

Royal Society-FCDO Africa Capacity Building Initiative (ACBI): Optimising the inter-relationship between individual- and organisational-level research capacity strengthening efforts

The Africa Capacity Building Initiative (ACBI) was designed to strengthen the research capacity of both individual members and their respective organisations. In most cases, these organisations were African universities or research institutions at which ACBI members were either enrolled as students or formally employed.

Individual members of ACBI consortia directly benefitted through such things as PhD fellowships, access to varied and extensive workshops, training and networking events and through resourcing to undertake applied research projects. Their respective organisations directly benefitted from a wide range of material support provided through ACBI in support of consortia activities. For example, the purchase of sophisticated laboratory equipment, ICT infrastructure development or contributing to the establishment of new research centres. However, organisational benefits of ACBI consortia membership were also derived through the knowledge, skills and resources many of their staff and students acquired through ACBI participation. In this brief case study, we highlight the inter-relationship between individual- and organisational-level research capacity strengthening observed across ACBI consortia. We present five examples of this inter-relationship from which we distil learning as to how individual capacity strengthening efforts may be optimised to facilitate even greater organisational-level impact.

1. Supporting and retaining PhD students to 'capacity-share'

ACBI supported a cohort of 38 African early career researchers through well provisioned PhD studentships. These PhD students were often a valuable resource to their home institutions, taking the time to mentor other students, contribute to teaching programmes and actively imparting knowledge, skills and resources acquired through ACBI to others.

Ensuring postgraduate students funded through consortia engage in 'capacity sharing' activities, and providing the time, encouragement and resources for them to do so, therefore stands out as an obvious opportunity for institutional capacity strengthening. The PhD students also benefit from the opportunity to gain a wider set of skills and experiences relevant to research career development. Many ACBI PhD students were recruited from the core faculty of ACBI partner institutions yet retained their institutional positions. These students were especially well positioned to facilitate knowledge transfer and were less prone to being lost to the institute at the conclusion of the ACBI programme. In those cases where ACBI PhD students were not recruited from existing faculty, the respective consortia were required to develop retention strategies to minimise the risk of the latter. There were several examples across ACBI of PhD students being successfully recruited into institutional positions at the conclusion of their studies, suggesting a planned retention strategy can pay dividends.

2. Proactively supporting the development of teaching curricula

Many consortia members reported participating in the review and/or development of teaching curricula at their home institutions at some point during the ACBI programme. These activities were not directly supported nor facilitated by ACBI; however, the respective consortia members, most of whom were senior academics in their home institutions, were able to introduce new knowledge and resources acquired through ACBI participation into teaching curricula when these opportunities arose.

Given high quality teaching, especially postgraduate teaching, is core to growing and sustaining research activity and to addressing human capital needs, and given the clear appetite for utilising ACBI-acquired knowledge and resources in this way, then future consortia could aim to proactively support curriculum development and teaching practice. Examples might include the provision of content specifically designed to be utilised in teaching programmes, mentorship/peer review in developing teaching curricula and training in modern teaching methods to strengthen pedagogical practice.

3. Harnessing the influence of senior consortia members to maximise institutional impact

ACBI consortia members, especially more established mid-to-senior career researchers, were appointed to a wide range of influential institutional committees over the lifetime of the programme and/or gained promotion to high-ranking institutional offices. These internal appointments within their respective institutions were often attributed, in part, to the prestige and professional development opportunities that arose from ACBI membership. Committee representation and promotion to higher-ranking office provided greater opportunities for the respective ACBI consortia members to exert positive influence on their home institutions. For example, via an appointment to a 'higher degrees committee', one ACBI member was able to inform the development of guidelines for all MPhil and DPhil programmes in her faculty greatly enhancing quality assurance processes as a result. In this example, the respective consortia member was able to draw on her ACBI consortia experiences to inform the guideline development. However, few consortia specifically set out to utilise the full range of opportunities for institutional influence afforded via the appointments and promotions of their individual members.

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"All of our Principal Investigators based in Africa have been promoted during the lifetime of our ACBI project."
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ACBI consortium Africa-based Principal Investigator
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A more proactive approach to identifying such opportunities and exploring the potential to more fully utilise them to facilitate institutional impact could be considered. For example, if a consortia member is appointed to an institutional research ethics committee, then this could be used as an opportunity to identify and provide any needed capacity strengthening actions in support of this committee's mandate.

4. Seizing opportunities to strengthen postgraduate supervisory practice

As the provision of PhD studentships was a central component of all 10 ACBI consortia, considerable emphasis was placed on developing supportive PhD student supervision and mentorship structures. All consortia were required to create a formal supervision and mentorship plan for each one of their PhD students in year one of the grant. These plans were then reported against to the funder on an annual basis. These plans often introduced practices that were not routinely applied to PhD supervision at the member institutions. For example, in some consortia written roles and responsibilities were drafted for both students and their supervisors, efforts were made to ensure female mentors were available for female PhD students and publication protocols were established to ensure student's authorship rights were protected. However, supervision practices were not uniform across all consortia and, in some cases, negative supervisory experiences were reported by ACBI PhD students at times. (Find out more at [Royal Society-FCDO Africa Capacity Building Initiative Case Study on the Challenges and Benefits for PhD Students | Royal Society](#).) Similarly, improvements to supervision practice implemented by some ACBI consortia remained consortia specific and were not 'institutionalised' by the member Universities (i.e. they were only applied to ACBI PhD students for the duration of the programme). These examples highlight the opportunities for consortia to exert positive influence on PhD supervisory practices, yet also indicate that not all consortia took full advantage of these opportunities. A key learning from ACBI, therefore, may be the need to proactively facilitate uniformly high 'good practice' supervisory standards in support of consortia funded PhD students as well as the broader institutionalisation of these good practices.



Image: Professor Imelda Bates from the Centre for Capacity Research at the Liverpool School of Tropical Medicine, delivering training to RS-FCDO ACBI Laboratory Technicians at a capacity building event in Lusaka, Zambia in 2019.

As noted in the previous point, it is highly likely that consortia members will be in positions of influence within their respective institutions to support such endeavours.

5. Ensuring wide access to consortia funded activities and resources

Only a small fraction of the staff and student body of ACBI member institutions were formal members of an ACBI consortium at an individual level. These staff and students had access to a wide range of ACBI resources that were not readily available by other means. Recognising that this access potentially conferred a considerable advantage to consortia members as compared to their institutional colleagues, all ACBI consortia sought to make ACBI-funded workshops and training events open to as many participants as possible, irrespective of whether they were consortia members or not. As reported in a complementary case study, of the 64 technical or general professional skills training workshops provided by ACBI consortia between January 2017 and December 2021, 82% (56/64) included participants who were not formal members of an ACBI consortium. Furthermore, of the 2839 individuals who collectively attended these 64 training workshops, 73% (2066/2839) did not belong to an ACBI consortium. These figures demonstrate both the demand for training and professional development opportunities as well as the potential to support broader impact through inclusive approaches to training provision.

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“Having the whole team from the laboratory attend the ACBI training, as opposed to just those laboratory members who belonged to the consortium, helped build and reinforce essential capacity for the benefit of all. The whole team got better and were able to lift each other up.”

ACBI consortium project coordinator

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A summary of key recommendations for optimising institutional impact through individual level research capacity strengthening activities

- Provide the time, encouragement and resources to consortia funded PhD students that will enable them to share knowledge, skills and resources acquired through consortia participation with others.
- Recruiting consortia students from the faculty of member organisations may enhance retention post project. Where this is not possible or appropriate, creating a retention strategy from the project outset detailing actions needed to enhance retention prospects post-project presents as good practice.
- Make available teaching resources to relevant consortia members from partner universities that can be directly incorporated into their respective postgraduate teaching curricula. These resources should, at least in part, focus on generic research skills to maximise their suitability across multiple teaching programmes. Additional support to design and deliver postgraduate teaching curricula, with an emphasis on research skills and methodologies, could also be considered.
- Establish and maintain a register of the committee memberships and roles and responsibilities of consortia members at their respective home institutions. Draw on these records, in consultation with the respective members, to identify unique opportunities to support institutional capacity strengthening throughout the consortia life course.
- Review postgraduate supervision policies at consortia partner institutions at project outset as well as training, resources and accountability mechanisms in place to support good supervisory practice. Drawing on findings from these reviews, seek to implement postgraduate supervision capacity strengthening interventions as required and that have potential to be institutionalised. Where possible, and drawing on the previous bullet point, senior consortia members from the respective partner universities should be supported to ‘drive’ these institutionalisation efforts.



Image: Simon Cain from Westbourne Training and Consulting delivering Presentation skills training to RS-FCDO ACBI PhD students at an Award Holders' Meeting in M'bour, Senegal in 2018.

- Wherever possible, any consortia-funded training activity should be made accessible to relevant non-members. To support these efforts, consortia could be resourced to undertake institutional-wide training needs assessments at project outset to identify priority training needs and potential audiences in partner institutions. Consortia should also be required to report training attendance figures disaggregated by member and non-member status.

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