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## SCIENCE AND TECHNOLOGY DIPLOMACY: THE CASE OF RUSSIA-IRAN RELATIONS

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### ABSTRACT

*Although the relations between the Islamic Republic of Iran and the Russian Federation have expanded significantly in recent years and they call each other "Strategic Partners", these expansions and developments were mainly based on political aspects, and their scientific and cultural-based cooperation remains lower than the desired level. In this article, in addition to emphasizing on the importance of the diplomacy of science and technology as a part of the public diplomacy and a tool to increase the country's soft power, we also investigate the science diplomacy ranking in cultural relations between the Islamic Republic of Iran and the Russian Federation to answer the following question: "What are the opportunities, challenges, and obstacles in taking advantage of the diplomacy of science and technology in the relations between the Islamic Republic of Iran and the Russian Federation?" Author offers solutions on how to strengthen such diplomacies in order to develop the university-level relations and expanding scientific-research cooperation between the two countries. In conclusion, the author emphasizes that Iran and Russia's universities and research centers have the capacity to expand their scientific-research cooperation between the two countries. The purposeful use of these capacities within the framework of efficient diplomacy will bring development and strengthening of scientific-cultural relations and mutual recognition of the two nations and, consequently, the consolidation of relations between the two countries.*

**Keywords:** *Diplomacy, Knowledge and Technology, Iran, Russia, Cultural Relations, Cooperation, University.*

### INTRODUCTION

Educational cooperation is considered a future investment in diplomatic relations between countries. Since most of the political elites are chosen from the universities, granting international scholarships and accepting foreign students is considered as an act of introducing your culture and society to the future political leaders and senior managers of the world. Besides, such relations between the universities could strengthen the political and economic relations between different governments. Especially in conditions of poor political and diplomatic relations, continuing such university-level relations is a way for continuity, keeping relations, and settling hostilities (Mohseni, 2015:98). As the US Advisory Commission on Public Diplomacy (1995) states in a document on 'Public Diplomacy for the 21st Century': "Exchanges and training have direct and multiplier effects that make them among the most valuable instruments of America's foreign relations" (De Wit, 2001, p.79). Thus, considering the importance and the efficiency of the diplomacy of science and technology, and the fact that Iran and Russia had close policies regarding the international incidents and the issues in the region, and since they are already trying to expand their relations, they could take advantage of the capacity of such diplomacies to secure and strengthen mutual interests.

Science is an international language and it is far from any tribes and tribal prejudices. Science creates a basis, in which negotiating parties and different hostile sides communicating with each other, creates a ground for different countries, even for those that have problematic political relations, and have the ability to start science and technology-based cooperation. Because of this high potential in combining science with diplomacy, this tool has been considered in many different countries, so they could apply their soft power and achieve their interests and goals through this method (Bonyadi and Sadough, 2018:61-62).

Among the definitions offered for the diplomacy of science and technology, we can refer to the definition offered by the National Institute of Science and Technology Policy of Japan (NISTEP, 2008), which based on it, all efforts in order to link science and technology to the foreign policies to achieve mutual development or taking advantage of diplomacy to develop science and technology and promoting efforts to take advantage of science and technology in accordance to the diplomatic goals, is definable in the diplomacy of science and technology framework.

Generally, diplomacy is seeking consistent expansions in relations with other countries. The diplomacy of science and technology is one of the components that have the ability and possibility in providing the national interests in any conditions, and as a soft power component, has the mutual effects in different areas of economic, cultural, political, and security. When we talk about the diplomacy of science and technology, it means that we can use such policies to achieve our goals and national interests. In the Cold War era, some countries reached the conclusion that science and technology, and cooperation in this area can help developing relations to achieve national interests (Hadian, 2013). For instance, after the incidents of the Second World War, scientific and technological cooperation between the US and Japan in the 60s marked the start for developing cooperation between the two countries. In the 70s, by the historical visit of Nixon, the president of the US to China and conducting scientific cooperation contracts between the US and China, everyone noticed the capacities in taking advantage of science and technology in the foreign policy. The importance of this component in foreign policy can be deduced from Henry Kissinger, Nixon's national security advisor, when said, "Nothing is more international than Science" (Turekian and Neureiter, 2012).

The diplomacy of science and technology shows a lot of capacities to international issues and challenges. The use of science and technology tools as soft power had been a method for different countries to achieve their goals and has spread in the world. Establishing organizations like DAAD in Germany, Confucius Institute of China, etc. are some of the efforts of different countries to use science and technology to their interest (Shafie-Pour et al, 2013:16). The use of science and technology as a penal tool (like sanctions), using them as an incentive tool (US's aiding to India because of the collation in foreign policy), an excuse to improve the relations (the efforts of Obama to improve the relations to the Islamic world throughout the scientific cooperation in his first years of presidency), and at last, creating dependency in the relations of weak countries (Barati, 2011:14) are just some examples of the capacities in the diplomacy of science and technology.

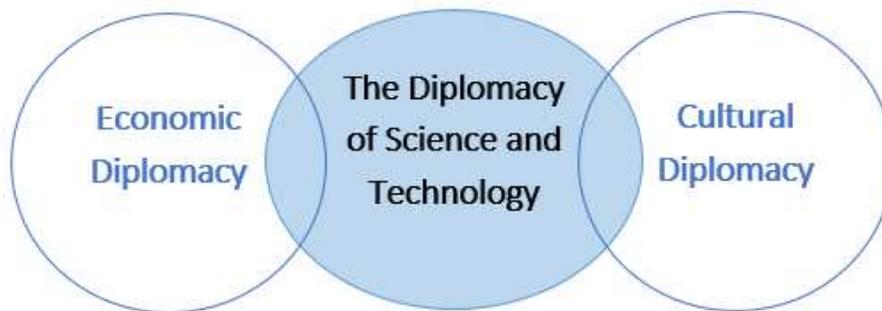
The growth rate of the diplomacy of science and technology in centers of strategic studies and world politics is much more than the scientific centers. Because of high sensitivity and importance, the political and practical aspects of it have surpassed its theoretical and conceptual aspects (Zolfagharzadeh and Sanaie, 2013). Change in international conditions and introducing new components, have lead other countries to define and use new tools and policies, to better



achieve their national interests. In fact, communication revolution and the expansion of mass media, and the activation of non-governmental players, like NGOs and corporations, has led others new roles to play with, so that public opinion has become an important pillar of decision making in different aspects for countries. Thus, countries like before, cannot lean only on the intergovernmental exchanges in the form of traditional diplomacy. This has led many countries to define a new mechanism for their diplomacies, which is called public diplomacy. In this diplomacy, in which the governmental and private sectors act together, most of the efforts of the politicians are related to the public and the public opinion, so that they can transfer their intended messages (Mohseni, 2015:99).

The diplomacy of science and technology is a part of each country's public diplomacy. The public diplomacy is in fact, is a set of mechanisms, which help the public to understand the foreign policy of each country; which means, people are the main target of this diplomacy. The public diplomacy is focused on foreign audiences and its core consists of directing communication of foreigners, to influence their thoughts and ultimately their governments (Pourhasan, 2011). Actions like granting international scholarships, admission of scholarships in the educational diplomacy field, internationalization of the country's higher education, holding various art festivals, conferences and cultural seminars are all located in the public diplomacy field. The most important target group in public diplomacy, are the elites. Educational exchanges and acceptance of the elites from other countries have long been among the most trusted foreign policy investments (Dehshiri, 2016).

Taking advantage of the hidden capacities of language and the literature of our country and promoting it by establishing language and literature fields in important universities of the world, granting arranged and continuous scholarships to propagate our culture and language at the world level, effective participation at international congresses and conferences alongside active participation in events and international festivals, helping to set up national centers and establishing such things in prestigious universities along with providing short-term study opportunities to academic experts and people interested in culture and literature of the country, in order to attract elites and intellectuals from destination countries (Khani, 2006:140), are considered as the areas where cultural and scientific diplomacy overlap with each other. Also, when the diplomacy of science and technology pursues issues of technology and wealth, it overlaps with economic diplomacy.



**Figure 1: The relationship between economic diplomacy, the diplomacy of science and technology and cultural diplomacy**

### *Approaches to the diplomacy of science and technology*

In January 2010, the American Society for the Advancement of Science<sup>1</sup> introduced three areas of the diplomacy of science and technology known as the Triple-AS Model (AAAS), including:

1. The effective use of scientific advice in diplomacy requires international policymakers to have a minimum level of scientific literacy, or at least access to others who have it. It also requires scientists to communicate their work in an accessible and intelligible way, which is sensitive to its wider policy context. Scientific bodies can help to build this capacity.
2. The second dimension of science diplomacy—diplomacy for science—seeks to facilitate international cooperation, whether in pursuit of top-down strategic priorities for research or bottom-up collaboration between individual scientists and researchers.
3. A third dimension of science diplomacy is science for diplomacy. Science has always played a role in the development of hard power capabilities, such as military technologies. But science for diplomacy primarily draws on the ‘soft power’ of science: its attractiveness and influence both as a national asset, and as a universal activity that transcends national interests.<sup>2</sup>

### *The goals of the diplomacy of science and technology*

At a glance, the goals of the diplomacy of science and technology can be categorized as follows:

- Setting an appropriate environment for a more effective role of the Ministry of Foreign Affairs in developing science and technology in the national innovation system;
- Taking advantage of the achievements of science and technology, especially technical knowledge and knowledge-based products as a tool for developing the country's diplomacy;
- Providing an ideal picture of national capabilities and authority and international dignity as a developed country to advance the goals of the country's diplomacy;
- Staying on the path of technological change of the world and setting up a technology transfer with the help of the official diplomacy apparatus;
- Establishing and improving relations with different countries due to the low sensitivity of science and technology in the international arena and its effectiveness in all countries;
- Creating added value and making money through the development of scientific and technological activities through scientific and technological interactions with different countries (Hadian, 2013).



### *The most important dimensions and components of the diplomacy of science and technology*

The diplomacy of science and technology has several dimensions and components. In a general categorization, the most important aspects of Iran's diplomacy of science and technology can be divided into the following parts (Mohseni, 2014; Mohseni, 2015):

1. **Cultural dimension:** The most important dimension of the diplomacy of science and technology. For Iran, cultural dimension includes six components of educational programs and intercultural interactions, sending cultural ambassadors constitute from academics and cultural elites to other universities of the world, sending scientific advisers

<sup>1</sup> American Association Advance of Science. AAAS Diplomacy. Website: <https://www.aaas.org>

<sup>2</sup> [https://www.aaas.org/sites/default/files/New\\_Frontiers.pdf](https://www.aaas.org/sites/default/files/New_Frontiers.pdf)

abroad, linking with seats of Islamic studies, holding seats of Iranian studies, and supporting seats of Persian language abroad and important foreign languages in Iran.

2. **Research dimension:** It is one of the most important aspects of the diplomacy of science and technology. The scientific and research activities of scholars and researchers have brought international borders together and provided a platform for strengthening interactions and exchanges between nations, cultures and civilizations, and ultimately internationalization. Research topics include the publication of joint university publications in international languages, joint international conferences, joint research projects with international universities, creation seats of international education and research, the establishment of technology parks, growth centers, and regional and international scientific poles, launching international research journals, and establishing scientific-international research and development centers.
3. **Educational dimension:** In the international arena, the educational dimension engages in the university's primary and major activities, such as joint curricula, joint university courses, joint international examinations, etc. The educational dimension includes joint academic curriculum, international tests, international training courses and workshops, the creation of virtual universities and international distance learnings, the exchange of educational content and other academic information, and the creation of joint academic fields of study.
4. **Implementation dimension:** All economic, social, and cultural sectors of the community need to be in close contact with universities in order to access the latest research findings, and of course the university needs these interactions to continue its work. In the international scientific cooperation arena, the implementation dimension is actively participating in international scientific associations, taking advantage of financial support from international assemblies, concluding and implementing scientific, technical, and educational contracts and agreements, establishing academic branches in other countries, etc., which includes awarding joint degrees with international universities, memberships and active participation in scientific-international organizations and associations, exchange and scientific and research interactions through virtual databases, concluding and implementing agreements and scientific, educational and technical memorandum, establishment of joint international universities and the establishment of academic branches In other countries.
5. **Personnel dimension:** Obviously, the presence of capable personnel in the arena of the diplomacy of science and technology is one of the effective factors in promoting it. International experiences of managers, faculty members and the diplomacy of science and technology personnel are effective in terms of teaching, research and services in promoting these activities. A significant percentage of the world's student population of the leading universities is devoted to the foreign students, while in Iran's universities, this percentage is only negligible in just a few universities. Attempting to attract foreign students, on one hand, requires a change of insight within the universities and the creation of a new infrastructure that helps to promote the international interactions of universities and on the other hand, will increase the credibility and reputation of universities.



The personnel dimension includes sending students abroad (granting scholarships), attracting foreign students, mastering academics in foreign languages, attracting foreign faculty members, sending faculty members to study abroad at other universities as a visiting professor, giving study opportunities to faculty members and giving students a chance to study.

6. **Welfare dimension:** Granting student accommodations for a visa, residence, work permit, etc., or awarding scholarly awards can create dramatic results in international academic exchanges. This includes providing student accommodations for visas, residence, work permits, awarding international scholarships, and so on (Mohseni, 2014:101-105; Mohseni, 2015:102-107).

Achieving advanced knowledge and technology for international communication among countries in different fields of education, research and technology are one of the most important means of development, and the 21st-century world will be owned by whom achieves this advanced science and technology. Therefore, it is necessary to pay attention to the basic issues of development and advancement, including planning, enhancement, and expansion of scientific and technological cooperation, and use effective and reasoned implementation practices to promote them; including regional and international cooperation in the field of higher education, the establishment of research networks at intergovernmental and nongovernmental levels, cooperation in specialized fields with advanced countries, support for studies and research that allows the understanding and accelerated development of scientific and technological changes (Ostadzadeh, 2005).

With this in mind, Iran can expand its relations with Russia, which works in sensitive areas with Iran, through the optimal use of the capacities of the diplomacy of science and technology.

#### *Opportunities and challenges of Iranian-Russian academic collaboration*

Although Iran and Russia have been next to each other for a long time in the same neighborhood of the world map, the people of these two countries do not have wide and deep knowledge of each other. Therefore, less accurate analyzes can be made from the sociological point of view (including cultural, economic, and political elements) between the Russians and the Iranians. Since the proper knowledge and recognition of various societies through the association of scholars and researchers of countries in a long-term process can lead to sustainable development of relations and also intellectual synergy between scholars and their scholars and the two countries, the use of scientific and cultural diplomacy tools can be formed as a way to increase understanding between these two nations, with the goal of building confidence and expanding cooperation. Although linguistic differences and misleading propaganda against the societies of both countries will lead to a slow and somewhat difficult process of scientific and cultural convergence, but to expand cooperation, there is no other way than to overcome these difficulties (Tisheyar, 2016).

Iran and Russia can have two approaches to the application of science and technology: the use of scientific and technological interactions to serve their foreign policy and other uses of political policies to generalize their interests and technology with them.

The formation of the High Commission for Scientific and Technological Cooperation of Iran and Russia, joint annual meeting of the heads of the top universities of Iran and Russia, signing memorandum for the implementation of joint programs between some of the prestigious



universities in order to develop the cooperation, including cooperation of universities of Tehran, Shahid Beheshti, and Allameh Tabatabai with the universities of Moscow and St. Petersburg in order to establish joint scientific centers, launch new fields of study, and establish the Union for the Academic Cooperation of Iran and Russia can be considered a good start to strengthen scientific diplomacy in the direction of expanding the scientific-cultural relations of the two countries. But it should be kept in mind that these measures should not be interrupted and remain as a memorandum. In order to bring these documents up to the date and remove existing barriers, there is a need for greater coordination between the Ministry of Foreign Affairs and the Ministry of Science in order to facilitate cooperation between universities in both countries.

Establishing centers such as “Russkiy Mir” foundation (at Tehran and Ferdowsi Universities), the Russian “Lomonosov” scientific center (at Shahid Beheshti University) in Iran, “Razi” scientific center (at Lomonosov Moscow State University) and Persian Language training centers in Russia, the agreement between the University of Allameh Tabatabai and the Moscow Humanitarian University to jointly establish a number of fields of study are among the practical and objective actions of recent years, which in the long run will bring positive results for the development of scientific-cultural relations and the mutual recognition of the two nations and the consolidation of relations between the two countries in other areas.

**One of the problems of the relations between Iran and Russia is that these relations are governmental.** To develop and consolidate the relations between Iran and Russia, it is necessary to expand the scientific, cultural and economic cooperation of the two countries and develop these relations from the governmental level to the public level.<sup>3</sup> There aren't many Iranian students in Russian universities and on the other hand, there are very few Russian students in Iranian universities.

Of course, it should be noted that the mere exchange of students or the accepting large numbers of foreign students does not necessarily mean implementing the diplomacy of science and technology, but such actions are among the tools that can be used effectively in the diplomacy of science and technology.

**One of the problems that leave Iranian students with little desire to study in Russia and Russian students to study in Iran is language.** Since Persian is the educational language in Iranian universities, Russian students have to learn Persian first, if they want to study in Iran. This leads to a small number of Russian students studying in Iran, despite the fact that the cost of studying and staying in Iran is far less than that of English speaking countries. On the other hand, given that Russian universities rarely and only in some universities, courses are taught in English, Iranian students are not very interested in studying in Russia. In addition, medicine courses in the 2018-2019 academic year that are held in English at Russian universities are not approved by Iran.

According to Deputy Chancellor of Education of Iran's Ministry of Health, English language courses at Russian medical universities do not have strong support, and courses offered in English are very weak and there are no professors and strong resources there. Hence, according to the requests from the Ministry of Health's official representative regarding the lack of approval of English language courses due to the lack of quality, it has been emphasized that from the new

<sup>3</sup> Sputnik, 10/04/2016. URL: <https://ir.sputniknews.com/iran/201604101378187>



year, Iranian students have to study only in Russian taught courses (ISNA, 8 March 2018).<sup>4</sup> Therefore, this may reduce the number of Iranian students in Russian medical universities.

**Another problem is the process of evaluating and certifying qualifications in Russia.** Qualifications obtained in Iran are approved in Russia only after evaluation, which is usually a complex process and may take several months. Although Russian universities have previously excluded Iranian scholars from this matter and have accepted them only on the basis of their official translation and approval from the Russian Consulate in Tehran, but since 2013, they've announced that even the Iranian scholars, which have applied through the Ministry of Science and their qualifications have been reviewed before their registration must first certify the qualifications they obtained in Iran in Moscow, and then continue their studies at the expected university and academic level in Russia. In Iran, qualifications acquired in Russia should also be evaluated.

## CONCLUSION

The diplomacy of science and technology can be efficient and successful so that its policymakers and implementers act as coordinators of the symphony orchestra members. Otherwise, the lack of coordination and the so-called island acting of some organizations will prevent them from achieving the desired result. It seems that establishing an academic co-operation union can solve the problems substantially. This union can coordinate both the actions of universities and relevant organizations as a trustee and also pursue issues, concerns, and political, cultural and security considerations of international cooperation of universities. Given the fact that the Iranian and Russian science centers and universities do not know enough about each other, there is a central place for organizing actions and pursuing bilateral agreements signed between the parties. Since many of the memoranda usually do not come to the phase of contracting and implementation.

It is expected that by more coordination between the Ministry of Foreign Affairs and the Ministry of Science, and Universities and Higher Education Institutions, the diplomacy of science and technology becomes more active with the aim of providing national interests in the direction of enhancing Iranian-Russian scientific-cultural relations, and existing obstacles and problems including Issues related to visa issuance for students and professors, students' deployment and exchange, confirmation of qualifications, approval, and acceptance of articles published in prestigious Iranian and Russian journals by either party are completely eliminated or minimized. Obviously, Iran and Russia's universities and research centers have the capacity to expand their scientific-research cooperation between the two countries. The purposeful use of these capacities within the framework of efficient diplomacy will bring development and strengthening of scientific-cultural relations and mutual recognition of the two nations and, consequently, the consolidation of relations between the two countries.



<sup>4</sup> ISNA, 8 March 2018. URL: <https://www.isna.ir>

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