PROJECT_POLICY SUMMARIES_CARGF_2024

National Research Foundation

National Research Foundation

IDRC GRANT / SUBVENTION DU CRDI : - COVID-19 AFRICA RAPID GRANT FUND

Strengthening the resilience and coordination of African science systems for future emergency crises:

Recommendations and Actions from the Covid-19 Africa Rapid Grant Fund

for science granting councils

By Tracy Bailey

CONTENTS

1. Background to this policy guideline

The Covid-19 Africa Rapid Grant Fund (CARGF) was launched in May 2020 under the auspices of the Science Granting Councils Initiative (SGCI) in Sub-Saharan Africa. It supported Covid-19 response with a focus on 17 countries across sub-Saharan Africa and was administered by South Africa's National Research Foundation (NRF) on behalf of all funding partners.

As a collective, science-based response to the pandemic, the CARGF was the most extensive initiative of its kind on the continent in terms of intent, coverage, and scope: 73 projects in 50 institutions on research, science communication, and science advice topics, supported by approximately US$5.7 million in funding from both Global North and African partners.

The CARGF was an unprecedented experience and learning opportunity in the initiation, conceptualisation, set up, implementation, and evaluation of a multilateral funding programme in a constantly shifting and uncertain global emergency.

In recognition of this, and the reality that the world is likely to see an increase in global and regional crises to which science will be called to respond, the NRF, as administrator of the fund, organised the CARGF Reflection and Foresight Convening in Pretoria, South Africa, 23-24 October 2023. The convening was attended by over 100 participants (researchers, science advisers, science communicators, grant support administrators, and research funders) from all CARGF eligible countries.

The main aim was to engage participants in distilling the learnings from the CARGF process and formulating recommendations on how to strengthen the resilience and coordination of African science systems to respond to future global or regional crises.

Additional information about lessons learnt from working under pandemic conditions, and the kinds of innovations introduced in order to adapt, was gleaned from role-players via surveys, interviews, and facilitated discussions prior to and following the meeting.

This policy guideline is the key output from these processes.

The Covid-19 Africa Rapid Grant Fund

Aim: to support Africa's science-based response to the Covid-19 pandemic via competitively-funded research, science engagement and science advice projects.

Objectives:

- To contribute to the African regional and continental response to the Covid-19 pandemic
- To support knowledge generation and translation to inform diagnostics, prevention and treatment of Covid-19 on the continent
- To strengthen African regional and continental science engagement efforts in response to the Covid-19 pandemic
- To leverage existing, strong multilateral collaborations in support of Africa's consolidated response to the Covid-19 pandemic and attract new collaborations from international partners.

Funding partners: National Research Foundation (South Africa), Department of Science and Innovation (South Africa); International Development Research Centre (Canada), Fonds de Recherché du Québec (Canada), Swedish International Development Cooperation Agency, Foreign, Commonwealth and Development Office (United Kingdom), United Kingdom Research and Innovation through the Newton Fund; and SGCI participating councils across 17 countries*.

*Botswana, Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe

2. Target audience and format of this policy guideline

The core focus of this policy guideline is a set of broad recommendations accompanied by key action points targeted primarily at the science granting councils (SGCs) that form part of the SGCI.

The policy guideline will be of general interest to the research-performing and supporting ecosystem in Sub-Saharan Africa, including researchers, science communicators and science advisers based at universities, public and private research institutes, and non-governmental organisations, as well as the those in research and grant management support roles in these organisations.

Key lessons learnt from SGCs and other role-players about operating under Covid-19 pandemic conditions are highlighted at the start of the guideline document. The values and principles which underpin the recommendations, and which should be used as guidance in the actioning of the recommendations are outlined in the next section.

3. Key lessons learnt about working under Covid-19 pandemic conditions

3.1. Impacts of the pandemic on 'business-as-usual'

1. Restrictions on movement and gatherings:

    - The move to working remotely impacted negatively on processes that were typically dependent on face-to-face interactions, such as site visits for due diligence and monitoring, decision-making in committees (e.g. peer review), and preparation of financial reports.
    - Preferred or desired aspects to project implementation were also constrained, such as multi-country/multi-institution team composition and collaboration, data collection via fieldwork, laboratory work, and stakeholder engagement/end-user participation.
    - Strategies to facilitate uptake, which are usually enhanced by personal interactions with critical users such as policymakers and health practitioners could not be implemented fully.

2. Shortages of financial, human, and material resources:

    - The reprioritisation of public funds to support government responses to the pandemic in many cases resulted in less funding available to support research and science communication efforts.
    - There was a shortage of human resources because of illness, care-giving, remote working and parental responsibilities around home-schooling.
    - Breaks in global supply chains and price-gouging created challenges for research teams to acquire important equipment and materials, with the effect that some projects could not deliver on some or all their objectives or required objectives to be entirely changed.

3. The ongoing shifts in the nature and understanding of the disease itself, in official and public discourses, and in the different measures imposed by governments and responses to these, gave rise to ever-changing impacts on the implementation of both the funding programme and individual projects in various ways.

4. Existing inequalities – such as between groups of people or different areas or institutions – were exacerbated during the pandemic, resulting in uneven inclusion and benefits of the funding programme and projects.

5. All-in-all, the cumulative effect of the pandemic-related conditions contributed to delays in processes, communications, responses and implementation activities within organisations and project teams, and thus in the funding programme and individual project implementation.

3.2. Institutional capacities and approaches

- The bureaucratic nature of many of the implementing organisations, as well as other stakeholder bodies such as government and financial institutions, posed challenges to working quickly, flexibly and adaptively.
- Weak or absent research or grant management systems at grant recipient institutions presented significant impediments to implementation.
- Different operational structures across partner and grant recipient organisations presented difficulties to effective coordination.
- The adoption of a traditional monitoring and evaluation model, which did not take into consideration the need for regularity and innovation in a global emergency resulted in limitations in project oversight and performance assessment.

4. Values and principles underpinning the recommendations

Resilience – at system, organisational, and individual levels – is at the core as it encompasses many of the other values and principles. Resilience implies having **foresight**; being **prepared**, **flexible**, **adaptable**, and **agile**. It is not only about overcoming shocks or surviving disasters, it is a capability that enables actors to thrive in circumstances of uncertainty, and to turn crises into a source of strategic opportunity. Resilient systems, organisations and people are always **learning** from their experiences and **adjusting** accordingly.

Institutional and capacity strengthening – continuing to build and strengthen research-performing and supporting institutions and ensure that they are appropriately capacitated to play their respective roles, should be an **ongoing process and investment** for the good of the ecosystem as a whole and not just for future emergency situations.

Coordination – across countries, sectors, and institutions – is essential to optimising the **efficient** and **timely** implementation of a rapid response. Coordination talks to the need for strong **partnerships**, **alignment**, good **communication**, and relationships of **trust**. It is thus not only about coordination structures and strategies but also a mindset and approach to interactions that is **people-centred** and **collaborative**, builds **capacity**, and promotes **wellbeing**.

Adaptive management and learning – establishing organisational and team **cultures** that enable **continuous assessment** of the effectiveness of crisis response strategies, **learning** from experiences, and **adapting** approaches as the situation evolves.

Innovation – strengthening systems' abilities to respond to crisis situations requires **creative**, **'out-the-box'** thinking; **risk-taking**, **experimentation** and **transparency**; finding ways to **simplify**; **optimism** and a **'can-do' attitude**, while remaining **realistic**.

Equity – already marginalised groups and regions were further disadvantaged by the multiple ramifications of the Covid-19 pandemic itself, as well as by government responses to managing it. Science-based responses to future crises need to ensure that **underrepresented and/or vulnerable groups are foregrounded in funding criteria, research calls, science advice** and **science communication initiatives**.

Humanising – the bureaucratic nature of many organisations and systems in the research and science ecosystem needs to be countered by humanising practices which, among others, foster **healthy interpersonal connections**, **open communication**, **collaborative problem-solving**, **trust**, **transparency**, and **valuing of diverse perspectives**.

5. Recommendations and actions

5.1. Science granting councils should build organisational competencies for resilience

Resilience should be centred as a key organisational competency for SGCs and other role-players in the research ecosystem to be able to respond quickly and effectively to crises situations. Resilient organisations require specific internal skillsets to function. Examples include:

- Agility consciousness that enables key leadership and other officials to support and enable the organisation to renew itself, adapt, change quickly, and succeed in a rapidly changing, ambiguous, and turbulent environment.
- Capabilities and systems fit for identifying risks and developing strategies to prevent risks from turning into problems, or to mitigate the severity and/or minimise the negative consequences of risks, and for contingency planning.
- Adaptive management based on effective and timely internal and external monitoring, communication, feedback, learning, and adjustment.
- How to work in relational ways; in other words, engaging cooperatively and collaboratively within the organisation and with other role-players, via interactions that foster dignity and respect and strengthen local capacity and/or resilience.

Leadership has a particular role to play in creating an organisational culture and environment that is conducive to flexibility and adaptability, fosters and supports innovation around systems and practices, and engenders trust and a culture of learning among staff. Leadership training for building resilient organisations and adaptive management is recommended.

Defining 'resilience'

A system's ability "to absorb external stresses…to create foresight, to recognize, to anticipate", and "focuses on how to help people cope with complexity under pressure to achieve success."

[Haimes, Y.Y. (2009) On the definition of resilience in systems. *Risk Analysis,* 29: 498-501]

"Organizational resilience is the ability of an organization to anticipate, prepare for, respond and adapt to incremental change and sudden disruptions in order to survive and prosper."

[Denyer, D. (2017) *Organizational Resilience: A summary of academic evidence, business insights and new thinking.* BSI and Cranfield School of Management]

'Adaptive management'

"…an intentional approach to making decisions and adjustments in response to new information and changes in context. It is a pragmatic and flexible approach to allowing implementing partners' changing methods of work if considered necessary in the given context. …a set of management practices that enable changing the path being used to achieve objectives in response to changing circumstances." (pp17-18)

[Schwensen, C. & L. Scheibel Smed (2023) *What can evaluations tell us about the pandemic response? Document review for the strategic joint evaluation of the collective international development and humanitarian assistance response to the COVID-19 pandemic.* Paris: OECD]

In light of the various potential impacts on personnel working under disaster conditions (e.g. lockdowns, illness, additional caretaking responsibilities), it is recommended that SGCs:

- Put human resource contingency plans in place to ensure that the organisation is able to remain adequately staffed at all times.
- Develop and maintain digital platforms and other technological solutions to support remote working and virtual collaboration, as well as setting funds aside to assist staff to be able to use these platforms from home (e.g. by providing adequate internet connectivity or data bundles).

The ability of science systems and research-performing and science communication organisations to produce high quality, timely and useful outputs during a crisis situation is contingent on their existing strengths and capacities. SGCs should continue their efforts and contributions to strengthening these systems and organisations by, for example, lobbying their respective governments for larger allocations for public sector science and research in general; developing appropriate research infrastructure; and increasing capacity strengthening opportunities for established and emerging researchers and science communicators.

5.2. Science granting councils should actively plan for future emergency or crisis scenarios

Develop an organisational emergency response strategy and team

At an organisational level, it is recommended that SGCs develop a comprehensive strategy document to assist them in preparing for and guiding their responses to future emergency situations. Such a document could cover the following aspects, among others:

- Leadership and governance: clearly defined roles and responsibilities of key personnel, a crisis management team with designated leaders and decision-makers.
- Financial preparedness: set aside funds for emergency situations, including for emergency or rapid research calls, and develop contingency plans for financial challenges that may arise as a result of the crisis.
- Communication plan: for internal and external stakeholders, identify primary and alternative communication channels, and protocols for timely and accurate information dissemination.
- Institutional strengthening and continuous professional development that will be needed to support and facilitate a rapid response under crisis conditions.
- Resource management: identify and provide for necessary resources (personnel, equipment, technology, and information systems).
- Partner agreements: build agreements with partner organisations that are holistic in nature, and that provide for resource-sharing.
- Business continuity planning: identify and plan for critical process, systems, and personnel required to keep the organisation running.
- Health and safety measures: develop protocols and ensure access to necessary equipment to protect employees.
- Evaluation and continuous improvement: regularly review and update the strategy document based on lessons learned and changing circumstances.

It is recommended that each SGC form dedicated teams with representatives from various departments within each SGC to manage the crisis response. These teams should have the authority to make quick decisions and coordinate resources. All members of the teams, as well as the other personnel in the organisation, should have a clear understanding of their roles so that the relevant processes and procedures can be activated quickly.

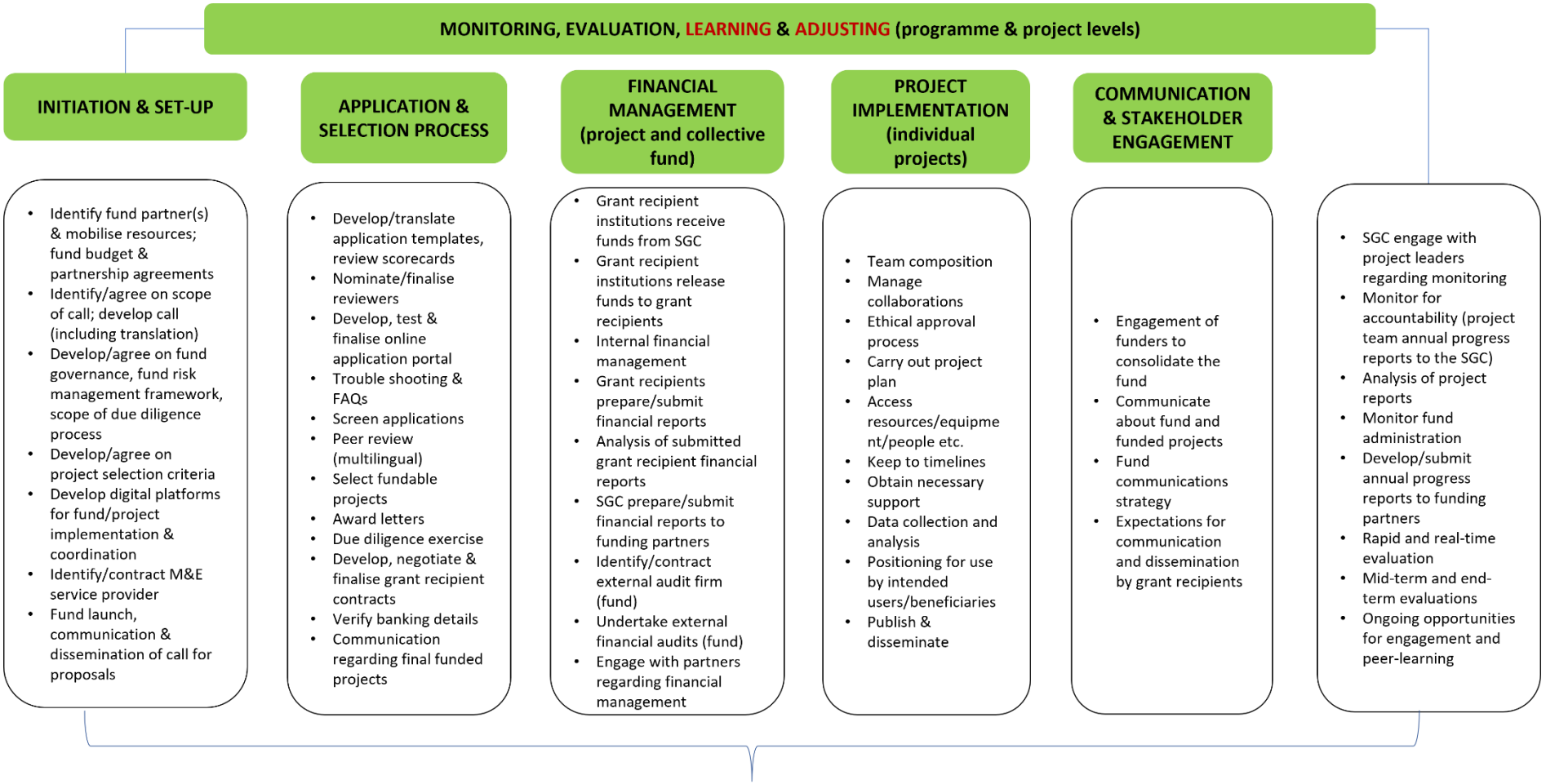
Undertake a role and process mapping exercise

It is recommended that SGCs gain clarity about the various roles and processes involved in initiating, designing, establishing, implementing, monitoring, and adjusting a new funding programme, such that the end-to-end process (or the programme cycle) is as seamless, well-coordinated, and time-sensitive as possible. This applies to the roles and processes within and across the SGCs in the SGCI, as well as to those linked to other key institutions and actors in the funding, research-performing and support, and science communication ecosystems at national and regional levels.

To this end, SGCs could engage in a role and process mapping exercise – internally and in collaboration with other key partners and stakeholders. The focus of the exercise would be on identifying the various activities, systems, and procedures involved in each stage or aspect of the process of establishing and implementing a rapid fund; the roles that need to be fulfilled to successfully undertake these activities; at which points in the process these roles come into play; and how the roles and the actors intersect or need to coordinate at different points in the process.

An example of a template for the role and process mapping exercise is provided in the figure overpage. The template offers suggestions for the broad steps and associated activities involved in the initiation and implementation of a rapid call. As these will differ by context and organisational structure, they can be adjusted accordingly. Three guiding questions are posed at the bottom of the diagram. The third of these – which focuses on what innovations will be required in order to ensure resilience, flexibility and adaptability – relates to the majority of the recommendations contained in this guideline document. Such innovations can also be used for national calls and should complement and fast-track the existing research and grants management practices at the council level.

A template to guide role and process mapping exercises



Which role-players are responsible for these various functions?
Which of these functions require internal and external coordination, and with whom?
What innovations are required in order to ensure resilience, flexibility and adaptability?

Develop a plan for the design and implementation of a rapid call

An outcome of the role and process mapping exercise could be the development of a plan for how a rapid call for a science-based response to a crisis should be designed and implemented. Such a plan could include aspects such as:

- An outline of those aspects of the process – from the development of the call, the selection of successful applicants, the due diligence processes, to the award and disbursement of funds and the monitoring and evaluation of the projects – and where these can be fast-tracked, streamlined, standardised, and coordinated.
- Strategies for how to include key internal and external stakeholders in the early planning stages to ensure clarity of roles and expectations; to give people a chance to think about what needs to be done from their perspective and prepare for the work ahead; and to minimise confusion, duplication, gaps, and delays.
- Mechanisms for adopting a 'whole organisation' approach based upon agreed and documented explication of the roles and processes which encourage and facilitate collaboration between units/departments to work together seamlessly.
- A framework that provides for ongoing monitoring, evaluation, information-sharing, reflection and peer-learning which can feed into adaptive management, adjusting processes and procedures and other elements as necessary, holding each other accountable, and identifying capacity needs as they arise. In addition, the framework should address:
    - Necessary technology and resources to facilitate regular convenings - from the inception of the funding programme and throughout – involving all key stakeholders, to support peer-learning and to identify challenges, blockages and needs and address these.
    - Training in and need to identify service providers with capacities to utilise rapid and real-time evaluation methodologies

Create a streamlined and flexible grant-making process

The nature of crisis or emergency situations is that they are unpredictable, unprecedented, and ever-changing. With the end-users in mind, and to contribute to the resilience of the organisational and systemic responses, the grant-making process should be **streamlined** and be designed in such a way as to be **flexible** when required.

Streamlining could include the following:

- Establishing and maintaining automated grant management systems across all SGCs.
- Ensuring that as many prospective grant recipient institutions in each country (and potentially region) are pre-loaded onto the grant management system of the SGCs. This will require coordination and cooperation between SGCs as well as ensuring that the grant management system is technologically enabled for this.
- Signing long-term memoranda of understanding between and across all the SGCs participating in the SGCI. These would cover due diligence processes as well as the requisite mechanisms for the transfer of funds and partnering geared for use in rapid calls during emergency crises.
- Implementing expedited review processes for crisis-related research proposals. This will ensure that urgent projects receive timely funding, accelerating the pace of scientific response.
- Making systems and processes more end-user oriented. Peer learning and sharing of experiences and practices within the SGCI and the Global Research Council (GRC) will be critical in this regard.

Greater flexibility could include the following:

- Adapting funding mechanisms to be more flexible during a crisis. This could involve streamlining application processes, accelerating review timelines, quicker disbursement of funds, allowing for virement of resources to enable the fast-tracking of project implementation, and providing additional funding for urgent research needs. It could also allow for the creation of 'targeted calls' (e.g. being able to target specific research centres or institutes that have existing specialised capacity, such as in vaccine development).
- In the granting parameters; for example, instead of fixing project budgets and timelines from the start, hold reviews at appropriate intervals in order to assess – and adjust, if necessary – to changing environments and innovations. A flexible fund payment policy to be able, for instance, to make payments upfront to support the initiation of projects (e.g. for procurement of essential equipment) can also be considered.
- Decentralising the process, where possible and appropriate. To do this requires that the necessary roles, structures, and capacities to deal with decentralised functions are first put in place.

When introducing greater flexibility into the process, trade-offs and unintended consequences need to be identified and managed appropriately (e.g. being lenient with disbursement of first payments in order to expedite the process but still holding recipients to account on progress).

Science granting councils and the SGCI should strengthen research management capacities in research-performing institutions

A key need identified was for prospective grant recipient institutions/organisations in the SGCI countries to either strengthen (or establish, where completely absent) institutional research and/or grant management structures, procedures, and capacities. Since 2015, the SGCI has been investing in activities geared towards the professionalisation of research management – within individual institutions and across the research-performing ecosystem – as an essential mechanism for the support of excellent research. There is an opportunity for SGCs to continue to build on these initiatives.

Recommendations for the SGCI and the participating SGCs include the following:

- The SGCI can engage with and leverage existing initiatives within its ambit to identify where research management capacity strengthening is needed.
- The SGCI can earmark capacity strengthening support provided to SGCs to support research performers.
- The SGCs can use the train-the-trainer approach to transfer research management skills acquired regarding research and grants management to research performers.
- The SGCI and SGCs can investigate different models of building capacities of research performers (e.g. supporting designated staff at grant recipient universities to interface with the SGCs).
- SGCs can advocate for the establishment of research support offices at universities in their respective countries.

The research management role in research-performing institutions

There is a great need for people who have the skill set and knowledge of the system required to act as effective intermediaries and interlocutors between the funder(s), principal investigators or project leaders, and the grant recipient institutions. This role requires, among others:

- The ability to engage with funders and understand calls – not only their technical requirements (and among these, special emphasis on due diligence processes), but also the contexts from which the calls emerge, what the call is trying to achieve (outcomes, impact), and thus the kinds of practitioners (researchers, science communicators, science advisors) who should be engaged.
- Knowledge of the national research-performing system – where research capabilities lie, the different role-players in the system, what resources are available and how to access them. This requires ongoing networking and relationship-building within each institution and across the system.
- Being able to support researchers and other types of grant applicants to write winning proposals, to navigate the grant application process and reporting requirements, to manage intellectual property requirements, and to steward the relationships with funders. This should not only take place at the time of a specific application or project implementation, but also through ongoing research development programmes across the institution, and in particular for early career and female researchers.

Organisations such as the Research and Innovation Management Associations (RIMAs) in Southern Africa, Eastern Africa and West Africa can be important partners in the endeavour of professionalising research management as a career and how to support this from a research office perspective.

Within universities, this role needs to be underpinned and supported by a resourced research office and institutional research strategy. The research office could support the implementation of emergency calls by, for example:

- Understanding the requirements of rapid research calls and having in place the competencies required to respond to and manage these effectively.
- Having structures, procedures and processes in place to support and manage grant applications, project budget expenditure, and internal and external reporting timelines and requirements.
- Providing effective and timely communication with grant recipients.

Science granting councils should strengthen external coordination and coherence

Rapid, efficient, and effective implementation of a new funding programme under crisis conditions requires strong coordination and coherence among implementing partners and their key stakeholders. This requires clarity of the process and roles involved. In addition to the mapping exercise outlined above, the following are recommendations for how external coordination can be strengthened:

Coordination and coherence

"Coordination aspects focuses on mutually supporting actions and initiatives across countries, sectors and institutions. *Coherence* focuses on both the *internal* coherence (synergies and interlinkages with other interventions supported by same country or institution) and the *external* coherence (consistency, complementarity and harmonisation with other actors' interventions)." (original emphasis, p11)

[Schwensen, C. & L. Scheibel Smed (2023) *What can evaluations tell us about the pandemic response? Document review for the strategic joint evaluation of the collective international development and humanitarian assistance response to the COVID-19 pandemic.* Paris: OECD]

- In multilateral research programme contexts (such as the CARGF), bring all participating SGCs on board from the fund conceptualisation stage (including co-creation of calls) to maximise buy-in, alignment, communication channels, and coordination mechanisms for implementation, and to support SGCs' role in managing research at the national level in their respective countries.
- Ensure that call documents are as comprehensive as possible, containing all relevant information as well as clear articulation of expectations of the different implementing partners and prospective grant applicants.
- Establish mechanisms for coordinating resource allocation to avoid duplication and ensure efficient use of funds. This involves collaborating on funding priorities, grant distribution, and resource-sharing initiatives.
- Encourage the exchange of information, collaboration, and learning between organisations; for example:
    - Holding online information and Q&A sessions at the start of the process involving all key implementation partners and grant applicants, to ensure clarity of understanding about the call, the grant selection and management process, as well as monitoring and reporting requirements.
    - Set up communication channels between key implementing partners (e.g. SGCs, research/grant support offices, grant recipients, external evaluator) from the inception and be as inclusive as possible as early as possible.
    - Have a central knowledge platform for the fund to which all (internal and external) role-players have access. Use innovative approaches to get people's attention, keep them informed and be inclusive (e.g. information dashboard or pop-ups, and a range of communication platforms such as WhatsApp, and other social media channels).
    - Create shared databases and information platforms to facilitate easy access to relevant data. This could include a centralised system for tracking funded projects, sharing research findings, and avoiding duplication of efforts.
    - Build in feedback loops throughout the process and between implementing partners – regular check-ins to identify blockages, problem solve, identify who needs to be engaged, etc. Document for learning and for informing how systems and governance models might need to be adjusted or adapted.
- Coordinate initiatives for capacity building within and between organisations. This could involve joint training programmes, knowledge exchange, and mentorship opportunities to strengthen the overall scientific community.

- Develop trust so that everyone involved can feel safe and free to share uncertainties and be transparent about problems and challenges encountered.

Managing language differences and ensuring language inclusivity across the SGCI countries are important elements of external coordination. Recommendations for enabling language inclusivity include:

- Translation of all relevant documentation into the relevant major languages. Prepare templates to ensure alignment and accuracy.
- Access to a pool of translation experts through prior identification and vetting of service providers
- Maintenance of a database of potential reviewers by language.
- Software and human support for interpretation.

Various systems, processes, and practices differ between SGCs, which created obstacles to smooth coordination and cooperation. To the extent that it is possible and appropriate, standardisation could be promoted to enhance efficiency and reduce administrative burdens. This could involve developing common application procedures, evaluation criteria, and reporting formats.

Ongoing partnership-building

Underpinning all efforts to optimise coordination, ensure clarity of roles and procedures, and enable strong communication and trust, within and between organisations and role-players is the need for ongoing partnership-building and strengthening. This is first and foremost among the SGCs on the continent, but also with international funding partners, with the research management and grant support personnel within different types of prospective grant recipient institutions and organisations, as well as with the pool of potential reviewers and service providers (e.g. translation services, monitoring and evaluation) across the continent.

The following are example areas of focus for partnership-building:

- A frequently cited area where relationships need to be strengthened is between SGCs and grant recipient institutions in the respective countries.
- SGCs and the SGCI can support the establishment of networks for sharing information, peer-learning, resources, and support within the research-performing ecosystem of individual countries, and between countries and across regions.
- SGCs and the SGCI can establish mechanisms for resolving conflicts that may arise during collaborative efforts. This could involve creating a designated body or process for addressing disputes and ensuring smooth coordination.