

SCIENCE DIPLOMACY IN THE MEDITERRANEAN: BUILDING TRUST THROUGH SCIENCE AND KNOWLEDGE

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Introduction

The Mediterranean region has a long history of cultural exchange, trade and interconnectedness. In recent times, there has been a growing recognition of the importance of science and innovation diplomacy as a means to foster collaboration, global development and cooperation, and address shared challenges in the region. The report entitled "Science and Innovation Diplomacy in the Mediterranean" provides valuable insights into the potential of science and innovation to strengthen diplomatic relations and promote socioeconomic development.

What is Science Diplomacy?

Science diplomacy is an evolving field that encompasses various approaches and practices aimed at improving global development and fostering a fairer world. It goes beyond traditional diplomacy focused on negotiation between states and includes non-state actors, particularly scientists. Science diplomacy involves the intersection of international relations and science policy, seeking to address global challenges through scientific collaborations and the integration of scientific knowledge into policy-making processes.

The term 'science diplomacy' gained prominence around 2005, but examples of scientific cooperation across borders can be traced back to the 17th century. The emergence of modern science and the establishment of institutions like the British Royal Society in the 18th century contributed to the early practice of science diplomacy. In the late 19th century, state actors started sending science envoys and attachés abroad to facilitate scientific collaboration and advance their national interests.

Defining science diplomacy is complex due to its multifaceted nature. The American Association for the Advancement of Science (AAAS) and the British Royal Society proposed a typology that categorizes science diplomacy into three interplays:² science in diplomacy, diplomacy for science, and science for diplomacy. Science in diplomacy emphasizes informing foreign policy decisions with scientific advice, while diplomacy for science involves facilitating international scientific cooperation. Science for diplomacy focuses on using science collaboration to improve international relations between countries.

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¹ Marga Gual Soler & Alicia Perez-Porro (2021). Science and Innovation Diplomacy in the Mediterranean. Barcelona: Union for the Mediterranean

² Science Diplomacy: An Introduction | American Association for the Advancement of Science (AAAS).

The importance of science diplomacy lies in its ability to address global challenges and build constructive international partnerships. By combining scientific collaborations between nations, science diplomacy seeks to tackle common problems facing humanity in the 21st century. Climate change, the COVID-19 pandemic, and the Sustainable Development Goals (SDGs) are examples of global challenges that require cooperation between science and policy.

Understanding the diversity and different perspectives within science diplomacy is crucial. Science diplomacy can be seen as a boundary problem, bringing together actors from different social worlds, such as diplomats and scientists. It acknowledges the need for cooperation without necessarily requiring a shared definition of science diplomacy.

Science Diplomacy in the Mediterranean Region

The Mediterranean region provides an interesting context for exploring science diplomacy due to its geopolitical complexities and shared challenges. The region faces various issues such as climate change, environmental degradation, water scarcity, migration, and political conflicts. Science diplomacy involves the use of scientific collaborations and partnerships to address these global challenges, build trust, and enhance international relations. In the Mediterranean, science diplomacy offers a unique opportunity to bridge divides and promote cooperation between countries with diverse political, cultural and economic backgrounds.

Science diplomacy in the Mediterranean region operates through different mechanisms and initiatives. One notable example is the Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME)³ located in Jordan. SESAME brings together scientists from Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestine and Turkey, fostering scientific collaboration despite strained diplomatic relationships between some member countries. The facility serves as a symbol of peaceful cooperation and scientific progress in the region.

In addition to specific projects like SESAME, science diplomacy in the Mediterranean region involves scientific networks, joint research projects, knowledge-sharing platforms, conferences, and workshops that aim to address common challenges, promote dialogue between countries, and foster regional integration. These initiatives facilitate the exchange of knowledge and expertise, contribute to policy-making processes, and foster mutual understanding and trust.

The Mediterranean Science Diplomacy Network (MED-SDN) is one notable initiative highlighted in the report.1 MED-SDN brings together scientists, policy-makers and stakeholders from Mediterranean countries to promote science-based solutions for regional challenges. The network facilitates the exchange of ideas, expertise and resources, leading to improved collaboration and joint research efforts across various scientific disciplines.

An additional illustration of a science diplomacy initiative pertaining to the Mediterranean region is exemplified by MedECC,⁴ an acronym for Mediterranean Experts on Climate and Environmental



³ https://www.sesame.org.jo/

⁴ https://www.medecc.org/

Change. MedECC acts as a platform for collaboration and partnership between scientists, researchers and policy-makers from nations bordering the Mediterranean Sea. The organization recognizes the power of science as a catalyst for dialogue and cooperation in addressing the complex challenges faced by the region. MedECC's core mission involves leveraging scientific knowledge and expertise to promote sustainable development, mitigate climate change impacts, protect biodiversity, and address socioeconomic issues in the Mediterranean area. Through its initiatives, such as joint research projects, capacity-building programs, and scientific exchanges, MedECC aims to foster mutual understanding, trust, and cooperation between Mediterranean countries. By promoting scientific collaboration and facilitating dialogue, MedECC envisions a more stable, prosperous, and sustainable Mediterranean region.

This region presents both opportunities and challenges for science diplomacy. Cooperation in the scientific domain can contribute to peace-building efforts and regional stability. However, political tensions and conflicts can hinder collaboration and scientific exchange. Overcoming these challenges requires sustained dialogue, trust-building measures, and a recognition of the importance of science in addressing shared regional concerns.

Innovation Diplomacy in the Mediterranean

Innovation plays a crucial role in driving economic growth, competitiveness and sustainable development. There is a growing need for innovation diplomacy in the Mediterranean region to leverage the potential of emerging technologies, promote entrepreneurship, and foster knowledge-based economies. Successful innovation initiatives include innovation hubs, startup incubators, and technology transfer programs that facilitate the exchange of ideas, talent and technologies.

One prominent example is the Union for the Mediterranean (UfM)'s Innovation for Women in Science, Technology, Engineering, and Mathematics (STEM) project. This initiative aims to bridge the gender gap in STEM fields by promoting the participation of women in scientific research and entrepreneurship. By fostering an inclusive and diverse innovation ecosystem, such programs contribute to social empowerment, economic development and regional stability.

Policy Implications and Recommendations

To fully realize the potential of science and innovation diplomacy in the Mediterranean, supportive policies, institutional frameworks and funding mechanisms are needed. Investment in research and development should be increased, science education improved, and robust intellectual property rights regimes established. Furthermore, regional cooperation and coordination in addressing common challenges and promoting sustainable development is highly important and needs to be a priority in the region.

Engaging multiple stakeholders, including governments, academia, industry and civil society, in shaping science and innovation diplomacy strategies is crucial. It stresses the need for establishing partnerships and networks that promote knowledge exchange, technology transfer, and capacity-building. Additionally, the concept of integrating science and innovation diplomacy into broader foreign policy frameworks to ensure long-term commitment and sustained efforts is increasingly gaining traction and garnering significant support.



Conclusion

In conclusion, science diplomacy serves as a bridge between the realms of science and international relations. It encompasses various approaches and practices aimed at addressing global challenges, improving international relations, and fostering cooperation between nations.

The Mediterranean region presents a multifaceted yet encouraging landscape for science diplomacy initiatives, showcasing the capacity of scientific collaboration to transcend geopolitical barriers and foster regional stability. By leveraging the power of science diplomacy and innovation, Mediterranean countries have the opportunity to cultivate trust, enhance diplomatic relations, and lay the foundation for a prosperous and sustainable future. The report's recommendations, serving as a roadmap for policy-makers and stakeholders, offer guidance to unlock the full potential of science and innovation in the region, facilitating collective advancement and shared prosperity.

