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A New Science Diplomacy in Latin America Embeds Knowledge in Public Institutions

Santiago, Chile: *In June 2023, Chile's Ministry of Science, Technology, Knowledge, and Innovation created the country's first National Advisory Council of Children and Adolescents. Consisting of 32 elected representatives aged 10–17, the council builds on local and regional youth councils that have been developing since the late 2010s, when youth organizations, civil society groups, and public agencies began working together to strengthen young people's participation in education, digital technologies, and social policy.*

By 2023, several government offices were working to bring representatives from regional and municipal councils into a coordinated policy process. This work culminated in the creation of the National Advisory Council as part of the National Policy on Children and Adolescents 2024–2032, which gives young people a regular place in discussions on digital rights, artificial intelligence regulation, and social inclusion.

By recognizing young people as digital natives with legitimate claims to voice, the council inserted civic experience into a governance arena dominated by transnational corporations. In doing so, it is building the capacity of young people and involving them directly in decisions around science, technology, and innovation policy. The council exemplifies a truly participatory decisionmaking framework by anticipating the needs of citizens, providing a forum for response, and then amplifying—in the very structure of governance—their distinct voices.

A different conception of science diplomacy

By traditional formulations, Chile's National Advisory Council of Children and Adolescents would not be considered an example of science diplomacy. Science diplomacy—at least, the dominant view of it in North America—is framed as an instrument of state influence, a means to use scientists or scientific issues to advance national interests or international prestige. But in Latin America and the Caribbean, where we study political science and science diplomacy, decades of political ruptures, institutional innovations, and epistemic struggles have reshaped how knowledge and governance interact. A distinct regional conception of science diplomacy has emerged: Not so much a tool of soft or elite negotiation, science diplomacy is the political craft of embedding diverse expertise into the design and architecture of public institutions, positioning scientific knowledge as a means of building legitimacy and collective governance.

Underlying traditional conceptions of science diplomacy is an assumption that improved communication between scientists and policymakers will naturally lead to evidence-informed decisions. Early typologies of the field often emphasized nationally driven approaches oriented toward "neutral" science serving monolithic foreign policy goals. In practice, however, governments are arenas of competing coalitions and conflicting agendas, with many agents of diplomacy and a plurality of actors (universities, private firms, philanthropic foundations, and civic networks) shaping decisionmaking. In this context, simple communication is not enough to anchor the use and importance of evidence; what is required is institutionalization. This perspective also recognizes that scientific knowledge is never produced in a vacuum. Evidence is shaped by institutions, values, and social priorities, which means that integrating science into governance requires legitimacy built upon political and institutional design—not just technical communication.

Kingston, Jamaica: *Since 2003, the Jamaica Environment Trust (JET), a nonprofit environmental nongovernmental organization (NGO), has worked with researchers, health professionals, and community groups to document the effects of bauxite mining on land, water, and public health in Cockpit Country and other regions in Jamaica. In 2020, JET published the* Red Dirt *report, a multidisciplinary study that linked scientific data to lived experience and challenged the legitimacy of extractive policies.*

After its release, the report was shared in Jamaican Supreme Court hearings, parliamentary briefings, regulatory meetings, and public forums, becoming part of wider debates on mining permits, land use, and environmental oversight. Through ongoing engagement with policymakers and advocacy networks, the report's community-based evidence entered formal decisionmaking spaces, such as the Organization of American States' Inter-American Commission for Human Rights. In this way, the report helped to anchor debates around land rights, environmental licensing, and international commitments—blurring the lines between domestic justice and foreign policy.

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Our conception of science diplomacy leans into an alternate definition of diplomacy: diplomacy as relationship management. Adopting this definition creates space for many more players to contribute to science diplomacy—without diminishing the role of the state, which is the central articulator of governance, responsible for convening, coordinating, and institutionalizing participation across sectors. Science diplomacy, in this view, expands the state's democratic capacity by embedding knowledge within structures that include society, opening up new ways of grounding the relationship between science and the public. Instead of being confined to bureaucratic roles, science diplomats work across nodes of governance, where authority and influence emerge through connection and coproduction.

We see this work as distinct from science policy, which organizes and funds research and innovation systems, and from scientific advice, which focuses on the use of evidence to inform policy decisions. Instead, science diplomacy is about designing institutional mechanisms, participatory coalitions, and procedural norms that position scientific knowledge inside legitimate decisionmaking architectures, both within states and among them.

Strategically linked "innovation diplomacy"

Latin America's reconceptualization of science diplomacy did not emerge from abstract theorizing. Three historical conditions converged to make this shift possible: the region's historical blending of domestic and foreign policy; its experience with cyclical legitimacy crises as multiple countries have shifted from democracy to dictatorship and back again; and its strong tradition of regional scientific cooperation.

From the 1960s to 1980s, regional networks—such as the Latin American Council of Social Sciences, the Latin American Center for Physics, and the science councils of the Organization of American States—helped build shared spaces for research, training, and policy dialogue across Latin America. These organizations connected universities, public research institutes, and government agencies, strengthening scientific capacity at a time when most research funding, publishing opportunities,

and international recognition were concentrated in the United States and Europe. Working in a global system shaped by Cold War power asymmetries, Latin American scientists thus often depended on US and European institutions for resources and visibility. In response, these regional networks sought to increase autonomy and cooperation within Latin America. Through this work, scientists increasingly acted as de facto diplomats, using research collaboration to advance development, sovereignty, and regional integration.

Awareness of science diplomacy as a concept and practice grew during the 1990s and 2000s. The 1992 Earth Summit in Rio de Janeiro, Brazil, and the subsequent creation of the Inter-American Institute for Global Change Research provided permanent platforms for connecting scientific expertise to environmental governance and international negotiations. At the same time, cooperation mechanisms within the Southern Common Market, or Mercosur, a South American trade bloc, supported sustained collaboration among member states, and the Latin American and Caribbean Network for the Popularization of Science and Technology expanded across national borders, strengthening public engagement with scientific knowledge. These initiatives situated scientific collaboration and public dialogue within regional governance structures, promoting collective rather than competitive interactions.

By the 2020s, science diplomacy was recognized as the deliberate effort to create and sustain structures that connect evidence, participation, and legitimacy. This shift was already visible in the 2019 Framework of the São Paulo Innovation and Science Diplomacy School. The framework, created by scientists and policymakers, defined "innovation diplomacy" as an applied science diplomacy able to transform productive domestic ecosystems by its strategic linkage to global governance structures.

Brasília, Brazil: *During the 2010s, Brazilian cities such as São Paulo and Recife created municipal climate councils and "urban labs" connecting universities, communities, and policymakers to co-create indicators of sustainability to use for regional planning. Over the years, these local efforts demonstrated that technical science expertise gained traction when it was formally integrated into participatory institutions. In 2017, Brazil's Ministry of Foreign Affairs launched the Innovation Diplomacy Program to connect national research, startup, and innovation ecosystems with international partners, reflecting an understanding of innovation diplomacy as a networked practice that links governments, academia, industry, and civil society across borders and spans the continuum from basic research to applied innovation. By 2023, a national coalition of researchers, NGOs, and government officials were advocating for embedding this logic in federal structures.*

In 2024, after more than a year of consultations and technical meetings—which one of us (Ferreira) followed closely—Brazil's Ministry of Environment reorganized the nation's climate governance. The result is three permanent chambers under Brazil's Interministerial Committee on Climate Change, including a Scientific Advisory Chamber, in which scientists are given formal standing to provide evidence directly to ministers and the executive secretariat. In addition to its domestic role, the Scientific Advisory Chamber joined the 28-member International Climate Councils Network.

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A working model for coherent governance architecture

As we've studied this new science diplomacy, we've noticed that some practices make it particularly effective. Brazil's Scientific Advisory Chamber offers a working model of how science diplomacy can help shape coherent institutional and governance architectures.

First, legal and institutional anchoring allows science diplomacy to become a stable function of the state. Brazil's advisory chambers were created through a presidential decree, transforming informal collaborations into recognized components of state governance. By embedding scientific advice in formal administrative structures, the advisory chamber ensures that integration of scientific knowledge will not depend on individual leaders or temporary political priorities.

Second, institutionalization must be supported by sustainable financial and administrative arrangements.

Integrating advisory bodies into existing ministerial structures links their activities to existing administrative and budgetary processes. This integration helps support participation over time, strengthening the credibility and continuity of scientific engagement in policymaking.

Third, Brazil's experience highlights the central role of coalition-based governance. The Scientific Advisory Chamber did not emerge from government initiative alone, nor from academic advocacy in isolation. Through years of negotiation and joint problem-solving, researchers, municipal authorities, civil society organizations, and federal agencies contributed to shaping the governance arrangement, sharing responsibility for both knowledge production and political legitimacy.

Fourth, the Brazilian process demonstrates how social embeddedness and transparency reinforce institutional authority. Advisory mechanisms are connected to municipal climate councils, community initiatives, and local research networks. This grounding in existing social institutions allows scientific advice to be responsive to concrete public concerns while making participation visible and meaningful beyond expert circles.

Finally, the development of the Scientific Advisory Chamber depended on science diplomats who were able to bridge governance and the scientific establishment. Many had prior experience in science-policy interfaces, public administration, and international cooperation—with the Innovation Diplomacy Program, for example. Over time, professionals enhanced their capacities to navigate political processes, translate scientific evidence for policymakers, and sustain dialogue across sectors. This professionalization and capacity-building helped transform science diplomacy from an ad hoc activity into a recognized area of public service.

Taken together, these five elements help to explain why the Brazilian case resulted in institutional transformation. When legal recognition, collective ownership, and professional capacity reinforce one another, scientific engagement becomes part of how public power is exercised.

An increasingly porous boundary

As coalition-builders who actively participate in public life, science diplomats help define policies that shape collective well-being—whether by translating lived experience into policy legitimacy, as in Chile, or by institutionalizing community-led evidence-gathering, as in Jamaica, or by designing participatory governance mechanisms, as in Brazil. The future of science diplomacy lies in its ability to embed scientific knowledge in the architecture of public institutions, where it can shape decisions in legitimate, accountable, and inclusive ways.

As global challenges such as climate change, digital transitions, and pandemics transcend borders, the boundary between domestic and foreign policy is increasingly porous. International relations and foreign policy scholarship shows that effective governance in a networked world depends less on sovereign command and more on coordination across multiple centers of authority. Latin American scholars argue that foreign policy should be understood not only as statecraft, but also as public policy shaped by domestic political processes.

This shift is already occurring across Latin America and the Caribbean as the region experiences a convergence of science, policy, and diplomacy aimed at addressing shared social and environmental challenges. The task now is to recognize these efforts for what they are: not exceptions, but signals of a new era in which science diplomacy becomes the architecture through which knowledge and democracy sustain each other beyond national borders.

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