

# **POLICY BRIEF**

# SCIENCE, RESEARCH AND INNOVATION INVESTMENT

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Solidarity Equality Sustainability

# **ORGANIZATIONS**

Resilience Action Network Africa YoungShip South Africa South African Medical Research Council Centre for the AIDS Programme of Research (CAPRISA) Africa Health Research Institute Africa Center for Intangible Phenomena Studies (ACIPS) Consultant SAYC

SCIENTIFIC RESEARCH INNOVATIONS

Grind SA NPO

Strengthening Africa's Health Technological Advocacy Coalition (SAHTAC)

Axzek Projects

Faculty of Best Advisory (FBA)

Uniting Reformed Church in Southern Africa & a Royal representative Mzilikazi Royal Monarch

HyaPak

Disability Lobby Group

Fumana Bophelo

**Enhancing Care Foundation** 

Africa Health Research, Innovation and Development Alliance TruCam ultimate Support

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#### **EXECUTIVE SUMMARY**

Under South Africa's 2025 G20 Presidency, Science, Research, and Innovation Investment (SR&I) is recognized as central to sustainable development, resilience, and global health equity. Through SR&I Working Group meetings and the G20 Initiative on Bioeconomy, key deliverables have been advanced, informed by civil society perspectives emphasizing equity, community agency, and South–South collaboration. Despite growing global R&D investment, access remains unequal. We urge G20 leaders to commit to a framework that ensures inclusive governance, targeted financing, and regionally anchored partnerships, embedding participation, justice, and equity at the heart of research and innovation for tangible benefits to all communities

#### **PROBLEM STATEMENT**

Science, Research, and Innovation Investment (SR&I) is essential for tackling global challenges, including pandemic preparedness, antimicrobial resistance, climate resilience, and equitable access to health technologies. However, a persistent innovation–access gap continues to limit the benefits of SR&I for historically marginalised populations, rural communities, women, people with disabilities, and countries in the Global South. This inequity undermines global resilience and inclusive development. The C20 calls on G20 leaders to address this gap by supporting community-driven, inclusive SR&I investments that enhance equitable access, strengthen regional innovation ecosystems, and foster South–South collaboration.

#### **KEY RECOMMENDATIONS**

- 1. Institutionalise Community-Based Participatory Research (CBPR): Embed CBPR as a core methodology across G20 SR&I agendas to ensure research is inclusive, locally relevant, and community-driven.
- 2. Close Innovation–Access Gaps: Ensure that historically marginalised populations benefit from SR&I by promoting equitable financing, technology transfer, and fair distribution of innovations.
- 3. **Strengthen Regional Innovation Ecosystems:** Prioritise dedicated G20 investments to bolster research infrastructure, capacity, and knowledge networks in the Global South.
- 4. **Advance Regulatory Harmonisation:** Facilitate timely, safe, and equitable access to health products and technologies through harmonised regional and international regulatory frameworks.
- 5. **Mainstream Inclusion:** Integrate gender, disability, and rural perspectives into all SR&I investments, governance structures, and policy frameworks to ensure equitable participation.

#### **CALL TO ACTION:**

By adopting these measures, G20 leaders can establish a pandemicresilient, inclusive, and equitable global health architecture that delivers tangible benefits for all communities.





#### INTRODUCTION

South Africa's 2025 G20 Presidency has strategically positioned Science, Research, and Innovation (SR&I) at the forefront of its agenda, convening three SR&I Working Group meetings in parallel with the G20 Initiative on Bioeconomy. These high-level engagements hosted at the University of the Free State (February 2025), the University of Mpumalanga (May 2025), and the Council for Scientific and Industrial Research (September 2025) have advanced the ten deliverables established during the inaugural session and laid a strong foundation for the forthcoming G20 Research and Innovation Ministerial Declaration.

In parallel, the C20 SR&I Working Group, fully constituted in June 2025, has elevated civil society perspectives, advocating for a research and innovation agenda that prioritises equity, community agency, and South–South collaboration. This collective vision is firmly grounded in regional and international frameworks, including the African Union's Science, Technology and Innovation Strategy for Africa (STISA-2024), the World Health Organization's Local Production and Technology Transfer agenda, and the draft G20 Leaders' and Ministers' Declarations on Research & Innovation.

Science and innovation are critical drivers of sustainable development, resilience, and preparedness. Yet, despite rising global R&D investments, inequities in access remain pronounced. G20 leadership under South Africa's Presidency has a unique opportunity to ensure that scientific breakthroughs and technological innovations extend beyond privileged populations, delivering tangible and equitable benefits to all, particularly historically marginalised communities. Achieving this requires closing the innovation–access gap through targeted financing, inclusive governance models, and regionally anchored partnerships that embed participation, justice, and accountability at the core of global research and innovation.

We emphasise that SR&I investments must be accessible, relevant, and responsive to the needs of marginalized populations, including those affected by poverty related and neglected diseases. By committing to a framework that integrates equity, inclusion, and community-led approaches, G20 leaders can ensure that SR&I not only advances scientific excellence but also drives meaningful social impact and global health equity.







### **ISSUE ANALYSIS**

#### 1. Innovation Capacity & Infrastructure Gaps

- Institutionalise Community-Based Participatory Research (CBPR) across G20 SR&I agendas to strengthen locally relevant innovation ecosystems, including rural areas and sectors such as agro-tech, off-grid energy, and rural health technology.
- Address gender disparities in STEM by promoting inclusion of women in leadership, research roles, and clinical trials, and develop gender-responsive SR&I policies to remove systemic barriers for women researchers.

# 2. Technology Transfer & Equitable Access

- Close innovation–access gaps for marginalized populations through equitable financing, technology transfer, and open-source innovation models.
- Prioritise disability-inclusive design, assistive technologies, and accessibility considerations throughout SR&I outputs to ensure equitable participation.

### 3. Financing & Partnerships for R&D

• Strengthen regional innovation ecosystems in the Global South through dedicated G20 investment, innovative financing mechanisms (e.g., blended finance, public–private–philanthropic partnerships), and support for research on poverty-related and neglected diseases.

## 4. Governance Reform & Civil Society Engagement

- Advance regulatory harmonisation and ethical frameworks for digital and Al driven innovations, addressing bias, IP rights, and equitable use in LMICs.
- Expand civil society participation in SR&I governance to ensure accountability, relevance, and community-driven research priorities.

#### 5. Cross-Cutting Threats & Opportunities

- Integrate considerations for antimicrobial resistance (AMR), climate-resilient Innovation, and digital ethics into all SR&I investments.
- Ensure interventions proactively address emerging global health, environmental, and technological challenges through inclusive, forward-looking research agendas.

#### **CALL TO ACTION:**

By implementing these measures, G20 leaders can foster a pandemic resilient, inclusive, and equitable global SR&I architecture that delivers tangible benefits for all communities, especially historically marginalized populations, women, persons with disabilities, and rural communities.





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#### **RECOMMENDATIONS**

To advance inclusive, equitable, and resilient Science, Research, and Innovation (SR&I) globally, we propose the following priority actions, clearly identifying lead responsibility across G20, national governments, multilateral organisations, civil society, and the private sector:

#### a. Institutionalise Community-Based Participatory Research (CBPR)

Lead responsibility: G20, civil society, national governments, multilateral organisations

- Integrate CBPR into SR&I policy frameworks to ensure research and innovation are community-led and locally relevant.
- Fund capacity-building initiatives for civil society organisations, end-users, and key populations to participate meaningfully in SR&I governance.

#### b. Strengthen Global South Innovation Ecosystems

Lead responsibility: G20, national governments, private sector

- Invest in R&D infrastructure, talent retention, and rural innovation hubs to reduce geographic and capacity gaps.
- Promote South–South knowledge-sharing platforms to enhance collaboration and reduce dependence on extractive North–South IP regimes

### c. Ensure Equitable Access & Technology Transfer

Lead responsibility: G20, WTO, WIPO, national governments

- Support open-source innovation, local manufacturing, and technology transfer mechanisms that expand access to lifesaving products.
- Mainstream disability- and gender-responsive design across all technology development to ensure inclusive innovation.

#### d. Advance Regulatory Harmonisation

Lead responsibility: Regional economic communities, WHO, G20

- Strengthen regional regulatory bodies, digital tools, and mutual recognition agreements to expedite safe product access.
- Provide regulatory science training and twinning arrangements to build capacity across LMICs.

#### e. Mobilise Innovative Financing

Lead responsibility: G20 finance ministers, multilateral banks, philanthropic sector

- Establish dedicated funding streams for neglected diseases, diagnostics, and pandemic preparedness.
- Leverage blended finance and public–private partnerships to diversify resources and enhance sustainability.







#### **CONCLUSION:**

By adopting these measures, G20 leaders can ensure that SR&I investments are inclusive, equitable, and strategically aligned with global health and development priorities. This approach will strengthen resilience, empower historically marginalised communities, and foster a research and innovation ecosystem that delivers tangible benefits to all

## **POLICY BRIEF SUMMARY TABLE**

Thematic Area	Recommended Actions	Lead Responsibility	Lead Responsibility
Community- Based Participatory Research (CBPR)	Integrate CBPR into SR&I policy frameworks- Fund capacity building for civil society, end- users, and key populations	G20, civil society, national governments, multilateral organisations	Research and innovation are community-led, locally relevant and inclusive
Global South Innovation Ecosystems	Invest in R&D infrastructure, talent retention, rural innovation hubs- Promote South–South knowledge- sharing platforms	G20, national governments, private sector	Strengthened regional innovation capacity; reduced dependency on North-South IF regimes
Equitable Access & Technology Transfer	Support open-source innovation, local manufacturing, and technology transfer- Mainstream disability- and gender-responsive design	G20, WTO, WIPO, national governments	Improved access to lifesaving products; inclusive and equitable innovation outcomes
Regulatory Harmonisation	Strengthen regional regulatory bodies, digital tools, mutual recognition agreements- Provide regulatory science training and twinning arrangements	Regional economic communities, WHO, G20	Timely safe and equitable access to products; strengthened regulatory capacity in LMICs
Innovative Financing	Establish dedicated funding for neglected diseases, diagnostics, and pandemic preparedness. Leverage blended finance and publicprivate partnerships	G20 finance ministers, multilateral banks, and the philanthropic sector	Sustainable, diversified financing for priority SR&I areas enhanced pandemic preparedness

#### **CALL TO ACTION:**

BAdopting these measures will empower G20 leadership to foster an inclusive, equitable, and resilient global SR&I ecosystem that strengthens health systems, supports historically marginalized communities, and delivers tangible societal benefits worldwide.



