



Africa-UK research partnerships for development – a vision for future success

March 2021

Authors: M. Flint-O’Kane, E. Abbey, J. Tager, J. Williams, S. Marillier, L. Oberlander, L. Shackleton, F. Swanepoel

Foreword

Now more than ever, we see the importance of equitable international research collaboration as a foundation for building a stronger, more equitable global society.

In the face of challenges such as the COVID-19 pandemic, climate change and the social instability created by inequality, collaboration among the global research community can drive the innovation required for a sustainable future.

In this communique we set out a vision for strengthening UK-African research partnerships, by building individual and institutional capacity, creating a supportive environment for researchers to thrive and grow, coordinating and aligning funding programmes and maximising research impact by enhancing networks and partnerships beyond academia.

It is a call to action for all those working in the international research and innovation community and beyond, and a timely reminder of what can be achieved through sustainable UK-Africa research partnerships.

Professor Barnabas Nawangwe, Vice Chancellor of Makerere University, Chair of the ARUA Board and member of ACU Council

Context and background

Significant investments have been made in the last five years to further strengthen the relationship between the UK and African continent for science and innovation partnerships. This has enabled the enhancement of longstanding relationships for joint research and development activities as well as the establishment of new, innovative partnerships between key actors driving change in the Africa-UK research and innovation landscape.¹

An important facilitator of this work has been the UK Research and Innovation (UKRI) Global Challenges Research Fund (GCRF), a landmark £1.4bn commitment by UK Government in 2016 to the unique opportunity presented by sustained partnerships that contribute to attainment of the Sustainable Development Goals through research and innovation.

The African Research Universities Alliance (ARUA) is at the forefront of this work and, in partnership with UK Research and Innovation (UKRI) and the Association of Commonwealth Universities (ACU), convened a high-level meeting of research sector leaders from across Africa and the UK in March 2021 (see Annex 1 for Contributors).

¹ <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/international-facts-figures-2020.aspx>

The aim was to reflect on the challenges and successes of past activities and to set out a vision for future success that will see continued and improved impact of Africa-UK research and innovation partnerships, across three priority areas:

- Enhancing research partnerships to tackle global inequalities
- Embedding international collaboration in the next generation of researchers
- Strengthening research systems for more and better research

The following recommendations have been set out for higher education institutions, funders and policymakers with the aim of enabling sustained, equitable and reciprocal research and innovation partnerships between Africa and the UK. Further background to the discussions can be found in Annex 2.

Recommendations for institutions, funders and policymakers

1. Cultivate an environment in which internationally based researchers are supported to develop the connections, relationships and skills required for sustained, equitable and reciprocal intellectual partnerships. Mentorship (local and international) should be considered as an important part of this. Centres such as the [ARUA and World Bank Centres of Excellence](#) demonstrate a successful model to achieve this, learning from such models should be shared.
2. Strengthen capacity for multi-sectoral relationships which maximise the potential of research to address global challenges. Opportunities to support networking, partnership brokerage skills and sustained engagement of policy and private sector actors should be sought at the national, regional and international level, and across all stages of the research cycle.
3. Enhance impact; policy, products and services – investigate the barriers to impactful research outputs in depth, and work in partnership with HEI's, academics, industry and policy makers to increase productivity. Challenging existing cultures and structures in academia and related sectors that inhibit the production of tangible outputs e.g. the publish or perish imperative, barriers to IP protection and commercialisation, will be necessary to maximise research productivity and impact.
4. Communicate the impact and societal benefits of investing in research strategically, in order to secure sustainable funding commitments from governments. This is especially important on the African continent to ensure shared ownership and sustained political engagement with research and development (R&D) activities.
5. The need to move to an African-led and Africa focused research agenda, set by African governments and the research community. International actors should ensure their support is aligned with this agenda set out by African R&D decision makers.
6. Nurture locally owned African research programmes that incorporate continual policy dialogue within the research design, implementation and dissemination process.
7. Invest in split-site models for scholarship and fellowships which recognise the African context, as well as virtual mobility early career researchers to embed the next generation of African researchers within international networks.

8. Ensure that support for women researchers and gender mainstreaming in research fellowships are explicit aims of all scholarship and fellowship schemes to enable the essential contribution of all genders to a thriving R&D landscape in Africa and beyond.
9. Support African higher education institutions to generate data on organisational performance across the remits of teaching, research and knowledge translation, to help shape future institutional and system-level interventions.
10. Strengthen the coordination between international networks that support African partnerships in the R&D sector. Harmonisation of activities can be achieved through mapping and aligning ongoing activities and priorities, but will require someone to take ownership of their coordination and sustained investment to be successful.

Annex 1 – Contributors to the meeting and communique

Professor Ernest Aryeetey Secretary General, African Research Universities Alliance

Professor Lucie Cluver Lead - GCRF Interdisciplinary Research Hub, 'Accelerating achievement for Africa's adolescents', Oxford

Professor Eric Danquah Director for the Africa Centre for Crop Improvement, University of Ghana

Claudia Frittelli Programme Officer HE & Research in Africa, Carnegie Corporation

Graham Harrison Senior Science and Technology Specialist, Africa Centres of Excellence Programme, World Bank

Professor Murray Leibbrandt Director ARUA Centre of Excellence in Poverty and Inequality Research, University of Cape Town

Dr Prestige Tatenda Makanga Senior Lecturer, Midlands State University

Professor Peter Mathieson Vice-Chancellor, University of Edinburgh

Dr Melody Mentz-Coetzee Senior Researcher at the Centre for Advancement of Scholarship, University of Pretoria

Professor Barnabas Nawangwe (Chair) Vice-Chancellor, Makerere University

Dr Joanna Newman CEO and Secretary-General, Association of Commonwealth Universities

Dr Jane Catherine Ngila Acting Executive Director African Academy of Sciences

Dr Amos Nungu Director General, Tanzania Commission for Science and Technology

Professor Madara Ogot Professor of Mechanical and Manufacturing Engineering, University of Nairobi.

Professor Teboho Moja Clinical Professor of Higher Education, New York University

Professor 'Funmi Olonisakin VP International, KCL, Lead Centre for African Studies, King's College London

Dr Doug Sanyahumbi Vice-President, South African Research Management Association

Professor Andrew Thompson International Lead, UK Research and Innovation

Professor Nelson Torto Permanent Secretary, Ministry of Tertiary Education, Research, Science & Technology

Annex 2 – Summary of discussions across the three priority areas

Enhancing research partnerships to tackle global inequalities

In order to enhance research partnerships it is essential to reflect on the origin of relationships that lead to effective international collaboration as well as the type of interventions and environments that contribute to sustained, equitable and reciprocal partnerships.

Equity should be considered not only in relation to geographies but also individuals; how is support for research careers and partnerships designed to maximise the inclusion of women, marginalised groups and displaced persons? Support for international collaboration and relationship building must be in-built throughout academic training and career stages through support for mobility and networking that enable meaningful, sustained interaction, knowledge sharing and challenge identification that leads to productive intellectual partnerships.

The productivity of these partnerships is dependent on active engagement with non-academic partners throughout research design, implementation and translation. In addition to supporting a climate of collaboration for researchers across career stages, support for partnerships must be designed to embed engagement from government and policy actors, the private sector and civil society. These multi-sectoral relationships are essential for a future focused on high impact research resulting in policy change, and products and services that serve the African continent and beyond.

Globally based funders of research and innovation have significant influence on agenda setting for research partnerships and strategies. It is therefore essential that international funding agencies invest in opportunities to engage with local governments to ensure local need and priorities set out in the national R&D agendas of recipient countries are supported and not undermined by international funding. Negotiations involving governments, international agencies and leaders in African R&D policy e.g. ARUA, the African Academy of Sciences (AAS), should be a focus going forward, to encourage greater investment in R&D capacity and outputs by African governments.

The plethora of international actors and networks operating across the African continent has resulted in a complex and fragmented investment landscape. There is significant opportunity for greater collaboration between Northern and multilateral funders and networks, and African based actors to map their activities, share learning and identify opportunities for collaboration and alignment to reduce complexity and maximise the impact of the activities. Support for funders will be needed to achieve this ambitious task.

Inequalities exist within and between all nations however there is often a lack of recognition and understanding of the scale of this issue on the African continent. While poverty is widely recognised as a dominant issue for Africa, inequality is growing and this must be monitored, investigated and context specific opportunities to reduce this growing challenge must be identified.

The [ARUA Centre of Excellence in Poverty and Inequality Research](#) at the University of Cape Town is an example of how to establish a pan-African network of research excellence that draws on African data, skills and expertise to effectively influence policy and practice. The success of multi-national, multi-sectoral international research partnerships like this one should be viewed as models for investment in the African research base to tackle global challenges.

Crucially, success stories should also be communicated strategically to policymakers in order to illustrate the value and impact of sustainable investment in international partnerships for impactful research and development.

Embedding international collaboration in the next generation of researchers; innovative models for doctoral training and research career support

International collaboration enhances research quality and impact. Embedding the next generation of researchers on the African continent within international networks is critical for the future quality of African research output. However, challenges for doctoral training and early career research development remain, and include brain drain, inadequate institutional support and the lack of coordination between networks supporting research development on the continent.

Split-site fellowships can play a critical role in addressing these capacity gaps. To enhance the impact of these fellowships, a combination of different models must be adopted, which respond to local need and are adapted to a variety of research career stages. Alongside this, cultivating networks of African research talent is critical, including identifying emerging research leaders and incentivising them to stay within African research systems, and enabling knowledge-sharing between researchers at different career stages, for example through reverse mentoring schemes. Equitable partnerships must also be embedded in these collaborations to ensure reciprocity of outputs. Collaboration must go beyond individual success and develop intergenerational networks that can be institutionalised to build sustained, embedded research capacity over time.

Gender mainstreaming should also be prioritised within programmes, alongside opportunities for accommodating family/unpaid care responsibilities, to ensure that female researchers/those who are primary care givers, can contribute fully to the African research base.

Synergies between doctoral training and early career research opportunities should be effectively leveraged within internationally collaborative programmes, to enable mutual learning, to strengthen discipline specific networks and knowledge and to catalyse self-sustaining environments for career development.

Strengthening research systems for more and better research

There has been significant commitment from international funders to strengthening research capacity at the individual level in Africa. This has increased the number of early career researchers on the continent. However, more support is now needed to strengthen institutional and research system capacity to sustain the career pipeline, create an enabling environment for success and facilitate the significant contribution that the African research base has to make to overcoming global challenges.

Universities can play a crucial role in supporting this by protecting researchers from the competing demands of teaching and administrative commitments. University leadership must seek to address the systemic issues of teacher shortages and a lack of dedicated teaching and research administration staff.

Learning from and building on existing programmes that have sought to address these challenges (e.g. [ReMPro Africa](#) and [PEBL](#)) there is significant opportunity for future international programmes to strengthen institutional capacity for teaching and research management systems. National governments and bodies e.g. Commissions for University

Education, should work together with higher education institutions to address these challenges.

Data-driven approaches to institutional bench-marking in areas including research management, gender equity, academic career progression and governance, can help to monitor and identify priorities for capacity-strengthening, such as the [Science Granting Council Initiative](#) on governance practices. Good data can be used to drive changes in funding structures that are better designed to support across the research cycle and ecosystem.

Enhancing the societal impact of research in Africa and beyond is the founding pillar of this vision for future success. In order to achieve this, the capacity of the academic and policy communities to work more effectively together across the research cycle must be strengthened.

Innovative funding models that aim to strengthen the relationship between researchers and public policy actors in the geographies where their research is focused will strengthen the relevance, production and utilisation of research outputs.

There is a role for all actors across the global research and innovation sector in delivering this vision. Without collaborative action from academics, university leaders, funders, governments, the private sector and civil society we cannot fully realise the immense potential of these partnerships to tackle the intractable societal challenges facing Africa and beyond.

Annex 3 – The convening partners for this work

The Association of Commonwealth Universities (ACU)

With more than 500 member universities in 50 countries, the ACU is the world's first international university network, established in 1913 and incorporated by Royal Charter. The organisation is dedicated to building a better world through higher education.

International collaboration is central to this ambition. By bringing universities together from around the world – and crucially the people who study and work within them – we help to advance knowledge, promote understanding, broaden minds, and improve lives. There are more than 3500 students on ACU-administered scholarships at any one time, resulting in nearly 90,000 alumni, 36,000 of which we remain engaged with.

Accredited by the Commonwealth and the United Nations, the ACU also champions higher education as a cornerstone of stronger societies, supporting our members, partners, and stakeholders to strengthen their capacity across research, teaching and partnerships, as they adapt to a changing world.

The African Research Universities Alliance (ARUA)

Composed of sixteen (16) leading research universities in Africa, ARUA aims to enhance research and graduate training in member universities through a number of channels, including the setting up of Centres of Excellence (CoEs) at its member universities. Addressing key challenges of Africa's sustainable development, ARUA CoEs are intended to be focal points for aggregating world-class researchers from member universities and elsewhere to undertake collaborative research in priority thematic areas while providing opportunities for graduate students from the region and elsewhere to work with the researchers. ARUA's priority areas include collaborative research, training and support for PhDs, capacity building for research management and research advocacy.

United Kingdom Research and Innovation (UKRI)

Our organisation brings together the seven disciplinary research councils, Research England, which is responsible for supporting research and knowledge exchange at higher education institutions in England, and the UK's innovation agency, Innovate UK.

Our nine councils work together in innovative ways to deliver an ambitious agenda, drawing on our great depth and breadth of expertise and the enormous diversity of our portfolio.

Through our councils we maintain and champion the creativity and vibrancy of disciplines and sector-specific priorities and communities. Our councils shape and deliver both sectoral and domain-specific support.

Whether through research council grants, quality-related block grants from Research England, or grants and wider support for innovative businesses from Innovate UK, we work with our stakeholders to understand the opportunities and requirements of all the different parts of the research and innovation landscape, maintaining the health, breadth and depth of the system.