

Summary of the 3rd Annual Neureiter Science Diplomacy Roundtable

“Science and Technology Diplomacy in Asia”

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Venue: National Graduate Institute for Policy Studies (GRIPS), Tokyo, Japan

Organizers: GRIPS and the Center for Science Diplomacy of the American Association for the Advancement of Science (AAAS)

About the 3rd Meeting

Asia is a growth center in the 21st century and its upward momentum has been attracting the rest of the world. The growth is not limited to economy. The rise of Asian countries has been remarkable in terms of science, technology and innovation (STI), and scientific cooperation and exchange within and outside Asia are actively pursued. Part of Asia's dynamism stems from its diversity – of religions, languages and cultures. At the same time, Asian nations have not always experienced harmonious relationships due to political differences resulting in diplomatic challenges.

The 3rd Meeting convened with the participation 28 practitioners and academics of science and technology diplomacy from 10 countries or regional organizations including Asian countries and the Russian Far East. It was aimed at deepening the understanding of how STI has contributed to fostering a trusting relationship among Asian nations. During the one-day meeting, participants discussed on what contribution STI might be able to make for future relationships in the region especially from the point of view of science for diplomacy.

The roundtable was composed of sessions focused on ASEAN, Korea and Russia.

ASEAN Session

The concept of science and technology diplomacy has started to spread in ASEAN countries. ASEAN has launched a Science & Technology Fellows Pilot Program with the cooperation of the U.S. Agency for International Development (USAID). Some ASEAN countries are engaged in the activities based on the concept of science and technology diplomacy. In ASEAN, the member countries are in the process of regional economic integration and they are placing a high value on STI as a key driver of national and regional development. In addition, at regional level, science and technology diplomacy is used for establishing cooperative networks both within and outside the region. It is supposed that international cooperation based on the concept of science for diplomacy is not easily achieved if there is a difference in the progress of STI between the countries involved. However, a scheme within ASEAN to encourage developed nations to work together with developing ones to enable science for diplomacy efforts.

- In Indonesia, science and technology (S&T) is considered as a vital tool in strengthening the nation's competitiveness at international level, enhancing people's living standards and producing S&T based innovation to move positions of the nation. According to an economic forecast by an international think tank, the Indonesian economy will be relatively good in 2030. However, Indonesia is still in the lowest among G20 countries in terms of ratio of R&D expenditures as a percentage of GDP and there are some challenges, such as small contributions of private companies on R&D, low number of researchers. It is clear that new government puts high value on STI. By doing so, it would be possible to use STI as the way to consolidate and expand diplomatic relationship.
- ASEAN was established in 1967 and the ASEAN Committee on Science and Technology (COST) was set up in 1978 with the participation of 5 nations¹. As a guiding document in pursuing regional cooperation in S&T, the ASEAN plan of Action on S&T (APAST) was made in 2007. In Kurabi Initiative 2010, STI is positioned as a tool for a Competitive, Sustainable and Inclusive ASEAN. ASEAN has keeping dialogues with many partners bilaterally or multilaterally and under the cooperation with US, the ASEAN-US S&T Fellows Pilot Program started with the aim of strengthening science-based policy making, building scientists' capacity to learn and influence policy making, and advancing regional cooperation as well as ASEAN-US cooperation in S&T.
- In Japan, there are some frameworks or initiatives with ASEAN which were set up to contribute to deepening diplomatic relationship as well as S&T or economic cooperation. One is "S&T Innovation Area" proposed by Japan's Council for Science and Technology Policy (CSTP, currently CSTI) in 2010 along with ex-Prime Minister Hatoyama's idea of "East Asian community", a diplomatic agenda at that time. It was taken note at East Asia Summit and e-ASIA Joint Research Program (e-ASIA JRP) started. Economic Research Institute for ASEAN and East Asia (ERIA) is another example.
- "Panel of Experts on the way of Science and Technology Diplomacy" was established under the Minister of Foreign Affairs of Japan to promote discussion on how to utilize science for diplomacy in Japan and what the government especially Ministry of Foreign Affairs (MOFA) would pursue.
- To carry on science and technology diplomacy effectively, it is necessary to have the person who interfaces between science and policy communities especially in diplomacy side. It is also important to make high-level politicians recognized its importance and to put the agenda to highest level of government, to have a long term policy and investment, and, especially in the case of developing countries, to tie up aid, science strategy and policy.

¹ Indonesia, Malaysia, Philippines, Singapore, Thailand followed by Brunei Darussalam in 1984, Viet Nam in 1995, Lao PDR and Myanmar in 1997, and Cambodia in 1999.

- To facilitate the collaboration for global problems is a core issue of science policy because major consideration in trying to enable global scientific community to function global way or 2 countries in a coherent way is to make sure that the detail policies that surround the combat of science are similar compatible.
- ASEAN is an example that science plays a role of building not only regional communities but relationship with external regions through science cooperation. Europe is a precedent of taking advantage of science collaboration for advancing regional peace. The coordination by EU is necessary to implement collaboration with countries beyond EU in rational and effective way. One of the means to do science for diplomacy was the sharing of scientific infrastructure, CERN (European Organization for Nuclear Research), The International Thermonuclear Experimental Reactor (ITER), Spaceship for instance and the place where the integration takes place is important.
- The Science and Technology Research Partnership for Sustainable Development (SATREPS), which was funded by the Japan International Cooperation Agency (JICA) and the Japan Science and Technology Agency (JST), was a successful example of science and technology diplomacy, both in terms of science for diplomacy and diplomacy for science, in Japan. However, one of the challenges is how to overcome an insoluble dilemma in the selection process. Scientists prefer cooperation with cutting edge technologies and seek diplomacy for science but, when it comes to science for diplomacy, such technologies are not always the solution.
- It is arduous to conduct science for diplomacy under asymmetrical condition where the countries have different degree of capacity for science since it often requires a respectful relationship between equals. In ASEAN, where capacity of research is diverse within the region, the scheme to help the development of other ASEAN countries exists and through the scheme developed ASEAN countries offer facilities and expertise to developing ones.
- Most important thing for private sector is to create network and built trusts. Private sector should invest to not only S&T communities but local grassroots people to improve economy and society.

KOREA SESSION

North East Asia is a region where historical factors have been giving obvious influences on the present diplomatic relations. South Korea, which rapidly increased their presence in STI, is no exception to such political imbroglio. The nation positioned science and technology as a key driver of the nation's development and used it as a means of strengthening their economy and as a bridge with other nations. As for the relationship with Japan, scientists and engineers who are Korean residents in Japan are one of the key players of science and technology diplomacy. In order that constructive relationship in the world of science and technology is not damaged by changes in political situations, it is expected that the science communities take action to make people realize its importance.

- Korea set up a community to facilitate Economy and technology cooperation between US in 1961, cooperative relationship with West Germany in 1966, with France in 1988 and Japan in 1985, after 20 years of the Japan-Korea Normalization Treaty. In the middle of 1970s, Korea started to allocate a lot of money into facilities etc. From mid 1990s innovation driven stage started and budget has been increasing. Science cooperation between Korea and Japan is not much affected by the recent political situation. Both countries collaborate some science issues. Recently Korean government has had cooperative relationship with China though both seem to be competing in terms of industry. As at Asia-level cooperation, there is the Asian Research Network (ARN), a network which includes many institutions from India and Singapore in addition to China, Japan and Korea, to exchange opinion and covers wider domain of collaboration.
- There is a difficulty in having diplomacy side or policy side to understand what scientists are thinking in Korea like other nations. While the scientist tends to look at a problem from bottom up, usually the politician tends to care about the issue for popularity. Therefore, it is quite important for the science community to identify the problem and to find out the way to solve that problem and take action.
- There is a non-profit independent voluntary organization, called Korean Scientists and Engineers Association in Japan (KSEAJ) established in October 1983 by volunteers of Korean permanent residential scientists and engineers in Japan. Main goal of KSEAJ is to contribute to improving quality of life of Korean residents in Japan, to Korean science and technology and to Japan-Korea relationship. One of the reasons of its success is that it has been based on its professional/academic centric operations by taking account of political and societal situations of the scientists and engineers in the country. It also turns out that it is necessary to increase of public engagement of scientists and engineers.
- One model of science and technology diplomacy is that it provides a mechanism to open-up relationship when the official relationships are difficult; However one challenge is how to ensure that the things that are important on science part can be preserved without affected by political difficulty. Korea and Japan used to be very good partner in many aspects but there are some cases that meetings or workshops turned out to be cancelled or be informal one because of political concerns.
- It is important is to raise fundamentals of international relationship and of the value of the science. Politicians understand that the science is very independent and important for the progress of the nation, but tend to be afraid of public opinions since science needs financial support. However, scientists should play the role by taking action.

RUSSIA SESSION

The land of Russia is so vast that the relationship with other nations varies with area. The Russian Far East has unique colonial geographical presence and a close connection to Asia including Japan. Here science and technology has been playing a leading role in developing

cooperative relationship between Russia and Japan or other nations by addressing societally important problems.

- The Russian Far East has favorite condition for international cooperation owing to ice free sea port, natural resource and industrial potential. It possesses significant scientific educational technology potential with 58 institutions and centers such, 25 industry research centers etc. The international cooperation development and information exchange in science is often ahead of the process of establishing official ties between countries due in part to the high mobility of scientist to the whole world.
- The Russian Academy of Science, the highest scientific institution in Russia, has Far Eastern Branch (FEB) in Vladivostok. FEB has been involved in development of international relationship from the beginning and still developing further international scientific ties with foreign countries in particular with the countries of the Asian-Pacific region. In terms of scientific cooperation with Japan, FEB priority is geophysical research including natural disaster based on mutual interest between both countries and of the region. Ocean research sector of RAS was involved in a joint project with Korea and Japan for instance.

WRAP-UP AND FUTURE TASKS

- In the case of Asia, “enhancing bilateral and multilateral relations” is most closely related among the three-Es of Science and technology diplomacy².
- Science and technology diplomacy is conducted at different levels in Asia. One is national or bilateral level. The second one is regional level at which the nations involved are thinking priorities and strategies more regionally. To identify societally important problems that are common in the region and focus around those issues are important because such issues cannot be done by individual country.
- In addition, there are many cases which third parties, from the region or not, join and piece the regional activity. It might be said that the reason of regional entities’ working scientifically together with such 3rd party is that S&T are not only the way to address key international challenges but also one of the critical and important international activities where national budget is spend internationally. And in terms of budget, not only science but

² “Nations are looking to science to achieve some or all of the three Es of science and technology diplomacy: expressing national power or influence, equipping decision makers with information to support policy, and enhancing bilateral and multilateral relations.” Turekian, V. (2012). Building a National Science Diplomacy System. *Science & Diplomacy*. Retrieved from <http://www.sciencediplomacy.org/editorial/2012/building-national-science-diplomacy-system>

also diplomatic side of contribution is required for its active promotion of science for diplomacy under the asymmetrical condition.

- The scientific community has to do more practice demonstrating the political leadership so that people understand its importance. At the same time, it is necessary to listen to the political leadership because the issues that S&T addresses are often the priorities for many national leaders, who may provide incentive for that cooperation in spite of a political imbroglio. This is the way that S&T can keep up.
- Questions of how do we take advantage of diplomacy to help build international scientific system that can integrate and be collaborative with one another, and how do we build collaborations will be further discussed with more participation from diplomacy side.
- More participation from private sector is expected since many industries are getting more globalized.

Disclaimer

The summary offers the main discussion points of the meeting. The views and opinions expressed here is not a consensus among participants nor do they necessarily reflect the views of the organizers.

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