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OPINION

# Science Diplomacy as a powerful tool for national unity and friendship among nations – II

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(First part of this article appeared yesterday (05 Feb. 2024))



## Importance and relevance of SD:

From a state’s perspective, SD is a subset of national foreign policy and a strategy for advancing its interests and needs. From a global perspective, SD is perceived as a potential solution for tackling common global problems. SD clearly falls within the scope of public policy. It is primarily a lever for action.

Developing economies, mainly in the Southern hemisphere, are home to approximately 80% of the world’s population. However, they started introducing SD only relatively recently, i.e. S.

Africa in 2012, India in 2018, Pakistan, 2019 and Columbia 2020. Researchers in the Global South are under-represented as leading authors in research journals, with the result that research produced and scientific methods and techniques developed in the Global South receive lower visibility and are not fully included and well-integrated into “Global Science”. Therefore, SD may provide a framework to acknowledge and address this imbalance in scientific collaboration between regions.

However, unlike countries in the global North, countries in the Global South, barring China and Brazil, find it difficult to post a science attaché in their foreign missions, Hence, the foreign ministry could have a Science Diplomacy Division which liaises between national S&T stakeholders and international partners. It can also call on the services of diaspora and alumni of foreign universities at home and abroad for advancing the national scientific ecosystem.

SD has the potential to play a role in addressing imbalance and global inequalities, i.e. between North and South, through capacity building in scientifically disadvantaged countries, uniting efforts and infrastructure to address global challenges, promoting more inclusive and socially responsible scientific practices across cultures, and promoting science from the “periphery” to the centre of discussions on policy.

Science diplomacy is becoming an important tool by which states can more effectively promote and secure their foreign policy agendas. Recognizing the role science plays at national and international levels and identifying a state’s national diplomatic style can help to construct a ‘national style’ in science diplomacy. SD, therefore, has the potential to influence national audiences in ways that traditional public diplomacy cannot. Thus, SD can be deployed for the following purposes:

Science diplomacy by the government to advance country’s national interests and development

Science diplomacy involving stakeholders to address their real-life issues effectively

Science diplomacy to improve foreign relations and collaborations and to address global challenges

SD to contribute to reducing disparities and inequalities between countries.

SD is neither an all-powerful tool nor a miracle remedy, but it can potentially mitigate conflicts and foster harmony and amity among different communities in a country, and promote friendship among nations. While it has its own limitations, its balanced and inclusive use in international relations could usher in a better tomorrow, making the planet a better place to live in. For all this to happen SD has to be institutionalized and it should also be essentially combined with morality and ethics in order it to be acceptable and effective. History is already replete with examples where SD has been deployed effectively to address global challenges. A few striking examples are given below:

Despite arch rivalry between North Korea and USA, American and British scientists were able to visit even the remotest villages close to the volcano Mount Paektu in N. Korea, following a catastrophic volcanic eruption in 2011, in order to collect rock samples and deploy seismometers. This led to an unprecedented scientific collaboration resulting in joint publications between North Korean and American and British scientists. It was a real boon,

showing the potency and power of SD in bringing even archrivals to work together, making the seemingly impossible happen through S&T. It is an example of how technical collaborations can morph into powerful peace and friendship building initiatives. (Figure 1)

Nuclear non-proliferation talks between Iran and USA came to a standstill in 2015 with the atmosphere becoming tense and electrifying. Then Iran nominated Dr. Ali Akbar Salehi, Head, Atomic Energy Organization of Iran, to lead the Iranian team, who in turn requested USA to nominate Ernest J. Moniz, Energy Secretary to President Barack Obama, as his counterpart. Both were alumni of the MIT, USA where they studied nuclear physics. When they came to the negotiating table, politics were put behind and they discussed physics instead, which enabled them to make steady progress. The intervention of science made a huge difference that would otherwise have been next to impossible. Suitably, they were nominated for Nobel Prize in Peace in 2016. (Figure 2)

At the height of the Second World War when fierce fighting was going on between the German troops and British & American troops, German and American scientists and German and British scientists continued to work together not letting the war drive a wedge between them. It shows the profound bonding power of scientific cooperation.

### **Potential applications of SD to address national issues and regional and global concerns relevant to Sri Lanka**

There has been a profound transformation of the Indian Ocean from a mere maritime trade route into a global nexus encompassing security, economic and environmental concerns, social issues and strategic interests. Moreover, international and regional policy discourses on the Indian Ocean regional order, Indo-Pacific dynamics and the Belt-Road Initiative are often sensitive and complex given the intensity of strategic interests and aspirations of some countries in and beyond the region. Here, smaller member-states, particularly when they are economically vulnerable, have no parity when dealing with bigger states that bully them into submission, so that the agenda on cooperation gets submerged by prevailing geopolitical tensions in the Indian Ocean and beyond. Here, SD can be an effective tool to cope with such issues.

Sri Lanka presently occupies the Chair of IORA from 2023 to 2025. Besides, it is a member of BIMSTEC and SAARC. The nature and scope of IORA centre round economic cooperation and on achieving sustained growth and balanced development in the region. Economic cooperation extends to areas such as trade facilitation and liberalisation, promotion of foreign investment, management of marine resources, maritime security, blue economic opportunities, disaster resilience, scientific and technological exchanges, tourism and movement of natural persons and service providers. Therefore, Sri Lanka's diplomacy needs to rise to the challenge, demonstrating its fullest strength during such discourses in order to navigate the complexities and intricacies involved.

In addition, when bilateral and transborder shared resources such as gas fields, marine resources, fish stocks, rivers and watershed exist, diplomatic efforts without adequate scientific understanding can be ill-directed and counter-productive. This is also applicable to the claimed extended Exclusive Economic Zone of Sri Lanka as per the law of the Sea of Convention. Therefore, a cogent multilateral vision, underpinned by inclusive, coherent policies and combined with a commendable grasp of science diplomacy and consummate skills will be of paramount importance.

Some major issues and concerns to Sri Lanka are briefly outlined below:

### **Debt restructuring and Climate Change**

Sixty one countries in the world face severe debt problems and these debt-distressed countries are unable to make progress towards climate resilience and sustainable development amidst cascading crises and inequalities. “This has not happened because of the bad behavior of one country. This has happened because of systemic shocks that have hit many countries at the same time,” said Rebeca Grynspan, Secretary-General, UNCTAD. With interest rates rising sharply, the debt crisis is putting enormous strain on public finances, especially in developing countries that need to invest in education, health care and their economies, and to adapt to climate change. “To resolve these issues equitably, this needs to be done in a manner that maintains the debtor countries’ ability to grow and meet its current and future debt obligations, while also fulfilling its commitments to the SDGs,” said Sri Lankan President Ranil Wickremesinghe. Debt cannot and must not become an obstacle for achieving the 2030 Agenda and the climate transition that the world desperately needs.

During the COVID-19 pandemic, “Nobody was safe until everybody was safe”. Similarly, unless fair debt relief is provided to debt-distressed countries through interventions such as climate financing, all the countries and peoples in the world, both developed and developing, will be at the receiving end and become victims of climate change. S&T both investigates the underlying causes of climate change and offers remedies for it and other global challenges stemming from human impact. Hence, SD can be applied in an objective and dispassionate manner to address not only climate change, but also other global issues such as pandemics, poverty, water, food and energy insecurity, inequalities, conflicts, pollution etc. which have far-reaching social, political and economic implications and ramifications on humanity as a whole.

### **National unity**

As a result of protracted internecine conflict, the performance of all sectors of the economy of the Northern and Eastern Provinces, including agriculture, fisheries, tourism, cottage industries and SMES were drastically affected. Concomitant with this was loss of livelihood, and means of sustenance of millions of people in those provinces. Therefore, in order to rebuild and resuscitate the regions, it is imperative to revitalize the key sectors affected so as to restore their livelihoods and raise socio-economic standards.

Jaffna has been a Mecca of culture and scholarship as well as a cradle of intellectuals, scholars, scientists and professionals who have made an immense contribution to national development. Similarly, the Eastern Province with a lot of natural endowments and cultural heritage sites possesses immense potentialities for economic growth. The Universities of Jaffna, Vavuniya, Eastern and South-Eastern constitute the brains trust and intellectual pulse of the respective regions. Hence, the universities and R&D institutions in other regions should join forces with them to promote regional development. For instance, with the advent of tsunami in 2004, the University of Ruhuna, with support from CIDA, embarked upon a programme in collaboration with the Eastern University and South-Eastern University in the Eastern province to rebuild and reconstruct the tsunami-affected villages through livelihood development by means of S&T interventions which were quite successful. That led to development of lasting organic linkages among staff of the three universities which are still robust and vibrant.

Therefore, identification of critical issues in the North in agriculture, fisheries, tourism, etc. and addressing them through such scientific cooperation with the South could contribute to fostering social cohesion, harmony and national unity in the country.

### **Claim for extended Exclusive Economic Zone**

Sri Lanka possesses a territorial sea of 21,500 km<sup>2</sup> and an Exclusive Economic Zone (EEZ) of up to 200 nautical miles (370 km) from the coastal line with an extent of 517,000 km<sup>2</sup>. Sri Lanka has the rights to the resources in the water column, seabed and subsurface in the EEZ. Under the United Nations Convention on the Law of the Sea (UNCLOS), Sri Lanka is entitled to claim for an extended area of seabed where the thickness of the sediment layer exceeds one km. This claim has been made and, if accepted, Sri Lanka could gain an additional seabed area. Therefore, the EEZ is likely to expand further with the delimitation of the outer edge of the continental margin of the country, which would permit Sri Lanka to own an EEZ equivalent to 23 times (approximately 1,400,000 km<sup>2</sup>) its land mass. Apart from living resources, this Zone contains a variety of exploitable minerals and hydrocarbons (oil and natural gas).

However, given the geo-political and geo-economic interests in the Indian Ocean, when this arbitration claim is taken up by the UN, other nations could also lodge a claim for part of the area claimed by Sri Lanka. Here, not only a profound scientific knowledge of the sediment dynamics in coastal and marine environments, but also consummate skills in SD are required to succeed in the arbitration process.

### **Potential threats stemming from growing water conflicts in the region**

Climate change and the ever-increasing population, combined with growing economic and social imperatives and needs will create competition for water. This can lead not only to social unrest and regional conflicts, but also to hydro-political issues, triggering “water wars”. Water insecurity can be weaponized and exacerbate tension and friction within and between countries. Today water is a growing source of global conflict in nearly 50 countries. In Asia, while Sri Lanka is blessed with abundant perennial water resources, many countries are already facing moderate to severe water scarcities.

Water being the lifeblood, its scarcities can trigger conflicts not only between, but also within countries. The historic Mavil Aru battle in 2006 is a telling case in point. Therefore, SD will be of great relevance in coping with potential conflicts emanating from water scarcities in the region. (To be concluded)

(This article is based on the address delivered at the inaugural ceremony of the annual sessions of the Sri Lanka Association for the Advancement of Science as its General President in 2023)

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