G20 Chief Science Advisers' Roundtable

Outcome Statement

Pretoria, 21 September 2025

1. We, the Chief Science Advisers and the nominated equivalents of the G20 members and invited countries*, gathered on 21 September 2025, in Pretoria, South Africa, for a meeting of the G20 Chief Science Advisers' Roundtable (G20-CSAR) under the theme "Equity-based Science, Technology and Innovation for Inclusive Human Development and Global Sustainability".

2. We recognise the importance of the G20-CSAR as a valuable platform that provides for open and constructive engagement amongst peers and serves as an appropriate forum for discussing effective paths, interventions and approaches to inform, on mutually agreed terms, national decision-making processes and inclusive international strategies on the main challenges of our time through the lens of science, technology and innovation (STI).

3. We acknowledge the intrinsic connection between the theme for South Africa's G20 Presidency, "Solidarity, Equality, Sustainability", and we note the priorities of the 2025 G20-CSAR which are to provide scientific advice linked to STI related challenges namely, (a) The development and promotion of a global STI agenda to support the implementation of the Sustainable Development Goals (SDGs) and enable just, equitable and inclusive energy transitions ; (b) Towards a global knowledge system that is equitable and open to all; and (c) Leveraging G20 STI initiatives to strengthen STI capacity-building initiatives in developing countries, particularly in Africa.

*G20 members and guest countries in attendance: African Union, Canada, China, European Commission, France, Germany, India, Italy, Japan, Republic of Korea, Russia, Saudi Arabia, South Africa, Türkiye, United Kingdom, Netherlands, Norway, Singapore, Spain.

4. Following an exchange of perspectives and extensive deliberations on these priorities, we proposed the recommendations set out below and discussed feasible pathways to promote their implementation.

The development and promotion of a global STI agenda to support the implementation of the SDGs and enable just, equitable and inclusive energy transitions

5. We recognise that, while advances in STI are key drivers of transformation in our rapidly changing world, inequities and asymmetries in STI persist and have a negative effect on inclusive human development and global sustainability.

6. We recognise that the challenges in this regard relate to (a) sustainable development in all its dimensions namely: the environmental, economic and social challenges, including energy access and security, significant climate change and just energy transitions, (b) insufficient resource allocation for STI initiatives across the G20, and (c) inclusive knowledge sharing and its open accessibility.

7. In pursuit of finding inclusive solutions to these complex challenges, we recognise the importance of a coherent STI discourse that takes into account the realities at national, regional and global levels.

8. We recognise the centrality of STI in advancing the implementation of the SDGs, promoting equitable growth and enabling an inclusive climate, environment and energy transitions, and across all other dimensions of sustainable development. We therefore recognise that STI, including both basic and applied research, should be an enabler of any post 2030 development agenda as a key driver for addressing global challenges.

Towards a global knowledge system that is equitable and open to all

9. We recognise that a global knowledge system promoting equity and openness to all, while safeguarding national strategic interests, could strongly support the effective implementation of an inclusive G20 STI agenda. The promotion of STI is vital to safeguard research integrity and the freedom of scientific research, and to strengthen public trust in science as well as evidence-based policy advice.

10. We note that developing countries, particularly in Africa, face major impediments and constraints with respect to knowledge dissemination, access and equity. Asymmetries in research activities persist in the production, dissemination and utilisation of knowledge and research outputs.

11. We emphasise the empowering role of open science and appropriate methodologies in transitioning to an equitable and inclusive global knowledge system. As a gateway enabling countries to access and share data on mutually agreed terms, results and the outcomes of global research, technological development and innovation, open and responsible science is an important bridge to: (a) support and enhance collaborative knowledge creation; and (b) prevent a lasting sustainable development divide.

Leveraging G20 STI initiatives to strengthen STI capacity-building initiatives in developing countries, particularly in Africa

12. We recognise the importance of leveraging G20 STI capacity-building initiatives to strengthen capacity-building initiatives in developing countries, particularly in Africa.

13. We acknowledge that sharing and exchanging knowledge, skills, technology and innovation in support of inclusive and sustainable development enhanced by cooperation among the G20, Africa and developing countries can generate positive long-term

impacts on human development, environmental sustainability and social stability.

14. We recognise that in order to build sustainable STI ecosystems supported by the G20, in Africa and developing countries, aligned with national development strategies, capacities and laws, it is important to: (a) transform the brain drain of scientists and STI experts into global brain circulation by recognising the imbalances of the mobility of scientists and STI experts from these regions; (b) encourage the establishment of appropriate STI governance and advisory mechanisms; (c) facilitate the creation of instruments and methodologies to inform evidence-based STI decision-making, and foresight; (d) enhance the development of inclusive STI infrastructure; and (e) help strengthen resilience against global challenges that could impact the leveraging of resources and capacity building initiatives for STI.

15. We stress the need to explore opportunities for leveraging STI resources for development among G20 members and invited countries, focusing amongst others, on capacity building, international research and innovation collaboration.

Way forward

16. We stress that the pursuit of education and scientific knowledge are universal public goods as set out in Articles 26 and 27 of the Universal Declaration of Human Rights and should not become the object of unethical, inequitable and discriminatory practices. Our agenda for the future must strive to bridge the differences that separate us in the pursuit of our common goals.

17. To find effective and enduring solutions to the issues discussed in the meeting, we recommend the following:

a) leveraging global STI partnership opportunities to support human-centric initiatives focusing on societal challenges such as the planetary crisis, including significant climate change, biodiversity loss and pollution as well as energy access,

security and transitions including but not only in Africa and developing countries.

b) identifying opportunities through enhanced international STI collaboration to strengthen partnerships that address disparities in research, technology and innovation access, knowledge sharing and dissemination, based on mutually agreed terms.

c) mobilising appropriate resources for STI to support capacity building initiatives and international research collaboration among the G20 and developing countries, particularly in Africa.

d) fostering framework conditions for science that enable an open and collaborative international research environment while ensuring research integrity and the freedom of scientific research to strengthen public trust in science and evidence-based policy advice.

18. We thank South Africa for hosting the 2025 G20-CSAR and look forward to the 2026 G20-CSAR.