



EUROPEAN POLICY BRIEF

Gender STI 

POLICY BRIEF ON GENDER STI

Policy feedback on Gender Equality in Science,
Technology and Innovation in Bilateral and
Multilateral Dialogues

October 2023

INTRODUCTION

The EU Member States and many countries outside the European Union are facing similar challenges in terms of gender equality in science, technology and innovation (STI): gender-related biases are leading to horizontal (disparities among different scientific disciplines) and vertical (low levels of women representation on top positions) segregation. The perception of and support for gender equality varies significantly across cultures. Cultural and institutional barriers turn women away from STI and affect their careers. Also, the take up of the gender dimension in research and innovation content is still limited. The EU has developed a strategy for promoting gender equality along three objectives of the European Research Area, i.e., gender equality in scientific careers, gender balance in decision-making and the integration of the gender dimension in research and innovation (R&I) content. Given the increasing interest from third countries to cooperate with the EU in the field of STI and encourage the mobility of researchers, it is therefore important to develop common solutions for common challenges regarding gender inequalities in STI.

The GENDER STI project investigated how gender equality matters are taken into consideration at different levels of international cooperation in STI between the EU and a selected set of third countries, and provides insightful learnings and recommendations on how to address gender equality in R&I within the EU STI dialogue with key international partners.

EVIDENCE AND ANALYSIS

The GENDER STI project addressed the challenge to integrate the gender perspective in bilateral and multilateral STI dialogues between EU Member States, Associated Countries and 10 selected third countries from three continents: Canada, the U.S., Mexico, Brazil, Chile, Argentina, South Africa, India, South Korea and China. Our investigation has been conducted along the three objectives of the EU gender equality strategy in R&I, i.e., gender equality in scientific careers, gender balance in decision-making and the integration of the gender dimension in R&I content. In the policy context described above, **the most policy-relevant findings** of GENDER STI are the following:

- a) **Mapping on gender equality in STI bilateral and multilateral agreements.** The mapping study based on the analysis of a sample of 528 STI agreements from 50 countries (including bi- and multilateral agreements, memorandums of understanding (MoU) and STI implementation activities), alongside insights gathered through a survey with 204 respondents and 80 in-depth interviews with relevant stakeholders in Europe and third countries. Our findings show that only 15% of the identified agreements include gender-related content. Most of the gender content is found in government level dialogues, especially in the third country context. In turn, the role of STI funding and research performing organizations is rather limited. The GENDER STI inquiries also revealed that there are a lot of commonalities between European and third countries on what needs to be

done to include gender equality in international R&I cooperation. Moreover, the findings disclosed that inclusivity and intersectionality are increasingly considered in bilateral and multilateral STI dialogues and that institutional and cultural differences need to be considered to advance the integration of gender equality in STI dialogues.

- b) Co-design Labs tackling gender equality in STI worldwide.** GENDER STI hosted a series of Co-Design Lab workshops to address three forefront challenges faced by women in STI that are at the core of the European Commission's gender equality strategy, i.e., gender equality in scientific careers; gender balance in decision making bodies and positions; and the integration of the gender dimension in R&I content. The Labs were implemented over 12 sessions in different days with a duration of 36 hours. Altogether, the Labs engaged +140 participants from 25 countries, including Europe, North America, Latin America, South Africa and Asia. As a result, we have developed 20 prototypes to enhance gender equality, which lay the groundwork for the Gender STI Community of Practice and policy recommendations.
- c) Policy recommendations action plan.** Built on collaborative effort of stakeholders, researchers, innovators, policymakers, and visionary individuals and organizations that advocate for gender equality in R&I, GENDER STI has developed a set of recommendations to foster gender equality in international STI dialogues and cooperation. The action plan outlines a strategic roadmap to translate the selected recommendations on gender equality in STI into concrete actions, encompassing clear responsibilities, timeframes, anticipated impact, and third parties involved. By operationalizing these recommendations, we aim to catalyze tangible progress towards achieving gender equality across the STI landscape.
- d) The European Observatory on Gender in STI.** The Observatory has been established to serve as a comprehensive and up-to-date source of information about gender equality in STI dialogues with third countries. The Observatory benefits policy debates on gender equality in STI and international cooperation, connecting organisations and practitioners interested in supporting gender mainstreaming in STI collaboration. The structure of the Observatory comprises four key areas: Gender Equality in international STI dialogues; Co-Design Labs & Gender Equality Solutions; Gender STI Community of Practice; and Resources.
- e) Support to inclusive gender equality in international STI Dialogues.** GENDER STI participated in the Gender Equality and Inclusiveness workshop held in April 2023, as part of the Multilateral Dialogue on Values and Principles for Research and Innovation (R&I) launched by the European Commission in July 2022. The event co-organised by the European Commission with Spain, Argentina, Mexico and Chile attracted around 80 participants from 39 countries and several European and international organisations. GENDER STI provided advice and shared the findings of the project and good practices for the integration of gender equality in international R&I collaboration and STI dialogues between Europe and third countries.

POLICY IMPLICATIONS AND RECOMMENDATIONS

GENDER STI policy recommendations are the result of a shared vision and collaborative effort to integrate gender equality dimensions in STI dialogues and agreements.

#R1 Introduce the implementation of a Gender Equality Plan in STI dialogues (addressing also gender-based violence, harassment and discrimination), with measurable goals in the short and long term.

#R2 Establish quantified and qualitative targets to increase the diversity of female scientists in STI dialogues and international cooperation actions.

#R3 Promote gender sensitive funding to advocate the participation of women in international scientific cooperation.

#R4 Undertake transparent and inclusive decision-making processes in STI international dialogues (negotiations and implementation).

#R5 Establish and implement working groups and/or advisory groups on gender equality to look at the gender aspects of international agreements and advise the decision-makers at all stages of the process.

#R6 Evaluate institutions' gender related actions in the context of international scientific collaboration, reflecting on ways to improve and share the most relevant results with the STI community.

#R7 Encourage inclusiveness in all dimensions of international dialogues in STI.

#R8 Negotiate and include gender equality clauses in international agreements, with focus on three challenges:

gender equality in careers, gender balance in decision-making, and gender dimension in research content.

#R9 Promote expert groups on the integration of the gender dimension in research content and integrate these experts as a compulsory dimension of STI programmes in international agreements.

#R10 Include in international agreements the organization of a Women in STI research day/symposium at research organizations where role models can be highlighted, and women scientists can present their research and networks.

SUSTAINABILITY AND LEGACY

GENDER STI has generated added-value differentiated outputs, which makes the project unique and impactful. Taken together, the project results provide a **unique toolkit for Dialogues and International Cooperation in STI**.

#1. Mapping gender equality in STI policy landscape: Extensive mapping study addressed gender content in STI international agreements and STI policies in Europe and outside Europe. It revealed that inclusion of gender equality and inclusiveness is not common practice in STI policy making, as only 15% of evaluated STI agreements and 4% of STI policies had gender content. Better integration of gender equality and inclusiveness in science and technology, as well as research and innovation policies is not only important but urgent to address grand global challenges.

#2. European Observatory on Gender in STI. The Observatory is unique of its kind in Europe and will serve as a hub for gender equality in STI dialogues. The Observatory is organized in four sections: (1) Gender Equality in International Dialogues, including insights from the mapping study as well as relevant policies and trends; (2) Co-Design Labs and Gender Equality Solutions, which presents the prototypes developed by the Labs to face common challenges regarding gender inequalities in STI; (3) Resources: The Observatory houses all knowledge and materials produced by the project and other initiatives and organizations supporting gender equality in STI; and (4) Gender STI Community of Practice, which act as a driver of the European Observatory on Gender in STI.

#3. Gender STI Community of Practice (CoP). The online Gender STI CoP gathers more than 200 members coming from different backgrounds spread worldwide. Members of the CoP serve as ambassadors to promote gender equality across European and third countries and to support informed discussion and reflection on gender equality. The CoP contributes to foster dialogues on gender equality and inclusiveness, identify new and emerging issues related to gender equality in STI and facilitate knowledge exchange between stakeholders worldwide.

#4. Guidance for integrating the gender perspective in STI. GENDER STI has developed a series of publications, handbooks, training materials, guidelines and scientific papers that serve as guidance for stakeholders and provide insights and good practices for the integration of the gender perspective in STI dialogues and international cooperation in R&I.

#5. Policy recommendations action plan. By adopting a policy approach to inclusive gender equality in STI, the action plan provides a roadmap to advance gender equality in STI agreements. This, in turn, catalyses transformative change leveraging the power of inclusivity and diversity. GENDER STI envisions gender equality as the cornerstone of STI partnerships, leading to more innovative, sustainable, and impactful outcomes from international cooperation in STI. The action plan will serve as a common foundation for collective efforts to transform the provided recommendations into actionable measures.

PROJECT OBJECTIVES AND METHODOLOGY

GENDER STI project aimed to: 1) Investigate and follow up how gender equality matters are taken into consideration at different levels of international cooperation dialogues in the area of STI between the EU MS and AC on one side, and the selected set of 10 third countries on the other side; 2) Develop a strategy to co-design solutions for common challenges regarding gender inequalities in STI, through a design thinking process to engage relevant stakeholders in EU and the selected third countries.

The GENDER STI design thinking methods, combined with data-driven analysis of gender-related policies in STI, along with the adoption of an intersectional approach and the values and principles of Diversity, Equity and Inclusion (DEI), make a difference. Our participatory approach allowed us to engage with policy makers and relevant stakeholders in the co-creation of common solutions and policy recommendations. The Co-design Labs served to transform challenging problems into creative ideas, innovations, strategies and solutions through dialogue, leadership, communication, and participatory interaction.

PROJECT IDENTITY

PROJECT NAME	Gender Equality in Science, Technology and Innovation Bilateral and Multilateral Dialogues (GENDER STI).
COORDINATOR	María Fernanda Cabrera, Universidad Politécnica de Madrid, Spain, mf.cabrera@upm.es.
CONSORTIUM	Canadian Institutes for Health Research – CIHR – Ottawa, Canada Centre National de la Recherche Scientifique – CNRS – Paris, France Council for Scientific and Industrial Research – CSIR – Pretoria, South Africa Euro-India Research Centre – EIRC – Bangalore, India FUTOUR – Pisa, Italy Georgia Tech Research Corporation – GTRC – Atlanta, United States Graz University of Technology – TU Graz – Graz, Austria Hallym University – Chuncheon, South Korea Grupo Empresarial Inmark – INMARK – Madrid, Spain Instituto Tecnológico y de Estudios Superiores de Monterrey – ITESM – Monterrey, Mexico National Academy of Innovation Strategy – NAIS – Beijing, China Ontario College of Art and Design University – OCAD – Toronto, Canada Red Argentina de Género, Ciencia y Tecnología – RAGCyT – Buenos Aires, Argentina Red Nacional para Investigación y Educación de Chile – REUNA – Santiago, Chile Sociedade Portuguesa de Inovação – SPI – Porto, Portugal Technical Research Centre of Finland – VTT – Espoo, Finland Universidade de São Paulo– USP – Sao Paulo, Brazil Universidad Politécnica de Madrid – UPM – Madrid, Spain
FUNDING SCHEME	Swafs-12-2019. The gender perspective of science, technology and innovation (STI) in dialogue with third countries.
DURATION	November 2020 – October 2023 (36 months).
BUDGET	EU contribution: 1 999 650 €.
WEBSITE	https://www.gender-sti.org/
FOR MORE INFORMATION	Contact: Yolanda Ursa, yolanda.ursa@grupoinmark.com.
FURTHER READING	<ul style="list-style-type: none">- Riina, Bhatia, Nina Rilla, Essi Laitinen, Gabriela, Ferreira and Catarina Milhazes (2023). Integration of gender in international science, technology and innovation (STI) collaboration: learning from international feminist policies. Eu-SPRI Annual Conference extended abstract, Brighton, 14- 16 June 2023.- Sarina Gursch, Luciana Ayciriex, Yolanda Ursa, Stefan Kutschera, Wolfgang Slany, Janina Onuki and Gabriela Ferreira (2023). Perspectives on Gender Mainstreaming in International Cooperation in STI: A Comparative Study. International Conference on Gender Research – ICGR 2023, Conference proceedings, Ulster, UK, 20-21 April 2023.- Giovanna Sanchez Nieminen, Nina Rilla, Riina Bhatia, Maria Merisalo and Gabriela Ferreira (2022), Moving away from traditional STI - how to improve gender equality and inclusivity in STI? 26th International Conference on Science, Technology and Innovation Indicators, Granada, 7-9 September 2022.- Riina Bhatia, Maria Merisalo, Nina Rilla and Tuisku Salonen (2022). From persisting gender inequality to inclusion in research and innovation content: challenging the gender equality norm in the STI fields. Extended abstract to Eu-SPRI 2022 conference, Utrecht, 1- 3 June 2022.- Sarina Gursch, Katja Urak, Michael Herold, Stefan Kutschera, Maria Fernanda Cabrera, Yolanda Ursa, Wolfgang Slany, Vesna Krnjic (2022), Inequalities for Women in Science, Technology and Innovation. International Conference on Gender Research – ICGR 2022, Conference proceedings, University of Aveiro, Portugal, 28 - 29 April 2022.