

SGCI TRAINING EFFECTIVENESS CASE STUDIES PLUS (STECS <u>PLUS</u>) PROJECT

# COVID-19 and beyond: why science-as-usual will not work

Julius Mugwagwa Anne Marie Kagwesage Carla-Leanne Washbourne Remy Twiringiyimana

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Image credit SGCI







## **Overview**

This paper uses the case of science granting councils (SGCs) in Africa to argue that 'pressure' from the COVID-19 pandemic necessitates rethinking how decisions on public funding of research are made, if responsiveness and resilience to crises are to be achieved.







# Context and background

- The COVID-19 global pandemic has exposed frailties in our health care systems.
- If there is a silver lining that has visibly emerged from the pandemic, it is the important, yet often hidden role that different disciplines of science and engineering play in generating and providing tools for dealing with societal challenges.







# Context and background

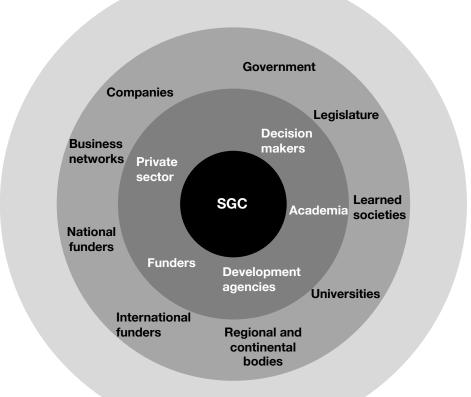
 Our on-going work on the Science Granting Councils Initiative in sub-Saharan Africa Training Effectiveness Case Studies (STECS) (2019-2021) project has shown that indeed SGCs in Africa have emerged as a strong coalition point for promoting and lobbying for more funding for research and innovation, and championing numerous sociotechnical imaginaries from technological leapfrogging to homegrown economic development through generation of new knowledge, technologies and innovations.







### **Roles of Science Granting Councils**



Source: STECS Project, 2020







## The Science Granting Councils Initiative - SGCI

- Launched as a multi-funder initiative in 2015 (IDRC, DFID and NRF, later joined by SIDA).
- **SGCI Goal:** Strengthening the capacities of SGCs to support research and evidence-based policies that contribute to the social and economic development of the 15 participating sub-Saharan African countries.
- This presentation stems from the SGCI Training Effectiveness Case Studies (STECS) Project – a collaboration between UCL & UR







### **STECS Project Process – 2019-2021**

|  | Evaluation<br>questions   | Data needed to<br>answer<br>questions  | Data Sources  | Data analysis   | _                           |
|--|---|--|---|---|-----------------------------|
| How are Science<br>Granting Councils<br>Initiative (SGCI)<br>trainings and other<br>forms of technical<br>support influencing<br>the performance of<br>beneficiary Science<br>Granting Councils<br>(SGCs)? | 1. How have<br>evidence, knowledge<br>exchange and<br>support informed<br>research allocation<br>and grants<br>management by<br>SGCs? | Qualitative and<br>quantitative data<br>(people,<br>products,<br>institutions,<br>processes) | <ul> <li>Document reviews</li> <li>On-site discussions<br/>and observations</li> <li>Questionnaire<br/>responses</li> <li>Key informant<br/>interviews</li> </ul> |   | Recommendations<br>for SGCs |
|  | 2. How have<br>learning outputs<br>been taken up by<br>SGCs?  | Qualitative data<br>(needs,<br>activities,<br>capacities,<br>outputs)                        | <ul> <li>Document reviews</li> <li>On-site discussions<br/>and observations</li> <li>Questionnaire<br/>responses</li> <li>Key informant<br/>interviews</li> </ul> | Thematic analysis to<br>organise, describe,<br>analyse and explain<br>views from the<br>different sources | Findings                    |
|  | 3. What adjustments<br>need to be made in<br>SGCI processes for<br>increased<br>effectiveness of<br>SGCs?                             | Qualitative data<br>and quantitative<br>data (funding,<br>needs,<br>capacities,<br>plans)    | <ul> <li>Document reviews</li> <li>On-site discussions<br/>and observations</li> <li>Questionnaire<br/>responses</li> <li>Key informant<br/>interviews</li> </ul> | for SGCI  |                             |
|  |   |  |   | <u> </u>  |                             |





## Methodology (Case study)

#### Data Collection methods:

- Desk research (secondary data)
- Questionnaire-led semi-structured interviews with SGCs, CTAs and the SGC IMT – total <u>29</u> interviewees

#### Data analysis:

- Thematic analysis (qualitative data)
- Tabulation and statistical analysis (quantitative data)







## Science system decisions timeliness and relevance to contexts of application

• The COVID-19 pandemic has highlighted the importance, not just of the availability of different tools from science, but their timeliness and relevance to contexts of application.







# Three other emerging realities

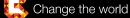
- Whether the ways we generate, triage and actualise research and innovation through existing arrangements are fit for purpose.
- The importance and urgency of matters of synergy, coordination and clarity within the national science ecosystem as key functions in local, national and global responses to challenges will need rethinking.
- The COVID-19 pandemic might also have seriously dampened global confidence in traditional sources of best practice for science leadership, potentially ushering in a new era for new ways and sources of learning.





# From science as usual to science as usual to science

| Science as usual  |                        | Science as unusual   |  |  |  |
|-------------------|------------------------|--|--|--|--|
| Dominance of tra  | ditional science       | Need for inter-, multi-and cross-disciplinary                              |  |  |  |
| disciplines and w | ays of knowing         | working arrangements which decentre  |  |  |  |
|                   |                        | privileged ways of knowing and doing                                       |  |  |  |
|                   | Partnerships           | Need to embedded local capabilities which bridge know-how and know-do gaps |  |  |  |
|                   | Responses              |  |  |  |  |
|                   |                        | Institutional entrepreneurship among both                                  |  |  |  |
|                   | Funding models         | centre and periphery actors and different                                  |  |  |  |
| Rigidity          |                        | points in science systems  |  |  |  |
|                   | Science-policy-society |  |  |  |  |
|                   | interfaces             | Science without innovation is insufficient.                                |  |  |  |
|                   |                        | There is need to embed and strengthen                                      |  |  |  |
|                   |                        | innovation   |  |  |  |
|                   |                        |  |  |  |  |
|                   |                        | Context matters: there is need to rethink                                  |  |  |  |
|                   |                        | global-national-local nexuses and engage in                                |  |  |  |
|                   |                        | new forms of science communication and                                     |  |  |  |
|                   |                        | citizen science  |  |  |  |
|                   |                        |  |  |  |  |
|                   |                        |  |  |  |  |
| Absence of physic | cal co-working spaces  | Need for co-working spaces where theory                                    |  |  |  |
|                   |                        | meets practice for experience and trust-                                   |  |  |  |
|                   |                        | building   |  |  |  |







## What could conspire against science-asunusual?

- Fitness for purpose of infrastructures and institutions will the needed adjustments be feasible, quick enough and sustainable? Is there institutional and collective will to make and accommodate adjustments?
- Collective amnesia when the pandemic pressure relents, practice may well revert back to the usual. There is often a tendency to normalise adversity
- **Problem with political rhetoric** building back better? Are we not better off building forward better?
- **Persistent paradigms** the pandemic has shown the limits and at worst, the fallacy of global collectives. The proximity thesis has manifested loud and clear through various forms of 'nationalism'. There is surely no single tunnel for us all ... let's imagine multiple lights and ends of multiple tunnels.





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# Conclusions

- The Covid-19 pandemic, through its pervasive and all-atonce nature, has brought to the fore the importance of tools from various disciplines of science.
- For science systems, as sources of tools and knowledge for responding to societal challenges, the pandemic has revealed the need for rethinking how these systems are configured, the levels of capacity in these systems, and their relevance and agility at points and times of need.
- Our argument in this paper speaks to a broader reality that social-technical imaginaries do not just emerge, but are a result of deliberate choices and actions by multiple players. The pandemic is a key moment for new choices and actions regarding the science-technology-society nexus.







## Acknowledgements

- UCL and UR leadership and colleagues
- Primary respondents from SGCs, CTAs and IMT
- Other stakeholders Annual Forum; Close-Out Workshop
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