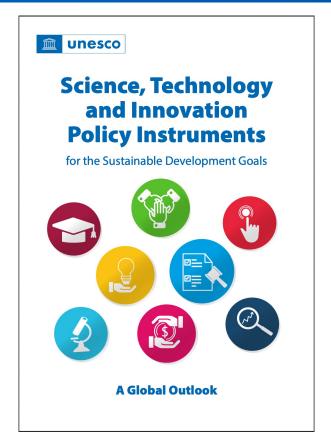


# Science, Technology and Innovation Policy Instruments for the Sustainable Development Goals: A global outlook



# Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs

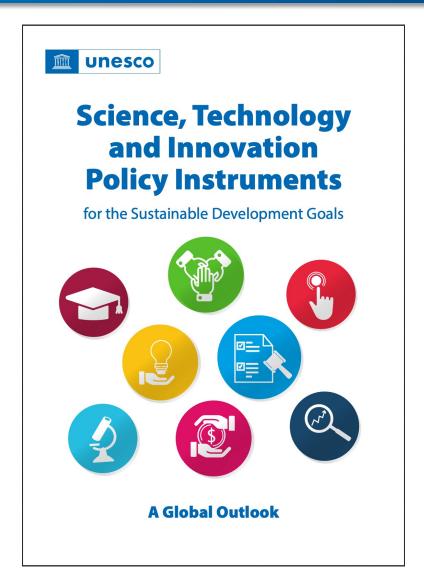
Side Event: Strengthening instruments for policy implementation in science, technology and innovation 10 May 2024

Manuel Ricardo GALINDO MORENO

"Without policy instruments to ensure that they are effectively implemented, STI policies risk remaining little more than a wish list."

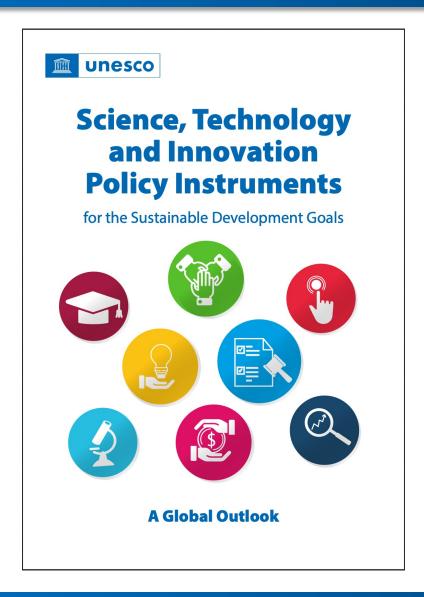
**Lidia Arthur Brito** 

Assistant Director-General for Natural Sciences, UNESCO



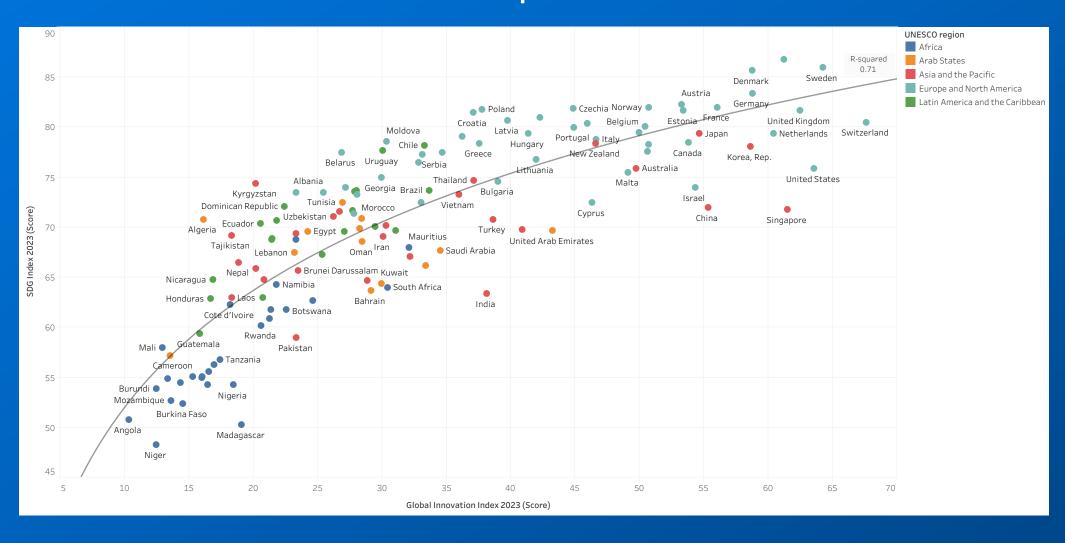
# Main sections of the publication

- Designing and implementing effective STI policy instruments.
- Overview of regional advancements in STI
- The global landscape of STI policy instruments: Insights and trends
- Conclusions and Recommendations





# Positive relationship between STI performance and sustainable development



# Data obtained from the Global Observatory for STI Policy Instruments (GO-SPIN)

# What are the goals of GO-SPIN?

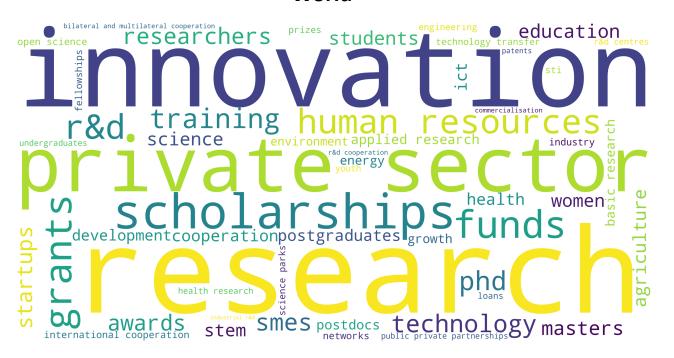
- To support evidence-informed decision-making and inclusive and gender-transformative STI policies.
- To help identify gaps in the policy mix and enable comparison between Member States and the identification of good practices by providing comprehensive information on STI systems, policies and policy instruments.
- To monitor the performance of STI systems over time using a broad range of indicators.
- To reinforce national human capacity in STI governance.





# What do the policy instruments of countries from different regions tell us?

#### World



#### **Africa**



#### **Latin America and the Caribbean**



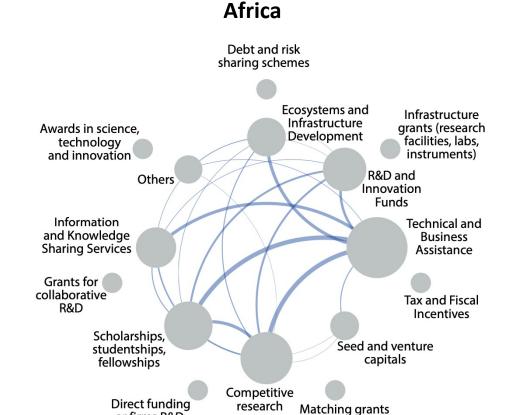
# STI Policy Instruments contributing to advancing the SDGs

Over 3 quarters of instruments are focused on SDGs 9, 8 and 4

Region	Indicator	SDG 1: No Poverty	SDG 2: Zero Hunger	SDG 3: Good Health and Well-being	SDG 4: Quality Education	SDG 5: Gender Equality	SDG 6: Clean Water and Sanitation	SDG 7: Affordable and Clean Energy	SDG 8: Decent Work and Economic Growth	SDG 9: Industry, Innovation and Infrastructure
Africa	Share of region's policy instruments	6.95%	9.27%	4.30%	23.51%	6.62%	0.99%	1.32%	32.12%	65.89%
	Number of policy instruments	21	28	13	71	20	3	4	97	199
Latin America and the Caribbean	Share of region's policy instruments	1.26%	2.52%	2.16%	13.49%	1.98%	1.26%	1.62%	28.42%	77.16%
	Number of policy instruments	7	14	12	75	11	7	9	158	429
World's Total	Share of total policy instruments	2.10%	3.64%	2.80%	13.01%	5.59%	1.26%	2.17%	27.90%	76.29%
	Number of policy instruments	30	52	40	186	80	18	31	399	1,091
Region	Indicator	SDG 10: Reduced Inequality	SDG 11: Sustainable Cities and Communities	SDG 12: Responsible Consumption and Production	SDG 13: Climate Action	SDG 14: Life Below Water	SDG 15: Life on Land	SDG 16: Peace, Justice and Strong Institutions	SDG 17: Partnerships for the Goals	
Africa	Share of region's policy instruments	0.99%	0.99%	1.99%	0.66%	0.66%	2.65%		8.61%	
	Number of policy instruments	3	3	6	2	2	8		26	
	Share of region's policy instruments	1.26%	0.54%	0.54%	0.54%	1.80%	1.62%	0.18%	8.09%	
	Number of policy instruments	7	3	3	3	10	9	1	45	
World's Total	Share of total policy instruments	0.77%	0.70%	0.63%	0.63%	0.98%	1.82%	0.21%	9.58%	
	Number of policy instruments	11	10	9	9	14	26	3	137	

# STI Policy Instruments Mix (support mechanisms)

The prevalence of support mechanisms used by STI policy instruments shows large variations across regions

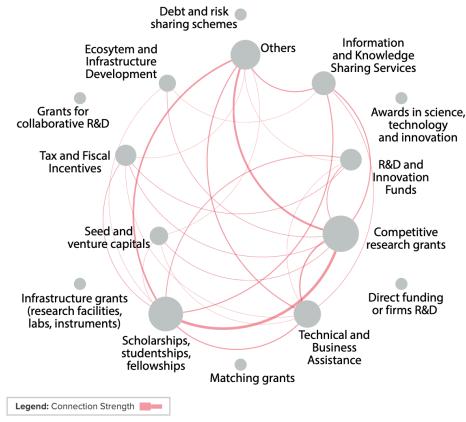


grants

or firms R&D

Legend: Connection Strength

#### Latin America and the Caribbean



# Case Studies: STI policy instrument implementation

#### **Africa**

- Grant Scheme of the Council for Scientific and Industrial Research of Ghana
- Botswana Innovation Fund
- National Research Fund of Mozambique
- Human Development Innovation Fund of Tanzania
- Institutional support for TTOs in Kenyan universities and research institutes

#### **Arab States:**

- United Arab Emirate's Mohammed Bin Rashid Innovation Fund
- Kuwait's KISR summer and spring training programmes
- US-Egypt Science and Technology Joint Fund

#### Asia and the Pacific

- China's National Science Fund for Distinguished Young Scholars
- South Korea's National Science and Technology Information Service
- Cambodia's Entrepreneurship Development Fund
- Mongolia's Mon-X.

#### **Europe and North America**

- Evaluation of R&D entities of Portugal
- United Kingdom's Industrial Strategy Challenge Fund
- Serbia's Research and Innovation

#### Latin America and the Caribbean:

- Guatemala's Digital Literacy Workshops for Indigenous Peoples
- Colombia's ArCo.
- Chile's Scientific and Technological Centres of Excellence with Basal Funding.
- Mexico's State Researcher System.
- Paraguayan instrument for the creation and strengthening of Master's degrees and doctorates of excellence.



### Conclusions and recommendations

#### **Sustainable Development Goals:**

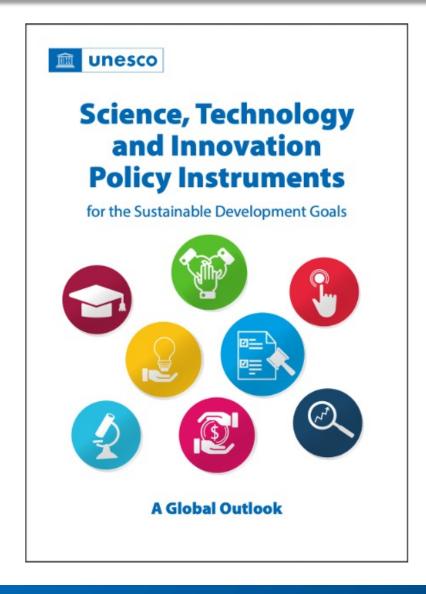
- **SDG Integration**: Further align STI instruments with the Sustainable Development Goals (SDGs) to address global challenges.
- **Broadening Participation:** Promote inclusivity by engaging under-represented groups like indigenous peoples.

#### **Evidence-Based Policymaking:**

- Data-Driven Decisions: Utilize quantitative and qualitative data for informed policy design and implementation.
- Comparative Analysis: Leverage platforms like GO-SPIN and STIP Compass to identify best practices and adapt them to local contexts.

#### **Design and Implementation**<sub>1/2</sub>:

- **Diversification of mechanisms:** Move beyond scholarships and grants to encompass a wider range of instruments.
- Tailored Approach: Recognize varying STI capacities across actors and industries, tailoring instruments accordingly.



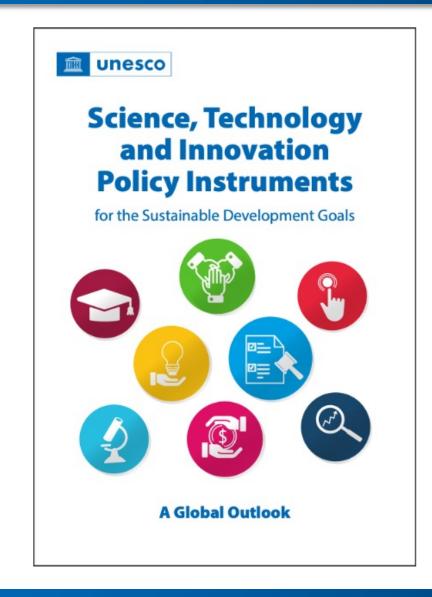
### Conclusions and recommendations

# **Design and Implementation**<sub>2/2</sub>:

- **Strategic Funding:** Align financial support with the absorptive capacity of the STI system to avoid overburdening it.
- **Program Design and Management:** Implement robust program design with logic frameworks and results-based management practices.
- **Human Capital Development:** Invest in building skilled human resources and institutional capacity for effective policy execution.

# **Continuous Learning and Adaptation:**

- Monitoring and Improvement: Establish comprehensive monitoring and evaluation frameworks to track progress, identify areas for improvement, and adapt policies to changing circumstances.
- Learning through Application Assessments: Use application assessments as learning opportunities for the evolution of the instrument.



# Thank you

Access the outlook at

https://unesdoc.unesco.org/ark:/48223/pf0000389665

