



Science Granting Councils Initiative in Sub-Saharan Africa (SGCI)

Theme: New Approaches for Funding Research and Innovation in Africa

Concept Note and Terms of Reference for Authors

1.0 INTRODUCTION

The Science Granting Councils Initiative in sub-Saharan Africa (SGCI) is a 5-year Initiative which aims to strengthen the capacities of Science Granting Councils (SGCs) in sub-Saharan Africa in order to support research and evidence-based policies that will contribute to economic and social development. The Initiative is jointly funded by the United Kingdom's [Department for International Development \(DFID\)](#), Canada's [International Development Research Centre \(IDRC\)](#), and South Africa's [National Research Foundation \(NRF\)](#). The SGCI theme on Networking Africa's SGCs is being implemented by the [African Technology Policy Studies Network \(ATPS\)](#) in partnership with [The Scinnovent Centre](#).

The SGCI convenes Annual Forums (AFs) that brings together Africa's Science Granting Councils (SGCs) from 15 countries¹ and other key stakeholders to deliberate and develop interventions in strategic areas. To facilitate sharing of lessons and good practices, the SGCI commissions a state-of-the-art paper on topics/themes of interest for Africa's development. The theme for the 2018 Annual Forum is on "*New Approaches for Funding Research and Innovation in Africa*". This document provides guidelines on the Concept for a research paper to be commissioned on the topic ahead of the Annual Forum scheduled for 5 – 7 November 2018 in Abidjan, Cote d'Ivoire.

2.0 BACKGROUND

The role of knowledge – its generation, transfer, uptake and utilization has become a key topical issue as countries transition to the knowledge-based economy (KBE). Research and innovation – the two methods of generating and utilizing knowledge can only be sustained through adequate funding and investments. Yet 37 years after the adoption of the Lagos Plan of Action, countries have not fully complied with the commitment by the Heads of States to allocate at least 1% of their gross domestic products (GDPs) to research and development (R&D). The low domestic funding and investments in research and innovation in particular and in science, technology and innovation in general has been worsened by the 2007 global financial crisis and the 2008–2012 global recessions which resulted in reduced budgetary allocations for R&D globally. According to a recent report from the Science-Business Forum, third United Nations Environment Assembly 2017, mobilizing resources is a key challenge and especially for science (ATPS, 2017). Given the

¹ The SGCI currently works with 15 sub-Saharan African countries namely: [Kenya](#), [Rwanda](#), [Uganda](#), [Tanzania](#), [Ethiopia](#), [Côte d'Ivoire](#), [Botswana](#), [Burkina Faso](#), [Senegal](#), [Ghana](#), [Zambia](#), [Mozambique](#), [Malawi](#), [Namibia](#), and [Zimbabwe](#)

“more internal focus” and “our own first” approaches adopted by most donor countries, African governments need to explore other approaches to upscale and sustain domestic funding and investments in research and innovation to support their economic transformations. New approaches, sources, tools and institutional arrangements have to be explored. Studies have shown that in order to increase the funding/financing opportunities for research and innovation under the current global financial crises and national cutbacks in research and development (R&D) budgets, new approaches and considerations must be made (Ozor, 2015 and World Bank, 2008).

Countries in the developed world and the newly industrialized countries have experimented with various approaches including through institutional reforms, models and mechanisms for funding and financing research and innovation that have delivered some good results. For instance, the Small Business Innovation Research Program (SBIR) is a pre-commercial procurement scheme introduced in the United States in 1982 that mandates the use of 2.5% of the federal R&D budgets from all government departments and agencies with large R&D budgets to contract R&D services from SMEs (<https://www.sbir.gov/>). Similarly, the Malaysian government has established the Cradle Fund, a unit of the Ministry of Finance that seeks to create an ecosystem to support a strong and innovative business building environment for technology entrepreneurs in Malaysia (<http://www.cradle.com.my/faq/>). As Africa joins in the transition to KBE, countries are reviewing their approaches - policies and procedures for funding and financing research and innovation. These on-going reviews could benefit from experiences and best practices from across the world.

In order to inform the current debates, reviews and re-organization of research and innovation funding in Africa, the SGCi wishes to commission a paper on “*new approaches for funding research and innovation in Africa*” paying particular attention on the learning experiences from good practices from across the world on institutions, schemes, and mechanisms and their potential applicability to African countries.

3.0 CONTEXTUALIZING THE NEW APPROACHES FOR FUNDING RESEARCH AND INNOVATION IN AFRICA: DEFINITIONS, CONCEPTS AND TYPOLOGIES

In the context of this paper, the term “**new**” is context-specific and takes both a spatial and temporal meaning. In other words, an approach is considered “new” if it has not been used before in a particular place/locality (the spatial dimension) or if it has been introduced in the same locality but at a different time frame (temporal dimension). The different timeframes may reflect different thinking, different actors, different governance structures and therefore same policy approaches and mechanisms could have different outcomes even in the same locality.

The term “**approaches**” refers to the broad ways and means of dealing with the funding or financing challenges for research and innovation. These include the funding/financing² schemes

² Whereas the terms funding and financing are used interchangeably, it is important to note the slight difference between them. While “**funding**” refers to an amount of money provided by an organization or government on the basis of an agreement for the provision of goods and services and with no requirements to pay back the capital, “**financing**” on the other hand refers to an amount of money provided to an organization with the expectation to pay back the capital amount along with a certain percentage of interest. The most common facilitators that normally fulfill the funding needs of an organization are the donations made by governments or philanthropists while financing needs are usually provided by financial institutions such as banks, or investors like venture capitalists, business angels, shareholders, etc.

and models on one hand (higher level) and the funding/financing mechanisms on the other hand (lower level).

Funding/financing schemes and models include but not limited to public sector funding from government as well as private and philanthropic organizations. Governments predominantly use either direct funding in the form of grants and subsidies or indirect funding in the form of tax incentives, soft loans and other fiscal policies. For instance, the National Research Foundation (NRF, South Africa) and the National Research Fund (NRF, Kenya) have instituted functional STI research grants schemes while countries such as Ghana, Rwanda and Nigeria are in various stages of establishing their own national research funding schemes. The private sector use debt financing, venture capitalism, angel financing amongst other measures. Beyond these well-known examples, there are other emerging models such as crowd-funding, co-investments and IP-based funding models.

Funding/financing mechanisms refer to the various channels of delivery as well as the accompanying eligibility, selection and accountability processes. While competitive grants schemes, awards, contracts or block funds constitute tried and tested mechanisms, some countries have experimented with novel approaches such as “innovation vouchers”, soft-loans, etc.

Institutional arrangements refer to the policies, rules, laws, regulations, procedures, frameworks, processes, habits and practices that facilitate and underpin the implementation of the funding/financing schemes and mechanisms. There are a number of on-going policy initiatives at the national levels aimed at reviewing existing STI policies and strategies to incorporate better funding arrangements for research and innovation. These new developments are laudable and need to be supported, scaled and sustained. For example, Namibia is currently reviewing their STI policy with a view to creating a stand-alone innovation policy; Mozambique is reviewing both its STI policy to incorporate the private sector and its manual on funding norms and procedures; Rwanda is in the process of reviewing its 2005 STI policy (STIP) while at the same time developing its national research funding strategies. Uganda is reviewing its 1990 law following the creation of the new Ministry of Science and Technology. These policy and institutional reforms constitute an opportunity for the Councils to learn and integrate lessons and experiences into their overall approaches for funding and financing research and innovation in their respective countries. On a global scale, the Belmont Forum for example has announced its interest and commitment towards the funding of STI in Africa especially in partnership with the national and regional governments so as to spur local ownership and action.

In the context of the foregoing, the issues to be addressed in the commissioned paper could include (but not limited to):

- (i) **New funding/ financing schemes/models:** This includes an understanding of the schemes and models used for funding research and innovation by governments, philanthropists and financial institutions and its potential applicability in African countries. Case studies, lessons, and key political economy conditions may be used to provide insights and deepen the understanding, practicality and applicability of such schemes and models.
- (ii) **New funding/ financing mechanisms:** This includes an understanding of the pathways through which the schemes and models described above have been or can be implemented. Specific case studies and experiences with such mechanisms will be of interest.
- (iii) **New institutional arrangements:** This includes institutions that enable or hinder the implementation of the schemes/models and mechanisms. Reforms should be discussed in

the context of existing STI policies in Africa as well as on-going policy reviews. Discussions may also include the features of the prevailing approaches, political economy aspects and the monitoring and evaluation of such policies and institutional arrangements.

4.0 TERMS OF REFERENCE

In line with the above descriptions and expectations, the commissioned paper could explore the following questions:

1. What are the new and innovative funding approaches (schemes, models and mechanisms) that have been applied across the world and what lessons could be drawn for African countries?
2. What factors facilitate or constrain the implementation of the funding approaches and how have/can the gains be enhanced or the challenges resolved?
3. What institutional reforms accompanied the new approaches and how could Africa reposition its own institutional architecture for enhanced research and innovation funding?

The questions above notwithstanding, authors are expected to frame more questions that will help in the understanding of the theme of the masterclass - *New Approaches for Funding Research and Innovation in Africa* based on their wealth of experience and expertise.

4.1 RESEARCH METHODOLOGY AND EXPECTED OUTPUTS

a. Approach for delivering the commissioned paper

Interested authors will be invited to propose a methodology/ approach for delivering the paper. Such methodology or approach could draw from primary data, secondary data, as well as insights and experiences of practitioners and other experts.

b. Expected Outputs

In addition to the final masterclass paper which will be presented at the 2018 Annual Forum scheduled for 5-7 November 2018 in Abidjan, Cote d'Ivoire, the authors are expected to produce a high-quality article that will be published in an international peer-reviewed journal and a policy brief.

4.2 PROCESS AND TIMELINE FOR THE PRODUCTION OF THE OUTPUTS

- i. An Expression of Interest and detailed CV(s) of potential author(s)
- ii. An annotated outline of the paper with a detailed work plan
- iii. Draft paper that will be submitted at various stages for reviews by the ATPS/Scinnovent Centre team after the authors have been selected
- iv. Final paper that will be revised after presentation during the Annual Forum
- v. A draft article for publication in an international peer-reviewed journal to be submitted for reviews by the ATPS/Scinnovent Centre team
- vi. One draft policy brief emanating from the paper to be submitted for reviews by the ATPS/Scinnovent Centre team

Timelines for the development of the Masterclass paper

S/n	Deliverables	Timeframe
1.	Selection and Contracting of authors	15 June 2018
2.	Submission of the 1 st draft paper	15 August 2018
3.	Submission of the 2 nd draft paper	15 September 2018
4.	Presentation of the paper during the 2018 AF	November 2018
5.	Submission of the final paper	February 2019
6.	Submission of draft article for publication in a peer-reviewed journal	February 2019
7.	Submission of the final version of article for the paper	March 2019
8.	Submission of 1 Policy Brief	February 2019

4.3 SUBMISSION OF EXPRESSION OF INTEREST, DETAILED CV OF POTENTIAL AUTHOR, ANNOTATED TABLE OF CONTENT AND WORK PLAN

The deadline for submission of the Expression of Interest, Detailed CV(s), Annotated Table of Content, and Work plan is on or before **Friday, 8 June 2018 by 6:00 pm East African Time**. All submissions should be sent to: executivedirector@atpsnet.org and copied to: info@scinnovent.org Submissions received after this deadline may not be considered. The successful candidate will be notified within one week after the deadline. Please note that the **Expression of Interest** should not exceed one page of an A4 paper, single spacing, font type-Times New Roman, font size- 11. The **CVs** should demonstrate strong experience from previous related assignments and publications on new approaches for funding research and innovation especially in Africa. The **Annotated Table of Content** should be clearly written with proposed chapters, sections and subsections as the case may be. The **Work Plan** should align with the deliverables and timeframe already identified under Section 4.2 above.

4.4 BUDGET

A maximum budget of up to **US\$27,000.00** has been marked for this assignment. A team effort in the production of the masterclass paper is **highly** recommended especially if coming from different regions of the world with Africa inclusive. We shall also cover the travel expenses for the main author to present the paper during the SGCI Annual Forum event scheduled for November 2018 in Abidjan, Cote d'Ivoire. **It is a requirement that the main author of the paper will have to be available to present the paper during the annual forum event.**

4.5 ATPS/SCINNOVENT CENTRE INPUT TO THE PROCESS

- i) Provide relevant documents to the researcher as may be required; and
- ii) Review all drafts of the papers and make recommendations for improving the paper on a continuous basis.

5.0 REFERENCES

- African Technology Policy Studies Network (ATPS) (2017) *Technopolicy Newsletter* Issue 011, ATPS Publications.
- Ozor, Nicholas (2015) Increasing Opportunities for Financing of Research: Lessons for the Demand Side. Paper presented during an international symposium organized on the theme: "New science, technology and innovation funding mechanisms in Africa" and held from 9-11 December in Dakar, Senegal.
- World Bank Group (2008) New Ways to Finance Development in Sub-Saharan Africa. Available at: <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/0,,contentMDK:21678510~pagePK:64165401~piPK:64165026~theSitePK:469372,00.html>