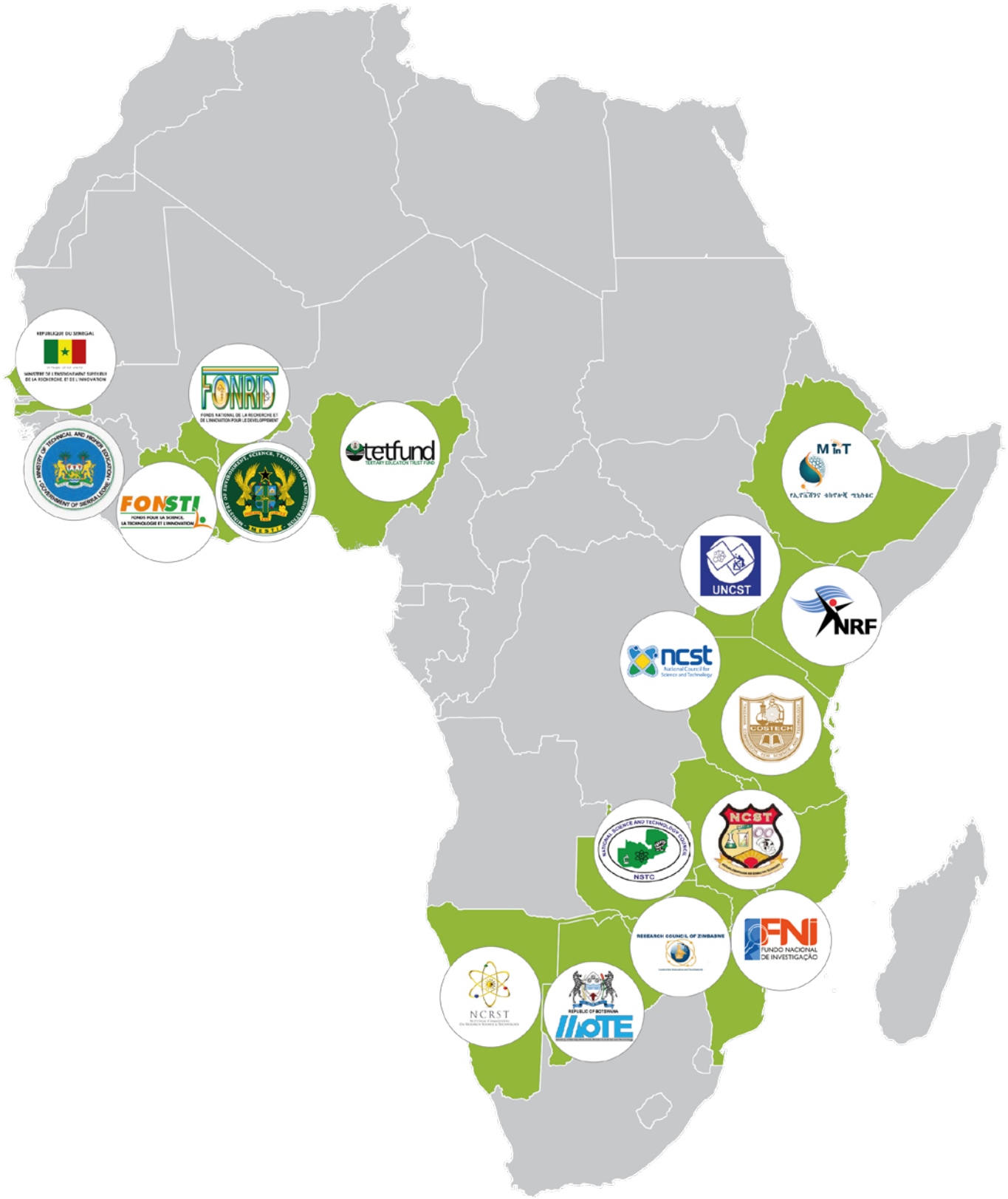
SCIENCE GRANTING COUNCILS INITIATIVE SGCI IOSRS INITIATIVE DES ORGANISMES SUBVENTIONNAIRES DE LA RECHERCHE SCIENTIFIQUE

Supporting the roles of science granting councils in Africa's development

SGCI Annual Report
October 2024

SGCI participating countries



Botswana	Ministry of Communications, Knowledge, and Technology (MCKT)
Burkina Faso	Le Fonds National de la Recherche et de l'Innovation pour le Développement (FONRID)
Côte d'Ivoire	Fonds Pour la Science, la Technologies et l'Innovation (FONSTI)
Ethiopia	Research Granting Council (RGC)
Ghana	Ministry of Environment, Science, Technology and Innovation
Kenya	(MESTI) National Research Fund (NRF)
Malawi	National Commission for Science and Technology (NCST)
Mozambique	Fundo Nacional de Investigacao (FNI)
Namibia	National Commission on Research, Science and Technology (NCRST)
Nigeria	Tertiary Education Trust Fund (TETFund)
Rwanda	National Council for Science and Technology (NCST)
Senegal	Ministry of Higher Education, Research, and Innovation
Sierra Leone	National Science, Technology and Innovation Council (NSTIC)
Tanzania	Tanzania Commission for Science and Technology (COSTECH)
Uganda	Uganda National Council for Science and Technology (UNCST)
Zambia	National Science and Technology Council (NSTC)
Zimbabwe	Research Council of Zimbabwe (RCZ)

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List of Acronyms and Abbreviations

AAU	African Association of Universities
ACTS	African Centre for Technology Studies
ATPS	African Technology Policy Studies Network
AUDA-NEPAD	African Union Development Agency-New Partnership for Africa's Development
CABI	Centre for Agriculture and Bioscience International
CTAs	Collaborating Technical Agencies
CC	Councils Committee
EC	Executive Committee
FCDO	Foreign, Commonwealth and Development Office
GERD	Gross Expenditures on Research and Development
GEI	Gender equality and inclusivity
DFG	German Research Foundation
GRC	Global Research Council
HORCs	Heads of Research Councils
HSRC	Human Sciences Research Council
IMT	Initiative Management Team
IP	Intellectual property
IDRC	International Development Research Centre
NRF-SA	National Research Foundation, South Africa
Norad	Norwegian Agency for Development Cooperation
POA	Panel of Advisors
PPPs	Public-private partnerships
SciDev.Net	Science and Development Network
SGCs	Science Granting Councils
SGCI	Science Granting Councils Initiative
STEM	Science, Technology, Engineering, and Mathematics
SARIMA	Southern African Research and Innovation Management Association
SC	The Scinnovent Centre
SDGs	Sustainable Development Goals
Sida	Swedish International Development Cooperation Agency
TOC	Theory of Change
UJ	University of Johannesburg
VfM	Value for Money

1. Summary and Report Highlights

The Science Granting Councils Initiative in sub-Saharan Africa (SGCI) is a multilateral alliance supported by six funders: United Kingdom's Foreign, Commonwealth and Development Office (FCDO), Canada's International Development Research Centre (IDRC), South Africa's National Research Foundation (NRF-SA), the Swedish International Development Cooperation Agency (Sida); the Norwegian Agency for Development Cooperation (Norad), and the German Research Foundation (DFG).

Since its launch in April 2015, the Initiative has been strengthening the capacities of Science Granting Councils (SGCs) in 17 sub-Saharan African countries to support research, innovation, and evidence-based policies that contribute to economic and social development (**Box 1**). The work of the SGCI is organized into seven (7) key thematic areas that were initially identified to address the key challenges faced by the Councils through a 2014 scoping study and subsequent political economy analyses, consultative meetings, as well as case studies (**Box 2**). These challenges included limited research management capacities; lack of sustained funding base; poor application of knowledge for economic and social use; poor coordination with other agencies; limited capacities to use evidence for policy and decision making, and poor integration of gender equality and inclusivity considerations in research/ grants management.

This second joint report covers the progress made by all SGCI-2 partnerships for the period **November 2023** to **October 2024**. It is based on a combined SGCI logical framework that was approved in 2023.

Box 1

SGCI participating countries

Kenya, Rwanda, Uganda, Tanzania, Ethiopia, Côte d'Ivoire, Burkina Faso, Senegal, Ghana, Zambia, Mozambique, Malawi, Namibia, Zimbabwe, Botswana, Nigeria, and Sierra Leone.

Box 2

SGCI-2 Themes and lead CTAs

Theme 1 – Strengthening the ability of Science Granting Councils in research management. (Association of African Universities, AAU/ Southern African Research and Innovation Management Association, SARIMA).

Theme 2 – Strengthening the Capacity of Science Granting Councils to use data and evidence in policy and decision making. (University of Johannesburg, UJ).

Theme 3 – Supporting the ability of Science Granting Councils to fund research and innovation. (African Centre for Technology Studies, ACTS).

Theme 4 – Supporting strategic communications and knowledge uptake. (CABI-SciDev).

Theme 5 – Strengthening the Capacities of Science Granting Councils in gender equality and inclusivity. (Human Sciences Research Council, HSRC).

Theme 6 – Supporting the Science Granting Councils to develop frameworks and enabling structures for public-private sector partnerships in research and innovation. (Scinnovent Centre, SC).

Theme 7 – Supporting frameworks for the establishment of new funding agencies in West (African Technology Policy Studies Network, ATPS).

The SGCI-2 has made significant progress in all aspects during the current reporting year as shown by the following examples:

i. **The Initiative has either met or exceeded most of the lower outcome and output indicator targets set for October 2024.** The collection of data for the Higher Outcome indicators has proven more difficult than anticipated. These include data on the Councils' expenditures on research and innovation, patents registered, and GERD[1] in SGCI countries.[2]

ii. **The Councils have continued to show great interest and commitment to the training and technical support** offered by Collaborating technical agencies (CTAs). During the reporting period, a **total of 45 training events** (27 in-person and 18 online) were conducted across all SGCI partnerships. The IMT (at IDRC and NRF-SA) have exercised oversight of all capacity strengthening and research activities through regular monitoring and participation in selected engagements. As well, IMT members have participated in CTAs' coordination meetings that are aimed at creating coherence in the work of the Initiative.

iii. The Initiative continued to support the Councils to **strengthen their research management systems and practices**. As mentioned in the 2023 annual report, a project led by SARIMA[3] (and funded by NRF-SA) has continued to provide customized technical support to the Councils during the reporting period. As well, the staff of Councils from Namibia, Mozambique and Burkina Faso are receiving support to attain professional certification in research management.

   To complement these efforts, a new 18-month grant issued in 2024 has enabled the Association of African Universities (AAU) to continue offering technical support to the Councils in specific areas of research management, including online grant management systems (OGMS). As mentioned in the 2023 annual report, an increasing number have adopted OGMs. However, the operationalization of these systems in several countries (such as Namibia, Zambia, Côte d'Ivoire, and Malawi) still face technical challenges as well as lack of trained personnel.

   IDRC offered a training course on financial and administrative procedures to the staff of three francophone Councils (from Senegal, Burkina Faso and Côte d'Ivoire) during the reporting period. Plans are being made to offer a similar training to other Councils in future.

Heads of Councils and other participants at the STISA-2034 workshop in Ghana

1. Gross expenditures on research and development

2. The main sources of GERD data are African Innovation Outlook (AIO) Reports, UNESCO Institute of Statistics (UIS) Reports, and National Statistical Offices. AIO and UIS reports are produced every 2 years or longer and so annual targets are difficult to set. Moreover, GERD values could increase, decrease, or remain constant over the project period.

3. Southern African Research and Innovation Management Association

iv. For the first time, the **Councils have been supported to develop research and innovation frameworks (RIFs) for use in selecting proposals to fund and synthesizing of research findings**. Through Theme 3[4] project led by ACTS, the Councils from 11 countries[5] have developed these frameworks. Sierra Leone's NSTIC was the first Council to use its RIF to select projects for funding under the FCDO-IDRC partnership support. In Zimbabwe, developing a RIF has motivated RCZ to reflect on and initiate a review of the National Research Priorities (2011). The revised document is currently awaiting validation by various stakeholders.
In Ghana, SGCI's support has enabled MESTI to develop a comprehensive framework to promote knowledge production, support start-ups, and enhance public-private partnerships as well as gender equality and inclusivity (GEI). MESTI has used the framework to explain to its Permanent Secretary and senior staff how projects are selected and funded, thereby increasing the ministry's interest in ongoing research activities with the SGCI.

v. The **SGCI has continued with efforts to position the Councils as policy champions at multiple levels**. For instance, the Initiative is currently supporting the participation of SGCI Councils in the development and implementation of the STISA-2034[6]. In this regard, a recent consultative workshop convened 14 SGCI HORCs, the representatives of the African Union Commission (AUC), UNESCO, IDRC, NRF-SA, and UK-FCDO (September 18 – 19, 2024, Accra, Ghana) to deliberate over the draft strategy. The SGCI will play a crucial role in providing insights and evidence-based inputs and facilitating stakeholder engagements. This vision for this work includes enhancing SGCI's role in facilitating knowledge exchange, fostering partnerships, and ensuring that STI policies are inclusive and equitable.

   In Senegal, the SGCI[7] has supported MESRI[8] to develop and validate the country's STI policy. As a result, the President of the Republic requested MESRI to develop a national strategic plan for research and innovation (2023-2032) based on the policy. The new strategic plan includes a clear budget line for research and innovation, which was not the case previously.

vi. **Gender Equality and Inclusivity (GEI) continues to be front and centre in SGCI's work**. SGCI uses an intersectional and transformative approach in supporting the Councils to advance systemic change towards greater GEI integration in all their systems and practices. As well, the SGCI has continued to promote leadership roles for women in STI. For example, Ghana is already advancing gender equality in STI in three interconnected domains, through an approach, known as the 3Fs – *Fixing the numbers* (increasing women participation), *Fixing the institution* (promoting gender equality through structural changes in organizations), and *fixing the knowledge* (stimulating research excellence by integrating GEI in methods and content). Through SGCI's support, NRF-Kenya[9] developed a GEI framework to support the integration of diversity and inclusion principles into its operational ethos. As result, the Council received an award from the National Diversity and Inclusion Awards and Recognition (DIAR Awards).

vii. The **SGCI has continued to contribute significantly to the stock of global knowledge by generating state-of-the-art knowledge outputs**. Building on the 2023 Executive Seminar paper[10], a comprehensive report entitled "**The State of STI in Africa**", has been developed and will be launched during the 2024 Annual Forum (Botswana). It relies on new data and analysis from novel methodologies to track the inputs and outputs of STI activities. In addition to highlighting trends in terms of various regional and multilateral initiatives, it also includes an interactive dashboard to track funding across the continent.

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4. Theme 3 project on Research and innovation management project is led by ACTS

5. Ethiopia, Tanzania, Mozambique, Sierra Leone, Ghana, Burkina Faso, Senegal, Cote d'Ivoire, Zambia, Zimbabwe, and Namibia

6. STI Strategy for Africa

7. Through the Evi-Pol 2 project led by UJ

8. Ministry of Higher Education, Research, and Innovation

9. National Research Fund

10. During the 2023 SGCI annual forum

viii. **The SGCI is committed to preventing sexual exploitation, abuse and harassment (SEAH)** in the implementation of its activities and works with all partners to reinforce safeguarding measures. In this regard, safeguarding policies and guidelines on SEAH have been developed by all CTAs. The protocols have been reviewed and the areas requiring improvements identified. The SGCI and FCDO plan to conduct a training session on SEAH for the CTAs in early 2025.

ix. Through a bilateral relationship with South Africa's Department of Science and Innovation, the **NRF-SA is advising and supporting Ethiopia to strengthen its newly established Research Granting Council (RGC).** This support is undertaken in close collaboration with the work of SARIMA and other CTAs. Namibia's NCRST has also benefitted from a similar bilateral relationship with regards to the establishment of a policy for rating of researchers.

x. SGCI has also had a global impact beyond Africa. For instance, **IDRC has launched parallel programming in Central America and the Caribbean to promote equitable and inclusive STI systems**. This work also aims to build the councils' capacities in open science. At the recent Annual Meeting of the GRC (thanks to efforts by IDRC, NRF-SA and co-hosts FONSTI), SGCI featured very prominently, including through a side-event that touted the Initiative as a model to follow in supporting granting councils from the Global South. IDRC continues to support STI actors through participation in multi-funder platforms like the Trans-Atlantic Platform, and through core investments in regional artificial intelligence research projects and the creation of a peer learning regional network among South American innovation agencies, led by the National Innovation Agency of Uruguay. IDRC is also supporting capacity strengthening, peer learning and joint research for regional Councils in South Asia. In particular, new programming has focused on social science research in the Indo-Pacific region, recognizing a regional knowledge and capacity gap.

xi. A new SGCI website has been developed using streamlining the tools and processes for incorporating new documentation from Councils and CTAs. Through the work of *SciDev.Net*/ CABI, the website has made significant steps forward in terms of focusing on the visibility and the perspectives of the Councils themselves, and disseminating the stories of change and new knowledge arising from SGCI that is of use to the Councils, researchers, stakeholders and donors from across the continent and beyond. Early tracking evidence, based notably on the subscriptions to the Footprints Newsletter through the website, indicates that traffic has significantly increased since the website's launch in June 2024.

xii. The SGCI has made good progress in implementing the recommendations from the 2023 review of the Initiative by the SGCI funders.

Emerging Lessons and recommendations:

Along with continuing to make progress towards SGCI's stated goals, this report highlights lessons and recommendations for the upcoming year:

i. The SGCI has made significant progress in supporting the Councils to engage with private sector actors in their research and innovation activities. However, questions related to the nature and quality of such partnerships have emerged. Not only is the typology of private sector actors in Africa less characterized and understood, but the frameworks and structures required for partnering with research and development actors are often weak or missing. It is widely recognised that the informal sector dominates the private sector landscape in SGCI countries. Over the coming year, it is therefore recommended to complement the ongoing support to the Councils with demand-driven programming involving innovation agencies. With the creation of a new network of innovation agencies in Africa (that includes many Councils) and involves programming on policy experimentation, capacity-strengthening and seed funding for joint innovation projects, there is an opportunity to enhance the impact of SGCI in the innovation field. This will also ensure greater linkages to regional initiatives such as AfCFTA[11]. This is an opportunity to utilize the knowledge and lessons learned from SGCI in order to enable Councils and other innovation agencies to better achieve their mandates, be it through incentivizing private sector R&D, supporting innovation in SMEs, enhancing links between universities and firms, or developing more effective intellectual property regulations.

ii. As the SGCI-2 draws to a close in 2025, there is an opportunity to increase efforts to consolidate and disseminate new knowledge and insights from almost a decade of the Initiative. Building on the success of the new website and new materials such as testimonials and stories of change from the Councils regarding their work, enhancing knowledge translation, sharing, and communication, will be a priority over the coming year. This will allow donors, Councils and stakeholders to better understand progress and gaps, and to better position the Councils themselves as leaders. Beyond the Councils, the research institutions and researchers they fund will be highlighted in order to help the Councils shape their national STI ecosystems and build new partnerships in Africa and across the globe.

   New mechanisms can be enhanced to enable knowledge outputs from SGCI activities to reach a global audience. Furthermore, as networks such as the GRC increasingly look to SGCI as a model, and as organizations such as IDRC seek to enhance South-South research collaboration not only in Africa, but also in the Middle East, Asia and Latin America, insights on funding modalities, research priorities and research outputs from the Councils must increasingly be front-and-centre. For instance, the data on research funding from the Councils and to SGCI countries can help to better enable impactful and strategic collaboration within donors and funders globally.

11. African Continental Free Trade Agreement

2. Progress made against the 2024 Logical Framework Targets

The SGCI developed a combined Theory of Change (TOC) and logical framework for all SGCI-2 partnerships (Sida-IDRC; FCDO-IDRC, Norad-IDRC, and NRF-SA/ DFG) in 2023 to facilitate joint annual reporting by the Initiative. This year's report is based on the combined TOC and logical framework. The key features of the combined TOC and logical framework have not changed since the last report.

Overall, the Initiative has met or exceeded most of the lower outcome and output indicator targets set for the end of October 2024. Rather than relying on CTAs, the Councils took the lead in data collection during the current reporting period. This was possible as many of them have already developed MEL frameworks that align with the SGCI's log frame indicators. The collection of data for the Higher Outcome indicators has proven more difficult than anticipated. For instance, there has not been an update of internationally recognised GERD[12] figures for SGCI member countries in the past year. At the same time, collection of patent data was complicated by changes to WIPO/ARIPO[13] websites and databases. Feedback from the Councils, CTAs, and IMT on the combined MEL framework has recommended the need for a simpler log frame with fewer and better-defined indicators in a future phase of the SGCI.

12. Gross expenditure on research and development

13. World Intellectual Property Organization/ African Regional Intellectual Property Organization

3. Selected SGCI-2 Outcomes

3.1. Increased contribution of SGCI-funded research to solutions, products, evidence, and new knowledge

The SGCI-2 has continued its support to the Councils to fund and manage research and innovation projects that address their national development priorities and interests during the reporting period. As mentioned in the 2023 annual report, research funds are managed either directly by the Councils (for Norad-IDRC partnership) or through a collaborating technical agency in the case of FCDO-IDRC partnership. Additional collaborative projects involving Councils from six countries have been supported under the NRF-DFG partnership (Namibia-Mozambique, Burkina Faso-Senegal, and Kenya-Uganda).[14] The total number of projects supported under the FCDO-IDRC, Norad-IDRC and DFG-NRF partnerships are 82, 83, and 3, respectively (**Table 1**). Most of the projects funded under these partnerships are national with agriculture being the preferred sector in both cases. Most of these projects focus on agro processing. There is growing interest among the Councils on the applications of artificial intelligence (AI) in agriculture and other sectors.

Projects	FCDO-IDRC partnership Total = 82	Norad-IDRC partnership Total = 83	DFG-NRF Partnership Total = 3
National	66	69	-
Collaborative	16	14	3
Projects involving private sector actors	32	17	-
Projects involving social sector actors	25	9	1
Projects with women PIs	31	18	-
Projects focused on gender	7	4	1
Projects involving upscaling	20	12	1
Projects on social science and humanities	8	3	1
Projects involving artificial intelligence	20	12	-
Agriculture	43	48	1

Table 1: Data on funded projects

To demonstrate how SGCI-funded projects are contributing to solutions, products, evidence and new knowledge (**Higher Outcome**[15]), three research projects supported jointly by the SGCI and the Councils from Uganda (UNCST), Botswana (BDIH) and Malawi (NCST) have been presented below.

14. The same partnership has issued grants to UNCST (Uganda) and NRF (Kenya); MESTI (Ghana) and NSTC (Zambia); COSTECH (Tanzania) and RCZ (Zimbabwe); FONSTI (Côte d'Ivoire) and FONRID (Burkina Faso); and NCST (Rwanda) and NCST (Malawi) to launch bilateral research calls.

15. Scaled up investments in research and innovation projects by the SGCs

i. Commercialization of Bee Propolis products for improved health and incomes in Uganda (Dr. Deborah Ruth Amulen, Makerere University, Uganda[16])

Beekeeping (apiculture) has great potential for boosting the incomes of rural communities in many low and middle-income countries of Africa. However, available evidence suggests that few countries reap the full economic potential of beekeeping. In Uganda, for example, beekeepers harvest just 1% of the estimated production potential of 500,000 tonnes of honey. This low production can be attributed to various factors that include lack of enabling policies, poor forage, limited access to equipment, and lack of knowledge among farmers. As well, there is need to diversify the products from beekeeping. Currently, honey and beeswax were the main known products known to beekeepers with only a few of them attempting to produce propolis. Moreover, beekeepers lack knowledge on how to develop high value products such as powder and infused tea bags.

In 2019, UNCST and SGCI awarded a grant to a team of researchers at Makerere University led by Dr. Deborah Amulen to develop and promote supplement and beverage product prototypes for improved commercial exploitation of propolis and bee venom. For the first time, the project identified red and black propolis found in Uganda and estimated the economic impact of commercializing the propolis value chain. The project also developed product prototypes and standardized the process of making propolis powder and tea bags. As a result, two commercially viable products (purified propolis powder and infused tea) were developed. A training manual on quality control and assurance of the propolis products were developed for a local industry association (Uganda National Apiculture Development Organization, TUNADO) that was the project's private sector partner. As part of the project activities, two students (one masters and one undergraduate) were supported to conduct their dissertation research on the research project. The project has also trained more than 100 beekeepers on propolis and bee venom harvesting techniques.

Dr. Amulen at her Makerere University Laboratory

The research team received a second SGCI grant[17] to further refine and characterise the two products (purified propolis powder and propolis infused tea bags) in preparation for commercialization. Since propolis powder was a new product line in the Ugandan market, the project developed the equipment necessary to produce propolis powder. A spinoff company, the Centre for Insect Research and Development (CIRD), was formed and registered with the patent office (Uganda Service Registration Bureau) to commercialise the refined products. CIRD is currently market testing the propolis infused tea bags (under Ejimea tea) and the propolis powder (Afro-propolis powder) which is promoted for its therapeutic properties. These products are awaiting certification from the Uganda National Bureau of Standards (UNBS), a critical step before they can be marketed countrywide. Additionally, the research team has applied for utility model patents for the propolis extraction process and a modified propolis crushing machine from Uganda's National Patent Office.

Propolis products

16. College of Veterinary Medicine, Animal Resources and Biosecurity

17. Commercialization of propolis powder for improved health and incomes in Uganda

ii. Development and use of novel nano-engineered reagents in mineral processing (Professor Gwiranai Danha, Botswana International University of Science and Technology[18])

Mining plays a pivotal role in the economy of Botswana accounting for roughly 20% of the country's GDP. Existing synthetic chemicals used in mineral processing by mining companies are imported from China, USA and South Africa. However, these chemicals are toxic to both humans and the environment The use of alternative and effective reagents regimes in mineral processing can reduce production costs and maximise profits in the sector.

With support of the SGCI and BDIH (Botswana), this project was undertaken by researchers from Botswana International University of Science and Technology (led by Professor Gwiranai Danha) in collaboration with Midlands State University (MSU, Zimbabwe). Its main aim was to develop innovative nanomaterials for use in mineral processing, thereby lowering production costs and reducing the environmental impacts caused by synthetic chemicals. By utilizing locally sourced materials (e.g., sand), the project has created a cost-effective and eco-friendly alternative to the current chemicals used in mining (**Box 3**). Through rigorous testing and characterization, the nano-engineered material produced under this project have shown great promise in enhancing the efficiency and selectivity of the froth flotation process, particularly in separating valuable minerals from waste.

The project is still in the early stages of commercialization through collaboration with Botswana Chamber of Mines. As well, the project team is working with Khoemacau Copper Mine on industrial testing of the new reagents. Other mines such as Botswana Premium Nickel Resources and Motheo Sand Fire, have provided mineral ore samples to validate the efficacy of the reagents. The project is also working towards obtaining a patent to safeguard the innovation. In addition to its application in the mineral industry, nano-sensors that incorporate silicon-nanoparticles have the potential for use in agriculture for soil monitoring. Such applications are expected to facilitate widespread adoption of this project's nano-engineered reagents in various industries.

Pulverised sand (R) used to make white nanoparticles (bottle), and ore/mineral stones

This project has fostered mutually beneficial collaborative linkages with researchers in Zimbabwe who are working on the development of flotation depressants. This collaboration has facilitated knowledge exchange and the sharing of research facilities. Overall, the project represents a holistic approach to sustainable mining, combining scientific innovation, public-private partnerships, and cross-border collaborations to create a greener and more socially responsible mining industry in Botswana and beyond.

Box 3

Development of nano-engineered materials

Nano-engineered materials were produced from sand through a sol-gel method for the synthesis of nanoparticle. In this process, raw pulverized sand is first subjected to a series of purification steps to remove impurities and ensure a high level of purity. The purified sand is then processed using advanced techniques such as sol-gel synthesis where a mixture sand and other chemicals is transformed into a gel followed by suitable chemical methods to transform the particles into nanoscale particles. These nanoparticles are then further functionalized and modified to enhance their properties for specific applications in mineral processing. The result is a unique and innovative material that can significantly improve the efficiency and sustainability of mining.

18. Department of Chemical, Materials and Metallurgical Engineering

iii. Upscaling and commercialization of biogas production in Malawi (Dr. Mapereka Chagunda, Malawi University of Science and Technology, MUST)

Access to energy in Malawi remains a major challenge. Most of the population has no access to electricity and lacks clean cooking fuels and technologies. Overdependence on biomass has contributed to high rates of deforestation and land degradation. Due to deforestation, fuelwood is also becoming scarce and unaffordable in rural and urban areas. Efforts have been made to identify alternative sources of energy such as biogas production from organic waste. Biogas can reduce energy poverty and overdependence on fuelwood and charcoal. However, commercialization of biogas presents several opportunities in the region including sustainability of the technologies and socio-economic benefits. Challenges related to low gas yield, low heating value of biogas, lack of bottling and lack of commercialization of biogas remain major obstacles to adoption of this technology and its sustainability.

Fig. 1: Black prefabricated plastic biodigesters

Supported by the SGCI and NCST (Malawi) and implemented by researchers at MUST, the goal of this project was to upscale the production and commercialization of biogas. Specifically, the project set out to optimize biogas generation in biodigesters; purify and bottle biogas for commercial purposes; and develop commercial biogas models as well as the market for biogas and organic fertilizer for increased technology adoption and sustainability.

The project team conducted research on the raw materials for biogas production, as well as heat energy demand assessment at Tsangano vegetable market. This market was selected for the piloting of the project because of the large quantities of vegetable waste that is generates. Prefabricated biodigesters were tested to compare their performance against dome shaped biodigesters. Two biodigesters (each 20m^3) made from strong plastic material were installed at biogas plant in Tsangano (**Fig. 1**). The project also collected data on willingness to pay (WTP), user ability to pay (ATP), income of the targeted beneficiaries' and operating costs, startup costs, working capital, overall returns on investment, and profitability of the business.

Use of a biogas stove in a restaurant

The project has optimized and commercialized biogas as the main product and generated organic fertilizer as a byproduct of the biogas plant. Each biodigester produces 7m3 backpacks daily which are currently supplied to local consumers. The plant also produces about 720 liters of fertilizer weekly which is sold to the communities around the study site and used instead of expensive chemical fertilizers.

The project involved piloting biogas production through a fee-for-service social enterprise business model. Under this model, the social enterprise charges the customer directly for the social benefits in form of energy services provided. To ensure sustainability, the project has identified a private partner that is currently managing the plant. There are opportunities to upscale and commercialise the biogas projects in other regions of Malawi.

3.2. Increased positioning of SGCI Councils as policy champions at multiple levels

As key actors within national STI systems, Councils are increasingly required to support governments to make and implement policies that steer STI to attain global SDGs (United Nations, 2021). Despite these public demands, making effective STI policies and implementation plans for the SDGs are both complex and demanding. STI policymaking and implementation processes have increasingly become knowledge-intensive, multidisciplinary, and multisectoral, and require the engagement of various actors. The SGCI-2 (under Evi-Pol 2 project) has been positioning the Councils as champions in policymaking by strengthening their capacity to generate and use evidence in policy and decision making (Lower Outcome 2[19]). This section covers the effective use of MEL in decision-making as well as assessment of the impacts of funded projects, and support to convene national multistakeholder dialogues. Selected examples are shown below.

i. The AU is developing STISA 2034, a 10-year plan that will articulate Africa's STI priorities and investment plan for 2025-2034. STISA-2034 will replace STISA-2024 that was the first comprehensive continental STI policy framework adopted by African leaders in 2014. A review of this last policy highlighted several shortcomings, but also significant progress linked to initiatives such as SGCI. The AU Commission has established a Task Force and a Drafting Team to help mobilize various actors to participate in the formulation and later implementation of STISA-2034. SGCI is working with ACTS, as the main coordinator of the Task Force, to ensure that the new Strategy is informed by lessons learned from the past decade of SGCI, and to position the next phase of SGCI in the implementation of the new strategy.

   The process will involve several phases: initial consultations, draft formulation, stakeholder review, and final endorsement by AU Member States by December 2025. The SGCI will provide insights and evidence-based input and facilitating stakeholder engagements throughout these phases. This vision for this work includes enhancing SGCI's role in facilitating knowledge exchange, fostering partnerships, and ensuring that STI policies are inclusive and equitable. Opportunities for the Initiative to have a greater impact regionally and globally include strengthening its partnerships with other key STI stakeholders, such as national governments, international agencies, and private sector actors, and promoting best practices in STI policy, funding, and management.

ii. Councils have been supported to collect, analyse and use MEL data more effectively. For example, Sierra Leone has used MEL to develop the aims and objectives of the country's new Council, NSTIC[20]. Namibia's NCRST has used MEL data (and especially the data on the impact of funded projects) to select existing projects for additional funding. As well, NCRST used MEL data to engage the Minister of Planning about the importance of funding research, and to demonstrate how the projects align with the National Research Framework and the Namibian National Development Plan.

   An assessment of the impacts of 35 funded projects by NRF-Kenya found that 77 master's and Ph.D. students had been trained under these projects. As well, several staff received promotions because of their involvement in these projects. These assessments have helped NRF-Kenya's selection of the projects to be supported for upscaling and commercialization.

iii. FCDO approved a new 2-year (January 2022 – December 31, 2025) funding to support the Councils to convene multistakeholder dialogues and other engagements related to STI policies, research to impact, and private sector engagement. Managed by ACTS and involving 11 Councils (from Burkina Faso, Côte d'Ivoire, Sierra Leone, Ghana, Kenya, Ethiopia, Malawi, Tanzania, and Zimbabwe), 5 multistakeholder events (out of 12 planned in 2024) were held during the reporting period **(Table 2)**.

19. Enhanced decision making by SGCs based on data and evidence

20. The National STI Council

In Tanzania, a multistakeholder event that brought together the representatives of COSTECH, research and higher learning institutions, research commercialization bureau, industry liaison and intellectual property offices and spin-off companies has advanced the development of a research commercialization framework. A similar engagement held by NRF-Kenya has supported the development of a research infrastructure sharing framework that will optimize the use of equipment by researchers and foster networking and linkages while promoting private sector linkages. Ethiopia's convening event has enabled the country's new Council (RGC) to develop a structured legal framework that will strengthen the governance of research, development and innovation, and promote public-private sector partnerships. A policy document for the establishment of a research fund is part of the framework. Sierra Leone used its convening event to develop a framework for leveraging public-private sector partnerships for research commercialization and technology transfer.

Council	Title of Convening Event
NRF, Kenya	Research infrastructure sharing framework stakeholders' engagement workshop (June 4, 2024)
COSTECH, Tanzania	Fostering innovation ecosystems in Tanzania - unveiling the vital role of policy support for spin-off companies from universities and R&D institutions (May 24, 2024)
MInT, Ethiopia	National consultative workshop on draft research proclamation (June 6, 2024)
NSTIC, Sierra Leone	Workshop promoting public private partnership (June 24, 2024)
RCZ, Zimbabwe	Reviewing National Research Priorities (NRPS) workshop (July 25, 2024)
FONSTI, Côte d'Ivoire	Implementation of a research ethics framework (October 2024)

Table 2: Multistakeholder dialogues supported by the SGCI

3.3. Increased involvement of SGCI Councils in strategic partnerships

During the current reporting period, the SGCI has supported the Councils to engage in strategic partnerships that promote collaborations amongst them, strengthen their capacities, and leverage research funding (Lower Outcomes 3.2 and 3.3). Examples of such initiatives are shown below.

i. The work of the SGCI (through Evi-Pol 2 project) has helped Malawi's NCST to meet the requirements for becoming a Grand Challenge Project host country. This development has created the opportunity for increased research support from funders such as Bill and Melinda Gates among others through the facilitation of AUDA NEPAD and Science Foundation for Africa. Malawi is the seventh country to host the Grand Challenge project, the others being South Africa, Rwanda, Senegal, Mozambique, Uganda, and Ethiopia.

ii. Participation of NCRST (Namibia) in the SGCI has contributed to the Council's selection as co-host of a new "Innovation Agencies in Africa" network funded by IDRC and South Africa's Department of Science and Innovation. With a projected funding envelop of ca. CA $1.5M, the network will leverage on the capacities and linkages built through the SGCI to support new and strengthen existing collaborative innovation programmes across the continent. It will utilise learning and materials already developed within the SGCI, for example on commercialisation and technology transfer.

iii. IDRC's Global Health and Education and Science teams invited West Africa SGCI Councils in May 2024 to submit expressions of interest to address health systems challenges in a region where the needs are greatest. FONSTI (Côte d'Ivoire) and FONRID (Burkina Faso) were selected and have received grants of over CA $500,000 each. Rather than imposing a specific topic, IDRC worked with the Councils to develop a research agenda and call modalities that are suited to the policy priorities and the research landscape in their respective countries.

iv. During the 2024 Reflection and Learning Workshop, the Councils narrated how participation in the SGCI had helped them to leverage partnerships between each other and with other players. For instance, RCZ (Zimbabwe) shared the partnerships and network it had developed since the start of the SGCI (**Fig. 2**). A key part of this journey included the development of partnerships with key national actors.[21] The partnership with IDCZ is specifically focused on ensuring research is targeted to address problems facing the country's industrial sector and facilitates the development of intellectual property into marketable goods and services.

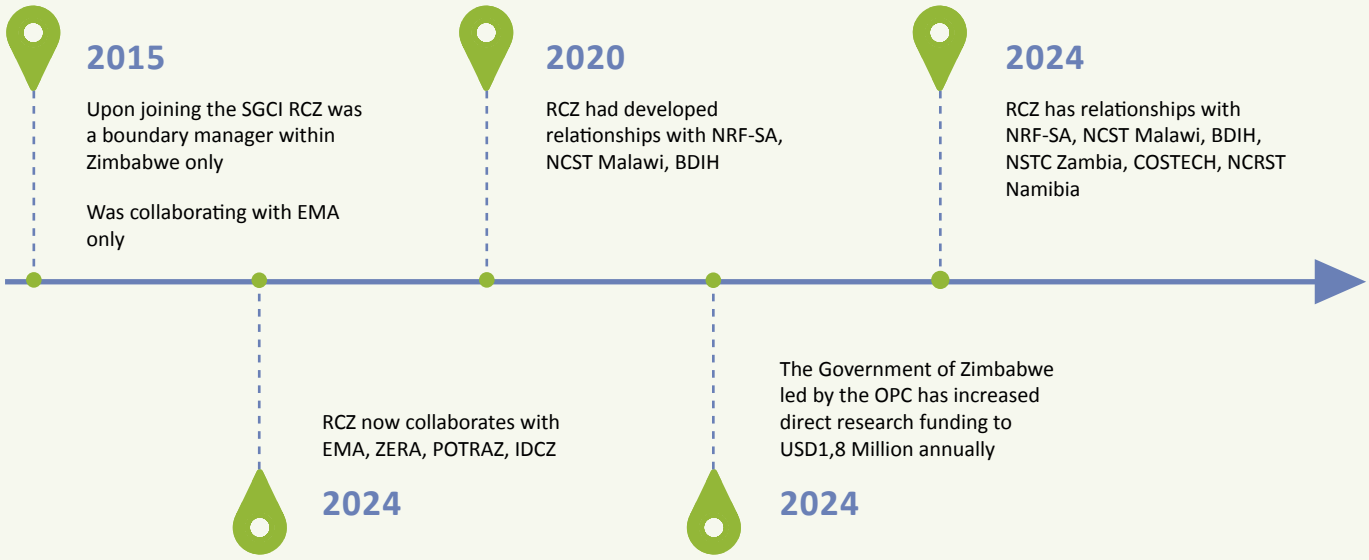

Fig. 2: RCZ's networks and partnerships journey

21. Environmental Management Authority (EMA), the Zimbabwe Energy Regulatory Authority (ZERA), Postal & Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) and the Industrial Development Corporation of Zimbabwe (IDCZ)

v. The Councils have continued to operationalize existing collaborative agreements by engaging in joint activities. As well, other Councils have entered into new agreements. **Fig. 3** shows how the Councils are currently collaborating with each other to fund joint research projects and engage in peer-to-peer mentoring and learning activities. The Councils from Rwanda, Senegal, Ethiopia, Sierra Leone, and Nigeria have no active collaborations with other Councils.

vi. SGCI Councils continue to participate in other initiatives, networks and programmes that contribute to the strengthening of their roles in national science systems. These include the Global Research Council (GRC), the O.R. Tambo Africa Research Chairs Initiative (ORTARChI), Belmont Forum Africa Regional Call, Long-term Europe – Africa WEF-Nexus Multilateral Research Programme (LEAWEF), and Africa-Japan Collaborative Research on Environmental Science (AJ-CORE).

Councils	Collaborating Councils					
NSTC Zambia	FNI Mozambique	MESTI	Ghana	RCZ Zimbabwe	NCRST Namibia	NCST Malawi
FONSTI Côte d'Ivoire	FONRID Burkina Faso	FNI Mozambique	UNCST Uganda			
COSTECH Tanzania	RCZ Zimbabwe					
RCZ Zimbabwe	NCST Malawi NCRST Namibia	NSTC Zambia	COSTECH Tanzania	FNI Mozambique	BDIH Botswana	
UNCST Uganda	FONSTI Côte d'Ivoire	NRF Kenya				
NCRST Namibia	NSTC Zambia	RCZ Zimbabwe				
MESTI Ghana	NSTC Zambia					
NCST Malawi	NSTC Zambia	RCZ Zimbabwe				
NRF Kenya	UNCST Uganda					
FNI Mozambique	FONSTI Côte d'Ivoire	BDIH Botswana	NSTC Zambia	RCZ Zimbabwe		
BDIH Botswana	FNI Mozambique	RCZ Zimbabwe				
FONRID Burkina Faso	FONSTI Côte d'Ivoire					

Fig. 3: Current collaborative agreements among SGCI Councils

3.4. Enhanced visibility and roles for SGCI Councils at multiple levels

The SGCI continues to support networking events and other activities that enhance the visibility and roles of Councils at national, regional, and global levels (**Lower Outcome 3, Output 3.2.1**). Selected examples are presented below.

i. The 2023 SGCI annual forum (November 13 – 17, Mombasa, Kenya)[22] helped to raise the profiles of the host Council (NRF-Kenya) and other SGCI Councils. Convened under the theme "Effective research contributions towards sustainable development" the meeting was attended by ca. 130 participants from 28 countries, including the representatives of 17 SGCI countries, SGCI funders, CTAs, the IMT, Kenyan researchers and research leaders, policy makers, parliamentarians, and private sector. The meeting provided a platform for the participants to engage in high level discussions on a selected STI theme and engage with the global network of partners in academia, industry, civil society, government as well as intergovernmental organizations. Among the meeting highlights was the presentation of a commissioned paper on *The state of STI and research funding in and for Africa* by Prof. Johann Mouton[23]. Following this presentation, a panel composed of four Council representatives from NRF-Kenya (Prof. Dickson Andala), FNI, Mozambique (Dirce Madeira), COSTECH, Tanzania (Dr. Amos Nungu), and RCZ, Zimbabwe (Dr. Timothy Marango) shared their perspectives and experiences on research funding. A Learning and Reflection session held during the forum provided opportunity for the Councils, CTAs and other participants to evaluate progress across the SGCI Themes, reflect on lessons learnt, and discuss the Initiative's implementation plan.

Participants at the 2023 SGCI Annual Forum (Mombasa, Kenya)

22. The 2023 Global Research Council (GRC) Sub-Saharan Africa Regional Meeting was held alongside the forum

23. Centre for Research on Evaluation, S&T (CREST), Stellenbosch University

The following key points emerged from the commissioned paper:

a. There is need for enhanced partnerships among SGCI countries and with other countries in Europe and North America, given the higher impact of papers and opportunities to leverage funding. However, there was also a need to ensure that North-South partnerships are equitable and allow for joint agenda-setting. External funders should not be prescriptive.

b. The landscape of STI programming is becoming increasingly complicated, with many new opportunities for collaboration, new funding initiatives and new donors. There is a need for the Councils to make strategic decisions to effectively take advantage of these opportunities, and to ensure that their own funded research is made visible. Regional STI policies, such as the AU-led STISA, are important in terms of positioning Councils and providing new opportunities for coordination and collaboration across Africa.

c. While the lack of accurate statistics on R&D in Africa remains a major challenge, there are opportunities to utilize and build on new databases to enable the Councils make evidence-informed decisions.

ii. The Councils featured prominently during the 2024 Learning and Reflection workshop (July 8-10) held online under the theme "How the SGCI is making a difference to Africa's Science Granting Councils" by chairing sessions and making presentations. The workshop allowed them to share stories on recent achievements, lessons learnt and make recommendations to the SGCI (especially in the context of the next phase of the Initiative) (Appendix 7).

iii. The SGCI continued to strengthen the roles of Councils in its governance structure during the reporting period. The Councils Committee (comprised of HORCs) held a joint meeting with the CTAs during the 2023 Annual Forum under the chairmanship of Prof. Dickson Andala (NRF-Kenya) to deliberate on the areas for improvement in capacity strengthening, research management, and policy influence.

iv. The SGCI supported the HORCs from Côte d'Ivoire, Malawi, and Rwanda to participate in a special session held during the International Network of Government Science Advisors (INGSA) conference in Kigali, Rwanda (May 2024). The session, which was also attended by two Executive Committee members, Naser Faruqui (IDRC) and Fran Davis (FCDO) as well as NRF and DFG, explored the core functions of Councils and their strategic roles in policy development, strategically positioning SGCI with African and international donors as well as government science advisors from several countries.

v. As in previous years, participating Councils have co-hosted training courses and workshops in partnership with the CTAs during the reporting period. For example, NCST (Malawi) co-hosted a methodology workshop with the Scinnovent Centre and its partners on private sector engagement strategies/ frameworks (26 - 30, August 2024). Uganda's UNCST co-hosted a peer-to-peer learning workshop with the AAU for the Councils in Uganda (August 12 - 14, 2024).

Gift A. Kadzamira (Director-General, NCST, Malawi) speaking at the 2023 SGCI Annual Forum

Tanzania's COSTECH and ACTS co-hosted a workshop for the Councils to reflect on the research and innovation management (RIM) project's implementation in Dar es salaam, Tanzania (March 25-26, 2024). The SGCI also held a consultative meeting with the HORCs about SGCI phase 3 ideas during this engagement. UJ/ UCAD (under the Evi-Pol 2 project) and ACTS collaborated to train the Councils from Burkina Faso, Côte d'Ivoire, and Senegal on MEL and research and innovation frameworks, respectively, in Dakar, Senegal (May 2024). Similarly, MESTI and ACTS co-hosted a workshop on STISA-2034 (below).

vi. Several Councils have initiated research awards, science conferences and STEM events at national levels as a way of raising their own Council profiles as well as the importance of STEM and STRI activities more generally. For example, RCZ (Zimbabwe) hosted the inaugural National Research, STI Conference in October 2023, which was officiated by the President of Zimbabwe, drawing participants from the whole national research ecosystem. Similarly, NRF-Kenya held the Kenyan National Research Festival in August 2024 which included its inaugural National Outstanding Research Awards ceremony.

3.5. Strengthened frameworks and structures for public-private partnerships, technology transfer, and commercialization

For the second year under SGCI-2, the Councils continued to receive training and technical support to develop frameworks and strategies for private sector partnerships and commercialization of research results[24]. This support included IP audits of funded projects; development of institutional IP policies/ strategies, frameworks for private sector engagement, commercialization and technology transfer; development and use of TechnoMart, an online platform for technology matchmaking (**Lower Outcome 3[25] and Output 3.3[26]**).

Examples of recent outcomes are highlighted below:

i. The project provided training on institutional intellectual property (IP) audits to the Malawi's NCST. Following this support, NCST approached the UNDP office in Malawi for financial support to pilot an IP audit exercise at a public university - Malawi University of Business and Applied Sciences (MUBAS). UNDP approved this request and agreed to work with Scinnovent in supporting NCST and MUBAS. In this regard, SC will provide technical backstopping for their national capacity building workshops and IP audit process and organize a benchmarking/ learning study visit to the University of Nairobi (Kenya) in October/ November 2024.

ii. SGCI support has enabled some Councils to launch programmes aimed at promoting commercialization of research results. For instance, TETFund (Nigeria) has recently launched a Research for Impact (R4I) Initiative that offers practical training to researchers on commercialization. In addition, the TETFund Alliance for Innovative Research (TETFAIR) encourages researchers, innovators and inventors to accelerate their work with support from innovation hubs and other experts.

iii. Zimbabwe, SGCI funding has enabled RCZ to support projects to go through proof-of-concept or prototype development stages. For instance, a SGCI-supported project on commercialization of high value goats and poultry breeds produced through artificial insemination has attracted additional government funding for upscaling and commercialization. The project has used existing innovation hubs to develop links with private sector partners. RCZ's partnership with the Industrial Development Corporation of Zimbabwe (IDCZ) is expected to facilitate the development of marketable goods and services from project funded by the Council.

iv. The SGCI convened a workshop in Lusaka, Zambia (August 13-14, 2024) on commercialization and technology transfer framework, for the Councils from Botswana, Burkina Faso, Côte d'Ivoire, Mozambique, Senegal, Tanzania, Uganda and Zambia. The event, organized by the Scinnovent Centre-led consortium was opened by Zambia's Minister of Technology and Science, Felix Mutati. A day after this engagement, the Minister met with officials from his Ministry's Department of STI and AEH representatives and asked the team to apply the framework in monitoring and evaluating the performance outcomes of the various agencies under his Ministry such as the National Institute for Scientific and Industrial Research (NISIR) and the National Technology Business Centre (NTBC).

Workshop on frameworks for commercialization and technology transfer (Lusaka, Zambia, August 13-14, 2024). The workshop was opened by Mr. Felix Mutati, Zambia's Minister of Technology and Science (seated, second from right)

24. This work is implemented through a project led by the Scinnovent Centre (SC) under the FDCO-IDRC partnership

25. Increased knowledge translation, partnerships, and learning among SGCs and other science system actors

26. Increased development of frameworks and structures for commercialization of research results

3.6. Greater integration of gender equality and inclusivity dimensions in the Councils' systems and practices

As in previous years, The SGCI has continued its support to the Councils to be intentional and proactive about GEI mainstreaming. (Lower Outcome 4). The GEI workstream uses an intersectional approach in supporting the Councils to advance systemic change towards greater GEI mainstreaming in all their systems and practices. As well, the SGCI has continued to promote leadership roles for women science. Selected outcomes during the reporting period are presented below.

i. A total of 10 Councils have implemented activities that promote women's leadership in STI. These efforts included awarding of scholarships to female STEM students, increasing the representation of women on grant review committees and boards and issuing research funding calls for women. For example, MESRI (Senegal) has increased the number of scholarships awarded to women by 232 from 6302 (2023) to 6534 (2024), and the number of women on grant review committees. As well, the number of women researchers who participated in proposal writing workshops has increased from 17 (2023) to 34 (2024).

   For the first time, NRF-Kenya issued a call on mental health specifically for women researchers that resulted in 52 applicants and one awardee. The Council conducted five capacity building workshops for researchers, 33% of whom were women. As of September 2024, 9 out of 12 principal investigators leading projects supported under the NRF-SA/ DFG partnership were women, demonstrating the Council's commitment to increasing women's leadership in STI.

ii. In Côte d'Ivoire, FONSTI's governance structure reflects its commitment to increasing women's leadership in STI. For instance, the Scientific Council is chaired by a woman as are two out of three departments of the General Secretariat. FONSTI has established a gender policy which is set to be revised to ensure greater GEI consideration in grants management. For the second consecutive year, FONSTI issued a special call (FONSTI-SGCI 2023) that specifically targeted women researchers. In this regard, six women-led proposals were selected for funding.

iii. In Ghana, MESTI has developed a strategic plan for integrating GEI in its research management systems and practices while also increasing the number of women in leadership positions. MESTI has recently welcomed two new female officers.

Prof. Rokhaya Ndiaye Diallo and Daouda Diouf (MESRI, Senegal) at a GEI workshop (Johannesburg, South Africa)

iv. With SGCI's support, Zambia's NSTC has initiated a new GEI change programme with a strong mentorship emphasis and includes an annual "Women in STEM" conference, STEM bootcamps for learners, and STEM festivals. The Council continues to serve on the GRC Gender Committee.

v. In Tanzania, SGCI's support to COSTECH has enabled the Councils to spearhead GEI in the country. For instance, the Council leads a national taskforce on gender mainstreaming in higher education. The Council is also a key player in Generation Equality Forum (GEF), an initiative convened by UN Women to accelerate investment and implementation on gender equality. The National Framework for Mainstreaming Gender in research and innovation developed by COSTECH (and reported in the 2023 annual report) was operationalized during the current reporting period.

vi. The NRF-SA and DFG have supported SGCI Councils to commission research that will deepen GEI integration in their grant-making cycles; train Council staff and various partners (e.g., grantees, reviewers and researchers) on GEI concepts; and convene workshops to develop or update GEI funding policies and tools. The HSRC[27] hosted a workshop for the Councils (from Uganda, Zimbabwe, Tanzania, Senegal, Namibia, Malawi, Kenya, Ghana, Côte d'Ivoire, Burkina Faso, Zambia, and Mozambique) to share, peer-review and refine their plans. Each of the 12 Councils has received USD 20,000 to implement these activities.

vii. The SGCI hosted a virtual session, *Finding Focus: Towards a Funding Agenda for Gender Transformation in African Science* at the 2024 Gender Summit (May)[28]. The panel included the Councils from Côte d'Ivoire, Tanzania, and Kenya and the chair of the Sub-Saharan Africa region GRC Working Group on Equality, Diversity and Inclusion (EDI) to discuss emergent GEI research priorities for advancing equitable social development.

27. Human Sciences Research Council leads Theme 5 on GEI

28. The Gender Summit is a global event for evidence-led dialogue between scientists, gender scholars, policymakers, and relevant stakeholders in science endeavours on gender and social inequalities

3.7. Increased mobilization of research funds by SGCI Councils

In the context of long-term sustainability, the SGCI has continued to support activities with the Councils that aim to increase investments in research and innovation by governments (**Higher Outcome**). As well, the Initiative has supported lesson-sharing among Councils on effective strategies for engaging their governments to increase R&I spending. Examples include the following:

i. SGCI's Evi-Pol 2 project has supported Senegal's MESRI to develop a national STI policy. As a result, the Senegalese President requested MESRI to develop a national strategic plan (2023-2032) that included a clear budget line for research and innovation, which was not the case previously.

ii. Through the SGCI, NSTC-Zambia effectively leveraged funding from the government to conduct a national R&D[29] indicator survey. This led to an increase in the government's grant to the Strategic Research Fund administered by NSTC. ORTARChI[30] partnered with NSTC to support two research chairs in Zambia (with each chair receiving US $842,000 over 5 years). The government provided an additional US $280,000 per Chair.

iii. In Malawi, SGCI's support to NCST for the management of research grants stimulated the operationalization of the S&T Fund that was established under the S&T Act no. 16 of 2003. The Ministers of Education and Health who co-launched the SGCI-funded projects joined hands with the Board of Commissioners to lobby the Treasury and the central government to ensure that the release of funds needed to operationalize the S&T Fund. This was the first time for the S&T Fund to be supported by the Treasury. Since then, the Fund has received an annual allocation from the Treasury.

iv. Several members of Kenya's Parliamentary Committee on Education and Research attended the 2023 SGCI Annual Forum (Mombasa, Kenya) at the invitation of NRF-Kenya as the host Council. NRF-Kenya also used this opportunity to showcase its research projects with Kenya Marine and Fisheries Research Institute (KEMFRI, based in Mombasa) to the parliamentarians and other forum participants. Following this successful engagement, the Council lobbied for and received a supplement (approximately KES 70M/ US $500,000) to its budget. A promise for increased funding made by the committee has not come to fruition due to recent austerity measures instituted by the government of Kenya.

v. The SGCI supported NCRST (Namibia) to develop and operationalize its online grants management system. As a result, several Ministries (agriculture and water) have expressed interest in using the system to manage their calls and projects. NCRST hopes to benefit financially from this collaboration by charging for the use of its platform.

vi. Participation in the SGCI has catalysed an increase in research funding to RCZ from the government of Zimbabwe from US $800,000 to US $1.8M in 2024. SGCI's capacity strengthening activities have boosted the government's confidence in RCZ's capacity to manage research grants, leading to increased government funding. As well, the Council's bilateral and trilateral research cooperation with Botswana, Malawi, Zambia and Tanzania (which are in line with the government's international science diplomacy policy) is expected to reinforce the political will for supporting research.

vii. The Councils have continued to leverage funds in support of multilateral research initiatives in collaboration with both the DFG and NRF-SA. These initiatives seek to strengthen capacity in research and grants management. For example, the 4th AJ-CORE call was launched in June 2024 in partnership with the Councils from Botswana, Côte d'Ivoire, Ethiopia, Kenya, Mozambique and Tanzania to support collaborative research projects.

29. Research and development

30. O.R. Tambo Africa Research Chairs Initiative

4. Emerging Lessons and Recommendations

i. Improving SGCI's strategic positioning and thought leadership within African STI policy processes

Although SGCI has seen recent success in influencing Africa's STI strategies and landscape – notably through being lauded in the AU's STISA review – these achievements have been limited. As such, SGCI is supporting a set of projects and networking opportunities to better connect SGCI, Councils, and CTAs to continental processes such as the STISA 2034, innovation support platforms and key STI policy bodies such as UNESCO and the African Observatory on STI. Specifically, SGCI will publish a report on the "State of STI in Africa", which will provide an overview of STI issues across Africa and offer a deeper dive within select African countries. The Initiative plans to publish the overview periodically – ensuring a direct platform for African STI experts to inform the continent's STI strategies and policies.

The SGCI is also increasingly using the STISA-2034 process and the "State of STI in Africa" report to support engagement of the Councils in high-level national, regional and international policy dialogues. In this context, it will be important to broaden the reach of SGCI on the continent beyond the current 17 countries, and to enhance strategic linkages to organizations such as the African Union Commission and the Regional Economic Commissions. In this context, enhancing targeted communications and knowledge translation activities will be critical to ensure that the Councils are well positioned, and to promote the uptake of new knowledge created through research and CTA activities.

ii. Putting the Councils at the centre of the SGCI

The SGCI has continued to strengthen the roles of the Councils in all aspects of the Initiative's implementation. In previous years, peer-to-peer mentoring and learning between and among the Councils has not been as prominent as we had hoped, hence the SGCI has redoubled its efforts to do so. For instance, five members of MESTI (Ghana) undertook a learning visit to NSTC (Zambia) to share lessons on MEL and data management. A recent consultation on the next phase of the SGCI clearly showed the Councils' interest in strengthening their capacity to engage in peer-to-peer mentoring and learning. However, they also emphasized the need for a framework, proper coordination, and assessment of existing capacities within various Councils. The Councils also suggested extending peer-to-peer learning to include Councils outside the SGCI. This is an important suggestion for the Initiative's next phase.

Moreover, part of SGCI's strategy to further empower Councils within SGCI has been to transition the role of data collection for MEL from the CTAs to the Councils. In this regard, the Councils have been invited (instead of the CTAs) to narrate their stories of change (linked to SGCI's activities) during learning and reflection workshops. While the Councils are becoming increasingly adept at doing so, some of them still need support to more effectively articulate their stories of change informed by sufficient evidence.

As mentioned in previous annual reports, the Councils appreciate the SGCI research funds that they manage on their own compared to those that flow through a CTA. Feedback from the Councils point to several challenges associated with direct funding of researchers in their countries. These include difficulties in effective monitoring of projects and lack of accountability. This will be an important point to keep in view as the SGCI prepares to transition into the next phase.

iii. Supporting the Councils' partner organizations

The SGCI has so far focused on strengthening the capacities of Councils with the assumption that this effort would ultimately strengthen the STI ecosystem. However, feedback from the Councils points to the fact that this has not happened as easily as we had expected. As such, there is growing interest in extending support to Councils' partner organizations (mainly universities and research institutes) in specific areas such as proposal development, research commercialization, grant management, MEL, and communication and utilization of research results. While a few Councils are already training their grantees, such support is usually limited in scope and provided only at the initiation phase of projects. Feedback received from the Councils during a recent consultation on SGCI phase 3 confirmed the Councils' interest in extending this support throughout the implementation phase of projects. Such effort will require additional resources that many Councils do not have. The SGCI should keep this point in mind as it discusses the implementation of the next phase.

iv. Grant-making challenges for SGCI Councils

The SGCI's support to the Councils has largely focused on improving their grant management systems and practices. For instance, Councils have received support to develop and operationalize online grant management systems. However, feedback from the Councils point to other challenges that have hindered efficient grant making. These include complex and lengthy procurement procedures which slow down the acquisition of necessary research materials and equipment, and ultimately affects project timelines. Several Councils have cited delays in the disbursement of funds to researchers from their host universities and research institutes (e.g., Botswana, Malawi, and Uganda), limited access to research equipment and facilities, and currency fluctuations. While many of these challenges are beyond the SGCI's current scope, the next phase could explore potential ways to address them, notably for focussing more on the full national ecosystem for science funding.

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