.

Even though Sri Lanka does not have a properly developed system under the label of 'Science Diplomacy', it is evident that functions of Science Diplomacy are carried out at present by various stakeholders of the Science and Foreign Policy spheres. However, further streamlining of such activities would help to bring more benefits to the country.

Countries such as USA have developed Science Diplomacy programmes and Networks. 'AAAS Science Diplomacy Fellows Programme', 'Jefferson Science Fellowship Programme' and 'Science Envoys Programme' are such programmes in the USA (Fedroff, 2008 and Berg, 2010).

A 'Science Counselor Programme' has been suggested by the Science, Technology and Innovation Strategy (2011-2015) for the first time, in order to streamline and better

coordinate Science Diplomacy related activities of Sri Lanka. If expatriate scientists could be appointed as 'Honorary Science Counselors' from key countries, extra costs will not occur in recruiting new officers for that purpose (Mr S Ratnawale 2016, pers. comm. 18 January) . Further, since they are experts in their fields in those countries, their ability to liaise easily with other experts of the foreign countries would be an added advantage. Apart from that, the officials of the Foreign Ministry/Embassies with a science background could be assigned to carry out Science Diplomacy related activities. This would become more convenient according to the current trend of more science graduates getting recruited to the foreign service of Sri Lanka (Mr S Walakuluge 2016, pers. comm. 11 January).

Keywords: Foreign Policy; Science Counselors; Science Diplomacy; Stakeholders; World Order

References

Berg, L. (2010). Science diplomacy networks. *Politorbis Nr*. *49*, (69).

Fedoroff, N.V. (2008). Science Diplomacy in the 21st Century.*Cell 136*, 09 – 11.

Flink, T., & Schreiterer, U. (2010). Science diplomacy at the intersection of S&T Politics and foreign affairs: Towards a typology of national approaches.*Science and Public Policy 37,* 665-667.

Ministry of Science and Technology - Sri Lanka. (2011). *Science, technology and innovation strategy for Sri Lanka.*Colombo: Author.

Royal Society - London. (2010). *New frontiers in science diplomacy*.Retrieved on December 02, 2015 from http://royalsociety.org/topic-policy/publications/2010/new-frontiers.pdf.