2022-2023 Annual Report

UNESCO Chair on Science, Technology and Innovation for Sustainable Development for Latin America





Table of Contents

About the Chair	3
At a Glance: Key Numbers	4
Impact: Training	5
Highlight: CILAC Colloquium - Open Science Forum of Latin America	Ĺ
and the Caribbean	6
Impact: Transfer of Knowledge	7
Key Messages	8
The Year Ahead	9
Appendix	10

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United Nations University - Maastricht Economic and Social Research Institute on Innovation and Technology

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About the Chair

UNU-MERIT's <u>UNESCO Chair on Science</u>, <u>Technology and Innovation for Sustainable Development for Latin America</u> helps to develop and strengthen science, technology and innovation policy and research in this region.

The Chair was approved in May 2022. Its goal is pursued through research, advanced policy training and advice to help national and regional decision-makers, policy experts and business sector representatives develop and strengthen their capacities in science, technology and innovation (STI) policies. With its activities, the Chair aims to contribute to achieving the UN's Sustainable Development Goals.

Led by Professor Carlo Pietrobelli, the Chair conducts advanced-level teaching and policy-relevant research. Specifically, this includes:

- Identifying, discussing and socialising the main challenges regarding STI in Latin America;
- Strengthening the teaching of STI in postgraduate programmes (Masters and PhD) via a network of universities in Latin America;
- Promoting and disseminating policy-relevant research and ideas;
- Promoting the training of policymakers, students and other relevant audiences in Latin America on the themes of STI; and
- Enabling deeper research- and policy-related collaboration on design, implementation and evaluation including in support of the UNESCO LA Policy Lab.



2 3

At a glance

Key Numbers



Working towards the following Sustainable Development Goals







Impact

Training

In its first year, the UNESCO Chair carried out a number of activities related to its mission. At the core of the Chair is improving policy through research, which it helped achieve through two trainings.

In October 2022, The Chair conducted the **Productive Development and Competitiveness** in Honduras programme in collaboration with the Inter-American Development Bank. Over three in-person days and five webinars, representatives from Government, the business sector and academia - more than half of which were women - were trained on how to promote innovation and competitiveness. Topics covered included public-private institutions, agriculture, smalland medium-sized enterprises, technology transfer and digitalization among others, with esteemed speakers from universities, ministries and embassies in Argentina, Chile, Costa Rica, Germany and Italy.



In March 2023, the Chair contributed to the Training Workshop for Latin America on Science, Technology and Innovation Policies and Policy Instruments in Science, Technology and Innovation for the SDGs within the framework of the Conference on Science, Innovation and Information and Communication Technologies of the Economic Commission for Latin America and the Caribbean. Through five sessions, more than 400 participants from more than 30 countries discussed and analyzed the conceptual and methodological approaches, as well as the actions and means used by governments for the design, implementation and evaluation of STI policies and policy instruments. This was held as part of the Chair's contributions to the United Nations Interagency Task Team Workstream 6 (IATT WS6) on Capacity Building in Science, Technology and Innovation for SDGs.



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Highlight

CILAC Colloquium - Open Science Forum of Latin America and the Caribbean

Academic freedom is part of the fundamental rights for maintaining strong democracies. In February 2022, the Chair convened an <u>online debate</u> on "<u>Academic Liberty in the time of disinformation</u>." With key speakers hailing from top universities and UNESCO in Mexico City, Lima and Montevideo – including the former President of the Republic of Peru Professor Francisco Sagasti – and moderated by Prof. Pietrobelli, the debate highlighted the role of high-quality independent research as a solid foundation for public decision-making, social and economic development, and democracy. It keenly supported the Colloquium's aim to address the state of academic freedom and what the UN system, national governments and academia can do to protect it.



Impact

Transfer of Knowledge

To reach a wider global audience, the Chair conducted a series of webinars together entitled "Addressing the main challenges on Science, Technology and Innovation Policies for Latin America." Conducted between December 2022 and May 2023, the webinars were broadcasted on UNU-MERIT's YouTube, LinkedIn and Facebook platforms, collectively reaching more than 800 listeners from across the globe.

The webinars were framed around four challenges of utmost importance for STI policies in Latin America, including the search for appropriate institutions and governance for STI policies, the multifold impact of automation technologies, energy transition and macroeconomic policies, and the reorganization of international production and global value chains. Speakers and discussants comprised top researchers and thought-leaders in their fields, including Pascual Restrepo of Boston University (automation technologies), Andrés Velasco of the London School of Economics (macroeconomics of the green transition), Gabriela Dutrénit of the Universidad Autónoma Metropolitana in Mexico (STI policy, development strategy and social inclusion), and Gary Gereffi of Duke University (global value chains), among others.

The UNESCO Chair was also present in several international conferences and workshops to present critical papers to which the Chair contributed.

The full list of webinars and presented papers can be found at the end of this report.





 6

Key Messages

Below is a sampling of points and policy recommendations delivered at the UNESCO Chair's events throughout the year.

Developing countries need to understand the strategic value of their natural resources in new industries. Sustainable development innovations are the most important forms of technological change in developing countries. (Gary Gereffi, Duke University)

STI policies must have a social inclusion perspective. This implies the design of a policy instrument considering its social implications from the outset. (Gabriela Dutrénit, Universidad Autónoma Metropolitana, Mexico)

International financial organizations must support financial investments in STI. However, they also need to act as intermediaries to complement good policy practices and favor their exchanges across countries. (Gonzalo Rivas, Inter-American Development Bank)

The world will need to invest at least 2 percent of its GDP per year to generate higher levels of economic growth while still delivering on climate and development goals. Sourcing such public and private financing needs a collective, international effort. The case for rich nations

"Just as medicine can come with unwanted side effects, even the best green investment plan can have undesirable byproducts. So unless we begin first acknowledging these byproducts and, second, crafting policies to address them, the world will not get the green transition and the emissions abatement the world so desperately needs."

- Andrés Velasco

helping to pay for the investment required by poor countries is watertight both economically and morally. (Andrés Velasco, London School of Economics)

A location-specific approach to addressing geographical and climate differences across countries and their impact on energy sources and supply is needed. Industry is likely to relocate to be closer to renewable energy sources, and this will have increasingly implications on the movement of people. (Luc Soete, UNU-MERIT)

Maximizing the added value generated by the extraction of minerals is the overarching objective of countries rich in critical minerals. The new digital and sustainability paradigm, with higher demand for natural resources and green technologies, can open a window of opportunity for Latin America. (Jorge Valverde, Mercedes Menéndez De Medina and Carlo Pietrobelli, UNU-MERIT)

"Two types of policies are going to be important in a world that is becoming increasingly automated. Policies for science and technology, and better education. They are needed both to rely on technological transfers and learning from abroad and to create new technologies."

- Pascual Restrepo

The Year Ahead







The Chair will continue working on the research and policy lines developed the previous academic year and will expand them to new relevant topics for STI policies in Latin America. At the same time, the results of previous research on key focus areas including the energy transition, critical minerals in the context of Latin America, and the role of public policies in global value chains will be presented in international conferences and seminars, such as the 7th Conference RIE in Guayaguil, Ecuador, the SASE Conference in Rio de Janeiro, the Inter-Universities Seminar on Productive Development (SIDPA) in Argentina, and the final CatChain Conference in Maastricht.

In addition, the Chair will launch a new series of webinars aimed at fostering dialogue between academics and policymakers on a wide range of topics relevant to STI development in Latin America, such as the role of natural resources and innovation, green finance, STI and gender, and the impact of human capital mobility on the region. In addition, the Chair plans to engage in new policy training on STI with international organizations and national governments. Finally, the Chair plans to participate in the organization of various academic events (conferences and seminars) at UNU-MERIT and abroad.

8 9

Appendix

Papers Presented

by Carlo Pietrobelli and other colleagues of the Chair

- "Global Value Chains and the Caribbean Economies: Innovation, capabilities, policies" webinar at the <u>Caribbean Course on the Economics of Innovation</u>, Compete Caribbean, Barbados, 10 August 2022.
- "GVC-oriented Policies" presentation at the Annual Conference of the International Initiative for Promoting Political Economy (IIPPE) on <u>Socio-ecological Crisis and the Political Economy</u> of Sustainability, Bologna, 9 September 2022.
- "The Trifecta of GVC-oriented Policies and Development" in the <u>Production Across Borders</u> for <u>Consumers across Borders</u> webinar and session at the Science Summit at UNGA77, 16 September 2022.
- "<u>La Trifecta de las Políticas orientadas a Cadenas de Valor</u>" webinar, Conferencia Anual de la Red Latinoamericana de Agencias de Innovación (RELAI), Buenos Aires, September 2022.
- "Mineral Supply Chains in a New Geopolitical Environment" presentation by Jorge Valverde at the Forum on Globalization and Industrialization: Sustainable supply chains in times of multiple crises, Vienna, 5 December 2022.
- "GVC-oriented Policies and Regional Development in Latin America" lecture, Cañada Blanch Centre, London School of Economics, 16 January 2023.
- "Accelerating Circular Economy Based Solutions to Support SDG 6 Implementation in the Latin American Region" virtual side-event, UN 2023 Water Conference, 21 March 2023.
- "Global Value Chains and Sectoral Innovation Systems: an Analysis of the Aerospace Industry" presentation at the CatChain Conference, Universidad Complutense de Madrid, 28 March 2023
- "How are GVC-oriented Policies Different? Implications for STI Policies" presentation at the Atlanta Conference on Science and Innovation Policy, Atlanta, GA, USA, 26 May 2023
- "Economic Complexity and Global Value Chains" lecture at the <u>Economic Fitness and</u> <u>Complexity Spring School</u>, Rome, 8 June 2023.
- "Energy transition, critical minerals and windows of opportunity from an economic complexity approach" presentation by Menendez and Valverde at the second CatChain Conference on <u>Global Value Chains, Latecomer Development and the Green Transformation</u>, UNU-MERIT, Maastricht, 29 June 2023.

2022-2023 Webinars

- "Should STI policies in Latin America give priority to social inclusion?" (6 December 2022)
 Speakers: Gabriela Dutrénit of Mexico's Universidad Autónoma Metropolitana (UAM), Mexico, and Gonzalo Rivas, Chief of the Competitiveness, Technology and Innovation Division of the Inter-American Development Bank (IADB)
- "Automation technologies: A challenge or opportunity for development in Latin America?" (14 March 2023)
 - **Speakers:** Pascual Restrepo of Boston University and Maria Savona of SPRU, the University of Sussex and Libera Università Internazionale degli Studi Sociali "Guido Carli" (LUISS)
- "The Macroeconomics of the Green Transition in Emerging Nations" (25 April 2023)

 Speakers: Andrés Velasco, Dean of the School of Public Policy at the London School of Economics and Political Science and Luc Soete of UNU-MERIT
- "The Reorganization of International Production, GVC Resilience and Prospects for North American Integration" (16 May 2023)

Speakers: Gary Gereffi of Duke University and Carlo Pietrobelli, UNESCO Chair at UNU-MERIT and Roma Tre University

10 11

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About UNU-MERIT

The United Nations University – Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT) is a research and training institute of the United Nations University (UNU) which collaborates closely with Maastricht University. UNU-MERIT aims to advance societal policy and innovation research, provide education and mobilise knowledge in order to unlock the full potential of innovation for achieving inclusive sustainable development. The research agenda of UNU-MERIT on 'Comprehensive Innovation for Sustainable Development' (CI4SD) focuses on the interconnected risks and opportunities of innovation, as they relate to climate change, digital transformation, poverty and inequality, migration and population, and the future of work.

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