

**SUMMARY REPORT**

**SCIENCE GRANTING COUNCILS INITIATIVE IN SUB-SAHARAN AFRICA  
2018 ANNUAL FORUM & MONITORING, EVALUATION AND LEARNING (MEL) WORKSHOP**

**Abidjan, Côte d'Ivoire, 6-7 November, 2018**  
African Technology Policy Studies Network (ATPS)  
Scinnovent Centre



**A: SGCI 2018 ANNUAL FORUM MASTERCLASS (6 NOV 2018)**

Theme: New Approaches to Funding Research and Innovation in Africa

**1. INTRODUCTION**

The Science Granting Councils Initiative in Sub-Saharan Africa (SGCI) 2018 **Annual Forum** brought together about 120 delegates from 15 the Science Granting Councils (SGCs) in Africa and other science system actors from across Africa and the world at large. This is in line with the Initiative’s ambition to strengthen the capacities of the SGCs in sub-Saharan Africa (SSA) in order to support research and evidence-based policies that will contribute to economic and social development. The Forum was organised by the African Technology Policy Studies Network (ATPS) in partnership with the Scinnovent Centre who are leading the work to promote networking among Councils and with other science system actors.

**Box 1: Science Granting Councils Present**

Botswana, Burkina Faso, Côte d'Ivoire, Ghana, *Guinea\**, Kenya, Malawi, *Mali\**, Namibia, Mozambique, Senegal, *South Africa\**, Tanzania, Uganda, and Zimbabwe.

*\*: non-participating SGCs invited to the Forum*

The theme was driven by the SGCI Commissioned Masterclass Paper on “*New Approaches for Funding Research and Innovation in Africa.*” Reposing on the ambitions of African countries for economic and social development through Research and Innovation (RI), the current and new approaches for RI funding were presented in Draft Masterclass Paper, whose lead author is Dr Julius Mugwagwa of the University College London. Pan-African and global perspectives were then respectively shared by George Essegbey from the Council for Scientific and Industrial Research (CSIR), Ghana and Stuart Taberner of United Kingdom Research and Innovation (UKRI).

Also present in the Forum were the SGCI Collaborating Technical Agencies, the SGCI Funders, Panel of Advisors, and invited science system actors. The objective of the meeting was to share evidence, experiences and good practices, and to deliberate and develop interventions along the forum’s theme. The Forum supported and strengthened the voices and views of Councils; and contributed to key Science Technology and Innovation (STI) policy debates at regional and continental levels. This was evidenced by the invitation extended to the Malian and Guinean Councils to the meeting by the co-host - le *Programme d'Appui Stratégique à la Recherche Scientifique (PASRES) en Côte d'Ivoire.* Through an open discussion in plenary, the contributions of Councils

showed that some of them are at different levels of application of the different approaches to funding RI in their respective countries. Examples were illustrated by some Councils including the Ministère de l'enseignement supérieur et de la Recherche-Senegal, Tanzania Commission for Science Technology (COSTECH), Ministry of Environment, Science, Technology and Innovation (MESTI) Ghana, National Commission on Research Science and Technology (NCRST) Namibia, with the supporting contributions from the Belmont Forum.

In conclusion, three key themes emerged from the masterclass: (1) the importance of youth involvement in driving the development agenda of our nations, (2) the role of African philanthropy in contributing to RI, and (3) the need for political goodwill in sustaining increased investment in RI in Africa.

## **2. WELCOME ADDRESSES**

Dr Yaya Sangare, the Executive Secretary of the *Programme d'Appui Stratégique à la Recherche Scientifique (PASRES) en Côte d'Ivoire* in his opening remarks noted that the SGCI allows for the participating countries to overcome significant barriers of ignorance, of prejudgements and of language in order to work together. For instance, Côte d'Ivoire, a francophone country has been working successfully with Mozambique, which is a Lusophone country. The Initiative also allows for these countries to benefit from the scientific and technical leadership that the authors of the masterclass and the other presenters usually display.

In the spirit of the theme of this year's meeting, he noted that the continent has many challenges which can be addressed through research and innovation. It is important therefore to think about new approaches for mobilising resources that will complement what is being given by the government.

Dr Sangare through PASRES considered it worthy to invite two other countries to this year's Annual Forum namely; Guinea and Mali, who are not only neighbouring countries, but also countries that offer added scientific and socio-economic value to the region noting that they will be an interesting addition to the SGCI.

Since 2015, the SGCI has always selected themes for the Annual Forum based on topical around science, technology, research and innovation issues of importance to sub-Saharan Africa countries and has produced valuable knowledge products of importance to the SGCs and the science communities. This year, the theme was on new approaches for funding research and innovation in Africa. Dr Phethiwe Matutu of the National Research Foundation South Africa (NRF-South Africa) in her opening remarks urged the SGCs to embrace the research conducted by the Initiative. For instance, the NRF-South Africa has taken upon itself to look into the 2016 SGCI "knowledge products" on research excellence and develop frameworks on how they will encourage research excellence as an organisation. Equally, in 2017, the NRF decided to come up with a strategy as a research council on public-private partnerships. Dr Matutu encouraged other councils to follow similar strides and institutionalise the research products from the Forums.

## **3. KEY MESSAGES FROM THE 2018 ANNUAL FORUM**

The 2018 Annual Forum offered an avenue for sharing of evidence and good practices, and to deliberate on interventions on new funding approaches for RI in Africa. The key messages on the theme emanating from the masterclass are briefly described below:

- Governments use public institution funding or interdisciplinary and multidisciplinary programmes, innovation brokerage, formation of national research funding consortia, co-funding with the SGCs, investment in high-end research programmes such as research chairs and centres of excellence. In Kenya and Zambia, there has been multi-institutional/multidisciplinary funding where this has contributed to the strengthening of research and innovation programmes. South Africa on its part has led in research infrastructure funding and investment in high-end research programmes and has seen the improvement of research infrastructure and the addition of 240 research chairs currently in position;
- The private sector use retained profits and borrowing for capital markets as well as corporate social responsibility (CSR) to fund research. They are also using patent buyouts to take over applied research from proof of concept as well as safety and efficacy testing. In Zambia for instance, patent buyouts have led to the strengthening of research and research dissemination;
- Impact investors fund commercialisation ventures through equity and debt to solve market failures with a focus on social goods;
- Crowdfunding efforts are made to fund research and commercialisation through equity, contributing to social investment and addressing market failures;

- Charities are funding basic, applied research and clinical trials using grants and co-funding for academia and SMEs working in neglected areas. This is motivated by the fact that these tend to be niche areas such as rare diseases where market failure is common;
- Cities and regions are funding land, labour and utilities through grants given as incentives to firms that relocate to a city or region targeting industrial development. This is motivated by the fact that cities and regions are looking to attract particular industrial activities to a particular city or region to boost economic activities and contribute to rejuvenation of de-industrialised places.

Research and innovation is undoubtedly important as echoed by stakeholders in the Forum, but the challenge remains on how to mobilise resources to address the issues of funding and hence address the economic and social challenges of the continent. As Dr Mugwagwa summed it all, there is need to **Demonstrate Value and Impact (DVI)**.

Feedback offered from the experts who gave perspectives on the masterclass paper showed that the models presented were relevant to local contexts. The role of partners was repeatedly identified as key to any funding approach especially in the multidisciplinary, transdisciplinary and interdisciplinary contexts. It was proposed that reforms should focus on output and impact as is the case in Kenya, emphasise on international competitiveness, strengthen the science-policy linkages as is the case in South Africa, ensure enhancement of human and societal benefits as is the case in Namibia and learn from the past as has been done Malawi, even with the potential of reviving old models.

Institutional reforms were also echoed by the experts as fundamental in providing the enabling environment for RI to thrive. National priorities still drive funding of which international funders' priorities only come second. The Councils, unlike the central governments, have a key role to play as they can engage with more autonomy with the international funders - these funders desire to engage with institutions with relative autonomy.

The key themes that emerged from the masterclass paper can be summarised into four groups: (1) Consistency of the funding and the funding mechanisms, (2) Sufficiency of the funding (is the 1% cap ambitious enough?), (3) Relevance of the funding today and how it is addressing the issues of today as well as the issues of tomorrow; and (4) Coordination of the different funding mechanisms. These themes are briefly expounded below:

### 3.1 CONSISTENCY OF THE FUNDING AND THE FUNDING MECHANISMS

In order to ensure consistency in funding, the Councils need to continually generate evidence of RI impact. The *African Science Technology and Innovation Indicators (ASTII) Initiative* run by the NEPAD Agency has had countries providing very useful and informative statistics and the Councils can rely on this data to generate evidence. This will, in turn, enable them to enhance the science-policy linkages. In addition, mapping out of research and innovation ecosystem is very paramount to developing linkages and partnerships. As one of the participants noted, no other person should understand the RI ecosystem in the African countries better than the Councils. Funders such as the IDRC, DFID and SIDA have most recently been working with African countries in an ecosystem approach in order to strengthen the roles of local institutions in contributing to their STI agendas. Therefore, Councils have a leadership and oversight role to play in ensuring consistency of funding.

### 3.2 SUFFICIENCY OF THE FUNDING (IS THE 1% GDP TO R&D CAP AMBITIOUS ENOUGH?)

African governments agreed to commit at least 1% GDP spending on research and development since 1980. However, this commitment has not been respected by any of the AU member countries, despite the adoption of the STISA-2024 Strategy. The average stands at 0.2 to 0.5% GERD. The question was posed on whether this is too high an ambition given that none of the countries has reached this target yet. Further, the importance of understanding the mind-set of the African politicians as they are the “gateway” to increased and sustainable government investments in RI was emphasised, as much as gaining political will is not about just talking about it, but also about committing resources to the declarations made.

The author of the masterclass paper recommended that the AUC, the Regional Economic Communities (RECs) and the national governments should work to increase, sustain and operationalise political will. Honouring the 1% GERD commitment will not only involve the reinforcement/advocacy from the international donors, but also from the civil society and the private sector actors. Private sector actors have the capacity to increase their levels of funding and their relevance of funding activities. Moreover, if governments provide all funding then the private sector will not have any impetus to put in their money: a public-private partnership project has been proven to have better outcomes. South Africa through the NRF shared its experience in mobilizing industry contributions by observing that context and strategy are the determining factors when engaging partners. They also added that Councils should play the role of creating an enabling environment for engaging with industry.

### 3.3 RELEVANCE OF THE FUNDING TODAY

The relevance of the funding approaches present today and how they are addressing the issues of today, as well as the issues of tomorrow, was deliberated on. The question was raised on whether the deliberations on RI funding will always be done by scientists, innovation and policy researchers, or whether it was time that the ministries of commerce and finance be involved in these deliberations. This remark was accompanied by the observation that youth are continually churning relevant innovations yet the deliberations may not be addressing their specific financial needs yet. Ethiopia just recently rebranded its Ministry of Science and Technology to the Ministry of Innovation and Technology, which speaks to the commitment to valorisation of research and the systems thinking perspective. These observations tie in with the subject of inclusion whether this be through gender, or other demographic dimensions in the discussions. The Authors of the masterclass paper argued their points from an ecosystems level approach rather than simply a value-chain level to include the demographic dividend that the continent is growing into. The organisers were also challenged to diversify the demographics of the invitees to such Forums to allow for a diversity of contributions.

### 3.4 COORDINATION OF THE DIFFERENT FUNDING MECHANISMS

Whereas some African countries have science granting councils/commissions/agencies and the accompanying parliamentary Acts that provide the mandates for their institutionalisation, these Acts do not cover very well the issues of funding and its mechanisms. It was proposed through the discussions that this should come out clearly in the recommendations from the Masterclass paper in order to allow for efficient and effective coordination of the different funding mechanisms.

Equally, a key theme in the coordination of funding mechanisms is the role of system actors in the coordination of the funding mechanisms. Firstly, it is important that the Councils themselves first seek to understand the concept of multidisciplinary/interdisciplinary/transdisciplinary RI before they look to implement them. Other countries have mastered these approaches better than others, and the latter can benchmark with the former where possible. Secondly, it is important that each actor plays its role in the system by providing complementary actions. Development partners were called upon to support countries to reconfigure their RI systems. The Pan-African perspective showed that development partners can reinforce the operational and infrastructural costs of RI thereby supporting the capacity building of local institutions. This way, perhaps, answers can be drawn on how to cushion RI agendas across political and policy regimes.

## **B: SGCI 2018 MONITORING, EVALUATION AND LEARNING (MEL) WORKSHOP (7 NOV 2018)**

### How the SGCI is making a difference for African Science Granting Councils

The 2018 SGCI Monitoring, Evaluation and Learning (MEL) workshop unlike in previous years had the special participation of the Heads of Research Councils and the SGCI Panel of advisors, alongside the Initiative partners, invited guests and other science system actors. The goal of the MEL workshop was to present progress and showcase how the SGCI is making a difference in the work of Africa's Councils. To achieve this, the following were set as the objectives for this specific year's workshop:

- Present progress against Jan. 2019 (SGCI) East Africa Research Hub (EARH) log frame targets;
- Present specific “story of change” in the context of SGCI log frame indicators and the SGCI Evaluative Learning Framework (ELF) system of “acquiring”, “adapting” and “applying” knowledge;
- Provide an opportunity for the Councils to engage in the monitoring and learning process by providing inputs to emerging stories of change and identifying any stories that may have been documented;
- Share and reflect on emerging stories – what has worked and what needs improvements; and
- Reflect on how political economy (PE) study results are informing technical support, and share plans for phase 2 analysis and case studies.

The theory of change of the SGCI is anchored on its log frame based on a “joined-up” SGCI. This year's workshop was built to enable the sharing of stories, not only from the Initiative but also from the Councils themselves, based on the specific targets of i) more effective research management practices among SGCs; ii) increased use of STI indicators to design and monitor research programs, and to implement policies; iii) increased knowledge transfer to the private sector and cooperation among the Councils; and, iv) increasingly coordinated and networked Councils.

#### **4. STORIES OF CHANGE” IN THE CONTEXT OF SGCI LOG FRAME INDICATORS AND THE SGCI EVALUATIVE LEARNING FRAMEWORK (ELF) SYSTEM OF “ACQUIRING”, “ADAPTING” AND “APPLYING” KNOWLEDGE**

The Collaborating Technical Agencies (CTAs) presented their “stories of change” while providing an opportunity for Councils and other participants present to engage in the monitoring and learning process by providing inputs to emerging stories of change and identifying any stories that may have been documented. The stories of change revolved around the CTA themes namely:

##### **4.1 THEME 1: RESEARCH MANAGEMENT**

The objective of Theme 1 of the SGCI being to strengthen research management of Science Granting Council’s in the 15 African countries by developing and delivering appropriate and needs-driven training, technical intervention and leaning opportunities as well as building communities through collaborative partnership networks, SARIMA (the Southern Africa Research and Innovation Management Association, South Africa) has focused on four (4) areas when assessment of the quality of research call competitions is considered namely; i) the call for application ii) the reviews and assessments iii) the award and iv) the monitoring, learning and evaluation.

Through the intervention shared with Dr Ismail Barugahara, it was observed that the Uganda National Council for Science and Technology (UNCST) is now able to clearly set out detailed guidelines in a call for proposal by UNCST, Scinnovent Centre and ACTS within the Initiative. Concretely, they have been able to specify their permissible and non-permissible budget expenditures, code proposals using the online research management system, and the issuance of customised feedback to all applicants. In addition, the UNCST recommends that SARIMA should get more involved in the research management processes taking place in the SGCs. This way, the actual SGC capacity needs can be clearly identified and appropriately addressed.

##### **4.2 THEME 2: USE OF STI INDICATORS**

The New Partnership for Africa's Development (NEPAD) is the development agency of the African Union and has been accorded the mandate of championing the use of STI indicators for designing programmes and public policy interventions. To do this, they take a differentiated approach towards the Councils, of which some have granting functions, others are national agencies for STI statistics and data management and others budgeting while at the same time other Councils have a multiplicity of roles.

The Fonds National de la Recherche et de l’Innovation pour le Développement (FONRID) is supporting the PNDES (Plan National de Développement Economique et Social) which is anchored on three main agenda, namely: i) institutional reform and administration modernisation ii) revitalising promising sectors for the economy and employment and iii) human capital development. This national plan is set to transform Burkina Faso to a modern economy anchored on manufacturing and a dynamic service in the tertiary sector for an average projected economic growth of 7.7%, create at least 50,000 jobs per year and reduce the effect of poverty to 35%. They have leveraged on NEPAD’s training on the use of database systems for impact evaluation in order that they can evaluate how the results of these projects contribute to the main goals of PNDES.

##### **4.3 THEME 3: KNOWLEDGE TRANSFER TO THE PRIVATE SECTOR & COOPERATION AGREEMENTS AND GRANTS**

The focus of Theme 3 in strengthening partnerships among Africa’s SGCs and the private sector has been to move forward with the collaborative agreements that were signed the previous year. A number of Councils have formed collaborative partnerships e.g. Mozambique and Namibia, the East African Community, Côte d’Ivoire and Sénégal, and Sénégal and Burkina Faso. Public-private partnerships are also being concluded with Malawi having three (3) proposals being funded, Mozambique having two (2) proposals being funded among other activities.

Through these activities the value of face-to-face meetings has been found to be very valuable in knowledge sharing activities. The team has also put in place a strategy for private sector engagement and monitoring, as well as one on supporting cooperation agreements which have facilitated the engagements with the SGCs. In that regard, the formation of the collaborative projects between Mozambique and Namibia showed that active interaction between the SGC staff in both Councils was crucial. In addition, the national databases of researchers in different fields of study in the two countries made matching of reviewers easier. As for Ghana, which is in the process of defining the institutional framework for Technology Commercialization Unit (TCU) and Ghana Innovation and Research Commercialisation (GIRC) Centre later to a fully-fledged agency, the financial support under the theme 3 pledged by Ghana has doubled as a result of these activities from 25,000 USD to 50,000 USD.

#### 4.4 THEME 4: BUILDING NETWORKS AMONG THE COUNCILS AND OTHER SCIENCE SYSTEM ACTORS

Theme 4 of the SGCI led by the ATPS in partnership with the Scinnovent Centre shared their experience on how the SGCI promotes and monitors uptake of knowledge products. To promote uptake, the project team ensures relevance of these knowledge products by prioritising key issues/topics of immediate interest and relevance to the SGCs, enhancing quality by generating policy-relevant knowledge and evidence, addressing timeliness by facilitating access to the knowledge products through effective communication and facilitating sharing of lessons and experiences through Forums and Meetings. On the other hand, the project team is intensifying efforts in tracking knowledge uptake by the SGCs. The team has effectively used interviews conducted during the meetings, the evaluation forms and performance indicators such as number and type of participants to perform monitoring.

As reported from the experience during the 2018 Annual Regional Meeting in Ghana, the SGCI created a platform for exploring possibilities of SGCI engagements through the Councils and Commissions mainly in West Africa with the ECOWAS Division of STI which is in charge of valorisation of research products and strengthening the governance of research institutions among others. In addition, the SGCI is a key member of the technical working group for the GIRC Centre. Representatives from FONRID reported that they do receive the knowledge outputs that result from the SGCI research, but they would like to know exactly how they can implement these recommendations as sometimes this is not explicit given the idiosyncratic political economies in the Councils.

#### 5. POLITICAL ECONOMY (PE) STUDY RESULTS

The political economy study ([Case Studies of the Political Economy of Science Granting Councils in Sub-Saharan Africa](#) and [How the political economy influence the evolution of science funding in sub-Saharan Africa](#)) was launched in 2016 targeting case studies from Kenya, Tanzania, Rwanda, Ethiopia and Senegal. The CTA feedback on the report (on which they have effectively developed actions towards) showed that there is bias in research funding towards agriculture and health, funding for research is more externally driven, research often gained little recognition internationally, data was difficult to find, and there is lack of engagement with the private sector.

With regards to the possibility of a 2<sup>nd</sup> phase of the study, recommendations issued were to conduct a study that would either i) produce future scenarios which can be used by SGCs and CTAs to inform strategy and decision-making ii) create a series of case studies which can be used to inform SGCs and CTA strategy and thinking about governance and operational modes iii) explore how national level SGCs can maximise the positive impact of international and regional policy and funding initiatives in national level STI narratives and practice.

Feedback received showed that it would be most feasible to link the 2<sup>nd</sup> Phase of the political economy paper with the issues on uptake and institutionalisation of knowledge output, which were earlier highlighted.

#### 6. SGCI PHASE 2: TOWARDS CO-DESIGN AND CO-IMPLEMENTATION

The 2<sup>nd</sup> Phase of the SGCI, set to run from 2019-2023 is about deepening and sustaining the SGCI in Africa, with the ambition of supporting the existing 15 SGCI member countries, supporting the SGCI thematic areas, but with greater emphasis on gender equality/ inclusivity and research excellence

In that regard, the focus of the new phase as would be managed by the CTAs will focus on the following areas, marked as high priority areas. These were presented to the Councils and others present for feedback and deliberation.

##### Theme 1 - Research Management

- Offer training on knowledge and practice of research excellence through the piloting use of tools such as the Research Quality Plus (RQ+) assessment framework and training in unconscious bias
- Support case studies to deepen knowledge and implementation of Research Ethics
- Support development of on-line grant management system, including software acquisition
- Offer training on research finance and risk management (from raising funds to granting)
- Support strategic communication of research results
- Support studies on research excellence and gender inclusivity

##### Theme 2 - Use of STI Indicators to design and monitor research programs and to formulate and implement policies

- Support Councils to develop STI data collection tools and platforms to measure R&D and innovation processes and performance in firms and social sectors

- Build the capabilities of Councils to use industry and social sector-level metrics to design policies and programmes
- Fund Councils to convene dialogues with policy-makers in order to exchange, share and disseminate data-derived key messages, or to advocate for increased investment in research and innovation

### **Theme 3 A - Support knowledge transfer to the Private Sector**

- Fund projects that provide solutions to private sector needs and interests (product development projects with potential for commercialization:
- Support studies on partnerships between public (universities and research institutes) and the private sector. The research will include approaches for assessing the impacts of such research
- Support Councils to convene dialogues between academia or research bodies and private sector groups in order to promote linkages and ensure demand-led research

### **Theme 3 B - Cooperation agreements and grants**

- Deepen support for inter-SGC cooperation agreements including funds for meetings to design and manage such agreements.
- Fund cooperating Councils to support projects on research for development themes (e.g., energy, water and sanitation)
- Support joint consultative meetings between/ among Councils

### **Theme 4 - Networking among Councils and with other Science System Actors**

- Support 3 annual forums (2020 – 2022) covering specific themes and informed by commissioned papers
- Support 2 regional meetings (2020 in Southern Africa and 2021 in Francophone Africa)
- Facilitate and monitor uptake of knowledge products (commissioned/ synthesis papers, policy briefs, books)

Feedback received showed that while these are necessary and ambitious steps of the SGCI, there is still a need to articulate how these programmes will be sustained beyond the Initiative. Councils were called upon to not wait for the Initiative's programmes to start but to also ensure that they initiate what they can within their own capacities. Nonetheless, Councils noted that they would need the SGCI's 2<sup>nd</sup> phase to focus on monitoring and evaluation, upscaling of research projects, research ethics especially in collaborative research, creating a database of scientists to ensure that calls are better targeted to intended audience and aligning the Initiative to the global and regional goals like the Agenda 2030.

## **7. WAY FORWARD**

The SGCI 2018 Annual Forum and MEL Workshop provided an opportunity for the Initiative to deliberate on the new funding approaches for RI in Africa and also look through the work that has been conducted through the year, while reflecting through the areas of action for the Initiative's 2<sup>nd</sup> Phase. The rich discussions that ensued during the Forum showed that considerable strides had been taken, but there is still a lot that remains to be done to strengthen the SGCs and other science system actors in SSA. While these two key meetings achieved a lot, more contacts will be made with the councils to especially close in on the focus that the Initiative will take for the coming years. The narration of the "stories of change" told by the CTAs in collaboration with the Councils would need to be reflected upon to ensure that what has worked and what needs improvement alike is well captured. The masterclass paper that was discussed will be finalised and shared accordingly. The theme for the next year's Annual Forum will be identified early in 2019 in partnership with the Councils, the Initiative Management Team and other science system actors. Importantly, as reflected in one of the key messages, councils are urged and challenged to come up with strategies for the institutionalisation of the knowledge outputs that the Initiative produces.