

Science for the SDGs across Africa's science ecosystem

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Overview



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Introduction



Agenda 2030 and the Sustainable Development Goals (SDGs) quickly became a rallying point for actors in the science arena, at national, regional and global levels

- Providing a powerful framing narrative for institutional policies, strategies and initiatives
- Enabling new collaborations based on the idea of common purpose and shared value

Also in Africa: often a re-framing exercise, but with good examples of new, targeted action in support of the SDGs, thematically and in terms of relevant approaches (notably, trans-disciplinarity)

Governments



- Agenda 2063 ‘The Africa we Want’ aligns with Agenda 2030, also in terms of recognizing the critical role of science, technology and innovation (STI) as a driver of sustainable development
- The African Union (AU) STI strategy for Africa (STISA-2024), currently under review, influences national governmental policies, strategies and investments in SDG-relevant areas
- The AU leverages funding channels and partnerships – including with multilateral organizations and regional development banks – to support STI for SDGs, with a strong focus on capacity development
- Launch of the STI Coalition for Africa’s Development in May 2023 during the first STI in Africa Day, held in the margins of the 8th STI Forum

Universities



- Impact ambitions generally aligned with SDGs
- SDGs increasingly used as a reporting framework, also as part of international ranking exercises
- Early career researcher (capacity development) initiatives – particularly those internationally funded – tend to have an SDG-related focus
- SDGs frame most collaborative undertakings, including
 - Research-based initiatives, e.g., African Research Universities Alliance (ARUA) Centres and Clusters of Excellence
 - Higher Education policy dialogues, e.g., Worldwide Universities Network (WUN)

Academies



- Between 2016 and 2019: SDGs as the central focus of academy-based policy and institutional capacity development work of the Interacademy Partnership (IAP)
- SDGs as topics of science advisory work
- Sustainable development central to the programmes and funding initiatives of both
 - African Academy of Sciences (AAS)
 - Network of African Science Academies (NASAC)

Funders



- National: SDG-relevant strategies, divisions, funding initiatives
- African Science Granting Councils Initiative (SGCI): Focused on institutional capacity development, but includes support for African collaboration in multilateral funding initiatives with a primary focus on SDGs
 - Belmont Forum
 - Global Research Council
 - Global Forum of Funders / ISC Sustainability Commission
- SDG-relevant funding orientation in multiple other sources, including
 - Bilateral agreements
 - International and regional foundations

Other, cross-sectoral initiatives



- Future Earth Africa Hub
- Africa Hub of the International Transformative Innovation Policy Consortium
- Regional centres of the Sustainable Development Solutions Network (SDSN)
- Science Diplomacy Capital for Africa (SDCfA)
- African Open Science Platform (AOSP)
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Critical challenge: Funding realities



- Low levels of public investment in R&D continue to prevail in most African countries: Across the continent, and specifically in sub-Saharan Africa, the average GERD/GDP has remained unchanged around 0.3% for the past three decades
 - 9 times lower than the average for high-income countries
 - Continues to fall short of all statements by the AU that 1% of GDP should be the targeted expenditure on R&D in Africa
- In most African countries the business sector makes a negligible contribution to R&D (which further increases the pressure on governments to provide funding for science)



Consequences:

- Persistent reliance on foreign sources of funding across the continent, leading to
 - A scientific culture of competition – and the inevitable duplication of efforts that goes with it
 - Agendas that are not necessarily determined by and for Africa
 - Inequitable modes of international scientific collaboration
- Weak engagement between science and industry, undermining the transformative potential of African research

Critical challenge: Diversity and inclusion



Significant variance across Africa in the resource base (financial and human) and, hence, robustness of national science systems

Consequences:

- Divides across the continent, with many countries left behind
 - Limited reach of Pan-African collaboration
 - Unequal access to science systems' development opportunities
- 'African science' a questionable reality, requiring multiple targeted development and support strategies

Critical challenge: Siloed action



- Interdisciplinarity remains a fundamental challenge, particularly when it comes to the full integration of the social and human sciences
- Science, Technology and Innovation tend to function as distinct domains of practice
- Collaborative action occurs primarily within rather than across science sectors: governments, universities, academies, funders

Consequences:

- Integrated knowledge for transformative action not yet a reality
- Fragmentation that undermines the collective potential of science in Africa, as well as its visibility and voice on the global stage

A way forward: An African STI Leaders' Forum



An inclusive, strategic forum or alliance of committed and influential partners who work together for a common purpose and shared value

- Reducing fragmentation, duplication and the competition that drives them
- Determining and advocating African agendas, based on African needs and interests
- Developing and unleashing the collective, transformative potential of African science for Africa's sustainable development

First meeting co-convened with the International Science Council on 4 December 2023, Future Africa, University of Pretoria



Who

- Scientific organizations, incl.:
 - Academies
 - Universities
 - Research Councils
 - Research-based NGOs
- And their regional representative bodies, e.g.:
 - Network of African Science Academies (NASAC)
 - Association of African Universities (AAU)
 - African Research Universities Association (ARUA)
- African scientific associations/unions or African chapters of international associations/unions
- Leading STI policymakers in Africa
- Science funding organizations. Incl.:
 - National science granting councils
 - Foundations
- And their regional representative bodies, e.g.: the SGCI
- African science and policy networks, e.g.:
 - African Open Science Platform
 - African Future Earth Hub
 - African chapter of the International Network for Government Science Advice
 - African Science Diplomacy Capital
- STI Ministries and relevant national advisory bodies
- Relevant private sector actors

What



- Review and influence key developments in STI on the African continent
- Exchange strategic information and ideas on African STI systems development
- Raise awareness of and advocate engagement with and support for the needs and interests, opportunities and challenges of African STI
- Provide scientific leadership and advice on the development of Pan-African initiatives: research, policy, infrastructure, etc.
- Provide coordinated high-level engagement with and representation in international scientific organizations (e.g., the ISC, IAP, WFEO)
- Support the positioning of African STI and amplify its visibility and voice in global STI and policy fora, incl. within the UN

Afterthought



Today we look for urgent ‘course correcting’ tactics in response to the lack of progress – and, in some cases, significant setbacks – in achieving the SDGs and dealing with the realities of a new global context of polycrises

- questioning the future value of global goal setting
- searching for new strategies to address apparent failures at the science-policy-practice interface
- Becoming serious about the need for transformations?



This is a critical moment for

- taking stock of challenges and opportunities (leverage points),
- confronting elephant in the room issues and thinking out of the box,
- shifting our focus for action from the global to the local level,
- listening to and learning from global South experiences and perspectives
- Convening and mobilizing collective capacities, skills, intelligence, wisdom – and financial resources



Thank you

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