

Evaluation Report

INDEPENDENT REVIEW: INSTITUTIONAL
CAPACITY STRENGTHENING OF CLIMATE
IMPACTS RESEARCH CAPACITY AND
LEADERSHIP ENHANCEMENT (CIRCLE)

ON BEHALF OF: THE ASSOCIATION OF
COMMONWEALTH UNIVERSITIES

Authors:
Ema Kelly, Vicki Doyle and Mick Kelly

JULY 2021

Submitted by



Capacity
Development
International

Capacity Development International Ltd
Liverpool
United Kingdom

info@capacity-development.com
www.capacity-development.com

Date: July 2021

This report should not be circulated without permission
of the client.



CONTENTS

Acronyms	5
Executive summary	1
1. Introduction.....	6
2. Review object, beneficiaries and objective	6
3. Methodology and approach.....	7
3.1 Limitations	9
3.2 Ethics.....	9
4. Institutional Strengthening Programme: Overview.....	10
5. Findings and Discussion: Institutional Strengthening Programme	11
5.1 Relevance	12
5.1.1 Alignment with the needs of beneficiaries.....	12
5.1.2 Alignment with good practice	13
5.1.3 Alignment of inputs and activities with the ToC and purpose of the programme.....	16
5.1.4 Complementarity with similar initiatives	17
5.2 Effectiveness: Inputs, Activities and Outputs	18
5.2.1 Capacity Strengthening [I2] and Learning and Tools Provided by the Programme [I3]	18
5.2.2 Beneficiary Institution Implementation of the ISP [A1].....	23
5.2.3 Programme Level Outputs and Learning [A2]	28
5.3 Effectiveness: Outcomes	31
5.3.1 Beneficiary Institution ECR Support Strengthening [O1]	31
5.3.2 Increased competence of ECR [H1]	37
5.3.3 Increased prospects for ECR [H2]	40
5.3.4 Beneficiary Institutions Climate Change Research Strengthening [O2]	44
5.3.5 Strengthened capacity of and relationships between researchers and support staff [H3] ..	48
5.3.6 Strengthened climate change research institutional arrangements [H4]	52
5.4 Efficiency	56
5.4.1 Resources (small grants and human capital inputs) [I1]	56
5.4.2 Project Management and Governance [I4]	60
5.5 Impact.....	61
5.5.1 Perceived Impact	61
5.5.2 Embedded Change in Beneficiary Institutions [S1].....	63
5.5.3 Synergies [S2].....	69
5.6 Sustainability	71
6. Findings and discussion: Relationship between individual and institutional strands	77
7. Findings and Discussion: AAS Capacity to Manage Fellowship Schemes [AAS1-4].....	83
8. Findings and discussion: Future Programme Design	85
9. Findings and Discussion: Future Monitoring, Evaluation and learning Framework.....	92
10. Conclusion.....	96
11. Next Steps.....	99
12. Acknowledgements	99
Recommendations From Throughout the Report	100
Annex 1: Theory of Change	104
Annex 2: Example Survey for institutional strengthening M&E.....	107
Annex 3: Models, frameworks and Toolkits utilised for ISP workshops	108
Annex 4: Evaluation Indicator Framework	109
Annex 5: Terms of Reference	114
Annex 6: The Consultant Team	117

List of Figures

Figure 1 Sample ISP participating institutions	8
Figure 2 Numbers of interviewees by category	8
Figure 3 Timeline and stages of the evaluation	9
Figure 4 Timeline of ISP support provided by CIRCLE delivery partners	11
Figure 5 Key themes in research capacity strengthening from the literature	14
Figure 6 Extracts from the programme logframe that relate to the ISP	16
Figure 7 Training topics for ECRs	32
Figure 8 Cadres targeted for mentoring through institutional mentoring schemes	33
Figure 9 Stage of development of policies	34
Figure 10 Institutional structure enhancements	44
Figure 11 Training to researchers (non-ECRs) and support staff	46
Figure 12 Health Systems Support and Strengthening Cube	67
Figure 13 ISP a permanent structure	72
Figure 14 CVF Contributions to institutional strengthening in the CIRCLE programme	79
Figure 15 Benefits to CVFs of participating in the CIRCLE ISP	80
Figure 16 Institutional Strengthening Streams for a future programme	90
Figure 17 Overview of an MEL framework	94
Figure 18 Extracts from the programme logframe that relate to the ISP	96

ACRONYMS

AAS	African Academy of Sciences, Kenya
ACU	Association of Commonwealth Universities
AESA	Alliance for Accelerating Excellence in Science in Africa
AWARD	African Woman in Agricultural Research and Development
CDI	Capacity Development International, UK
CIRCLE	Climate Impacts Research Capacity and Leadership Enhancement
CLARE	Climate and Resilience Framework
CR4D	Climate Research for Development in Africa Initiative
CSIR	Council for Scientific and Industrial Research
CVF	CIRCLE Visiting Fellow
ECR	Early Career Researcher
FCDO	Foreign and Commonwealth Development Office, UK
FLAIR	Future Leaders – African Independent Research
HR	Human Resources
INASP	International Network for Advancing Science and Policy
IPCC	Intergovernmental Panel on Climate Change
ISP	Institutional Strengthening Programme
MEL	Monitoring, Evaluation and Learning
MOUA	Michael Okpara, University of Agriculture, Nigeria
NIHR	National Institute for Health Research
NRI	Natural Resources Institute, Greenwich University, UK
OECD/DAC	Organisation for Economic Cooperation and Development/Development Assistance Committee
RDF	Researcher Development Framework
Sida	The Swedish International Development Cooperation Agency
SSA	Sub-Saharan Africa
STARS	Structured Training for African Researchers
STEPRI	Science and Technology Policy Research Institute, Ghana
ToC	Theory of Change
ToR	Terms of Reference
UENR	University of Energy and Natural Resources, Ghana
UKCDR	UK Collaborative on Development Research
UKRI	UK Research and Innovation

EXECUTIVE SUMMARY

Climate change is having a growing impact on the African continent, hitting the most vulnerable hardest, and contributing to food insecurity, population displacement and stress on water resources. A better understanding of this potential impact has become critical to developing sustainable and cost-effective responses, however, the level of support and resources required to build a solid research base within sub-Saharan Africa are still lacking. The Climate Impacts Research Capacity and Leadership Enhancement (CIRCLE) programme aims to strengthen climate change research within sub-Saharan Africa. The purpose of this evaluation is to assess the impact of institutional capacity strengthening through CIRCLE and generate learnings that will feed into the development of the UK Foreign, Commonwealth & Development Office's Climate and Resilience Framework (CLARE).

This evaluation was conducted between January and July 2021. It covered four focal areas:

1. The design, delivery, and perceived potential impact of the institutional strengthening strand of the programme (ISP).
2. The relationship between the individual and institutional strands of the programme as a model for capacity strengthening.
3. The design, delivery, and perceived potential impact of the strengthening of the African Academy of Science (AAS) strand of the programme.
4. The monitoring, evaluation, and learning (MEL) of the institutional strengthening objectives, with a focus on designing an MEL framework for future programmes.

The evaluation took a realist, theory-based approach that was both formative and summative. Participatory workshops were used to design the theory of change underpinning the evaluation framework and to discuss preliminary findings. Eleven sample participating institutions were chosen through purposive sampling. A total of 74 interviews were undertaken with key informants from participating institutions, delivery partners, the funder and other stakeholders. An e-survey with participating institutions was used to prioritise recommendations and test an approach to future monitoring, evaluation and learning (MEL). The institutional response rate was 62% (n=18). Limitations of the evaluation included: staff turnover, few interviews with early career researchers who did not receive a CIRCLE fellowship, measuring impact for institutional strengthening within the programme timeframe. In addition, due to factors outside the control of the evaluation team only a small number of informants from AAS were available for interview, leading to a largely descriptive evaluation of the AAS component which is not included in the executive summary.

RELEVANCE

The need to invest in institutional strengthening for early career researchers (ECRs) in sub-Saharan Africa is recognised in the institutional strengthening literature. The capacity strengthening approach used in the CIRCLE programme adhered to recognised good practices. There was a clear consensus that the CIRCLE programme aligned with the vision and mission of the participating institutions, their aspiration to conduct world class research, as well as the individual needs of CIRCLE visiting fellows (CVFs) and ECRs. The emphasis on ECR strengthening, formal mentoring and enhancing institutional policies bridged an important gap. The programme supported younger institutions to develop new structures and systems, and more established ones to strengthen existing ones. Addressing both individual and institutional capacity strengthening was highly valued by participating institutions. Whilst there were some synergies between CIRCLE and other programmes most complementary activities were at the individual level within participating institutions for example utilising resource materials on mentoring from other programmes. There was only limited engagement between CIRCLE and the other FCDO/DFID funded initiatives in either climate change or institutional strengthening. It is hoped that the **more integrated approach planned in the CLARE framework will allow programmes to learn and complement each other more strategically.**

EFFECTIVENESS

Effectiveness: Inputs, ISP Implementation and Learning

The content, methodology, tools, materials, and facilitation of training were viewed as being of a high standard, as well as relevant to the sub-Saharan Africa context. The Researcher Development Framework (RDF) was appreciated at all levels, although connectivity issues meant the online planner was less widely used. Informants stated that training of trainer workshops delivered directly by Vitae provided greater confidence in utilising the RDF than those delivered internally. Additional inputs such as a peer to peer mentoring process might support adoption, or a series of virtual master classes to embed the knowledge. Face to face technical support from the delivery partners was highly rated, however, providing this support to the ISP teams outside of the workshops never met its full potential and is an area that could be developed in future programmes so that institutions can access trusted expertise when required in a way that suits them. The opportunities provided for **south-south inter-institutional sharing and learning** were highly valued and there is scope to extend this in future programmes. **Grouping or pairing institutions** working on similar initiatives could provide a valuable benchmark and mutual support mechanisms.

The participating institutions clearly embraced the CIRCLE experiential learning approach, adapting all elements to their own context. This occurred by means of the formation of teams, structured gap analysis, and the development and implementation of action plans. ISP team composition varied in size, structure, and reach. This related to programme funding, institutional complexity and senior level buy-in. Staff turnover of senior management and/or ISP members affected continuity and momentum. When ISP members were promoted, this often allowed greater institutional influence. Regular **updates to senior leadership are essential in managing changes in staff roles and turn over at institutional level** whilst ensuring a conducive environment for the ISP. Action plans were updated on an annual basis, and specific training activities were evaluated. However, routine monitoring and evaluation (M&E) of the ISP action plan was not systematic and it was difficult for ISP teams to track the reach of their interventions or present their impact to senior management. **Strengthening M&E is essential.**

CIRCLE should be commended for its investment in learning and its reflexive and adaptive approach to programme delivery. **Learning products** included the peer case studies, good practice guides and Climate Change Institutional Strategies report which should form an **important foundation for any future programme**. Participants of the ISP teams and delivery partners identified important learning about the process of institutional strengthening.

Effectiveness: Early Career Researcher Support Strengthening

Early career researcher support strengthening is a core component of the ISP including, career guidance, continuing professional development, mentoring, and strengthening policies and processes. ISP teams and their institutions have been very resourceful in delivering training and support to ECRs at low-cost utilising internal resources. The demand for, reach, content, duration and frequency of training varied considerably between the participating institutions, as did the extent to which training was embedded into existing systems. E-survey results (n=16 institutions) show that 56% of training delivered was institution wide, 38% reported reaching a smaller number of departments and 6% reached only one department. Survey respondents reported reaching all or most ECRs in 44% of institutions whilst 56% reached some or a small number of ECRs. Whilst many universities reported informal mentoring before CIRCLE, none of the sample institutions had formal mentoring schemes in place at the programme start. 62% of institutions that had developed mentoring guidelines or policies under CIRCLE stated that the mentoring scheme had been implemented. There was widespread appreciation of the importance of mentoring and how it differed from a more traditional supervision model. CVFs played a key role in mentoring other ECRs and were regarded as role models.

Significant progress was made in the development, drafting and or updating of enhanced institutional policies and frameworks across participating institutions including promotion criteria, recruitment

policies, gender discrimination policies, mentorship policies, and induction processes. Barriers to policy development and implementation were numerous and included: time and resource, expertise, lack of institutional continuity and leadership, lack of integration, cumbersome approval stages, slow buy-in, and a lack of evidence to inform policies.

ECRs clearly benefitted from the ECR strengthening component of CIRCLE, gaining soft and research skills and competencies. Leadership and mentorship skills were mainly built amongst the CVFs, building on their fellowship and ISP experience. Institutions were pleased to see significant increases in publications particularly amongst CVFs. Whilst in some cases training and mentoring were attributed to increased quality and quantity of publication amongst ECRs in many cases it seemed to have a stronger link to the CVF, rather than the ISP programme. Mentoring helped ECRs achieve qualifications more quickly and contributed to their attainment of promotion criteria. Whilst increasing research equity is discussed, African universities struggle to compete for international funding and scholarships. ECRs should not be expected to fund their own research which continues to be the norm in sub-Saharan Africa for the large number of ECRs who are unsuccessful in gaining scholarships. Future programmes should also consider including **institutional seed corn funds to support ECRs with their research costs** if they are seeking to support the wider ECR community through institutional strengthening. Ideally such schemes should eventually be funded directly by institutions themselves and hence should be managed by them.

Effectiveness: Climate Change Strengthening

Most of the inputs in the workshops and activities in ISP were focussed on ECR strengthening. However, there were also inputs and activities focussed on climate change. New institutional structures such as centres relating to different aspects of climate change were launched in many institutions, often driven by CVFs. In other institutions existing centres/departments/faculties were strengthened. There was little evidence of enhanced strategic frameworks within the sample institutions. There were, however, examples of enhanced climate change research curricula and teaching. Some institutions also provided training for researchers and support staff covering the RDF, academic writing, grant writing, mentoring, data analysis, communication skills, research uptake, ethics, and due diligence in research administration. The CVFs were an important resource and sometimes driver of institutional improvements in relation to climate change.

All survey respondents reported that there had been either some or a significant increase in interest in climate change research because of CIRCLE. Training provided to researchers and support staff was linked to increased skills and effectiveness although it was hard to get concrete examples of the impact of this. There were many examples of informants stating that the ISP had strengthened capacity to win funding or publish through the formation of research groups utilising CVFs and the training provided to research staff. However, of the survey respondents, 50% of the institutions had solely received only national or institutional grants. International funding is important to conduct research at scale and also to provide funds to sustain institutions and developmental activities within them. Hence it is recommended that future programmes **focus on building capacity to ultimately increase national and international collaborative funding.**

Decisions on the form of structures within participating institutions were largely driven by institutional norms rather than climate change research strategy. Institutions provide space and some small resources to new centres, such as centres of excellence, but ongoing success was identified as depending on gaining external funding. Increased engagement with policy, decision makers and research beneficiaries was driven by the research uptake funds provided to CVFs and elements of the training provided for the ISP. There was a striking change in attitude towards applied research addressing local problems coupled with increased aspiration to engage with policy makers and beneficiaries. There were examples of stronger links with national government; with institutions being invited to participate in Technical Working Groups or equivalent. **Research uptake should remain a strong focus of any future programme** and should be an integral part of institutional strengthening efforts. Capacity strengthening in how to engage policy makers and communities coupled with funding to undertake these actions is a strong intervention. Capacity strengthening on how to budget and

advocate for research uptake to funders or international partners further adds value of this element of the programme.

There were improvements to department and interdisciplinary collaboration, largely driven by the CVFs who were drawn from different departments and disciplines. Whilst there were gains in relation to climate change research these were mainly driven by the CVFs rather than the ISP. Arguably having a clear strategy for climate change research would support CVFs more than strengthening institutional ECR training and mentoring which was largely facilitated by CVFs rather than being for CVFs. It is therefore recommended that future programmes have a **specific institutional strengthening stream focussing on strategy for climate change research**. Incorporation of climate change research and actions into institutional strategies is also recommended in the 2018 CIRCLE report by NRI “Organisational Strategies and Structures for Climate Change Research in sub-Saharan Africa”.

EFFICIENCY

The design of the programme was based on previous experiences of the Association of Commonwealth Universities (ACU) driving institutional strengthening with minimal funding but with technical inputs. The approach seeks to address problems of sustainability. Funds have been primarily used by institutions to support training costs and were widely supplemented by in kind contributions. Most institutions recognised achievements but felt funding had been insufficient to meet needs. This was particularly in relation to spreading interventions to the whole institution. It is recommended that in any future institutional programme **participating institutions are assisted to cost activities in terms of developmental costs, piloting costs and implementation at scale** in order to be realistic about the scope of change that is achievable within the budget and to look for additional funding where necessary. There is a case in future programmes to provide funds for existing CIRCLE participants to scale up the gains that they made in CIRCLE in order to protect the investment made by FCDO and the participating institutions. The human capital invested in the programme was widely praised by the participating institutions as being world class. Informants were very positive about the project management and governance, and delivery partners had good complementarity. Participating institutions identified that they would have benefited from more frequent evaluation or monitoring to support timely achievement of objectives. It may be that post pandemic, virtual contacts may be more acceptable. **Programmatic M&E was insufficient to allow robust tracking of the ISP and should be strengthened in future programmes.**

IMPACT

When institutions were asked to identify the most important changes from CIRCLE ISP for their institution, they identified a wide range of improvements. From mentoring and training to changes in the research culture and structures to increased research outputs. Institutions took different approaches to embedding which were also influenced by the scale of the interventions; being either institutional wide or more focused in particular departments or faculties. A top-down approach utilising central departments and senior administration was recommended for embedding institution wide changes and this resonates with findings from other institutional strengthening initiatives. None of the key informants interviewed were aware of an institution wide climate change policy. This is a missed opportunity for institutions to identify priority research needs of the societies that they serve and their comparative advantage in being able to respond to them. There were examples of multi-country research projects arising from CIRCLE and increased south-south collaborations although it is arguable that the CVF programme had more impact than the ISP. Training delivered by the ISP was in demand from other departments and involvement in the programme had inspired the NextGen workshops which were initiated by a participating institution ISP member working with ACU.

SUSTAINABILITY

Where there was significant senior management buy in and integration into existing institutional structures there was high confidence that improvements would sustain. In other institutions, however, there was less confidence with funding, staff turnover in senior management, lack of internal

resources, and competing priorities seen as barriers to sustainability. Sustainability is a difficult issue for any development programme and there are positive signs in many of the institutions. The CIRCLE programme should be commended for making embedding change part of the process. Enabling institutions to grow their portfolio of national and international research releases overhead and/or capacity strengthening levies which can support the sustainability of institutional strengthening.

The relationship between institutional and individual strengthening strongly contributed to the success of the ISP through CVFs being key resource persons and in some cases the driving force behind the ISP. This was achieved through spreading learning both directly through the ISP but also indirectly through their formal and informal roles within the institution. CVFs became hubs of climate change research activity and advocacy, leading to increased publications and research outputs and, increasing the visibility of the institution. CVF research uptake funds became catalysts for a change in the design and dissemination of research. CVFs themselves received significant benefits from their involvement in the ISP, in particular gaining visibility, understanding of how to enact change and facilitate workshops and develop leadership skills. **These strong synergies show that this is a robust model for any future institutional strengthening programme.**



Key Recommendations for Future Programmes

Future Institutional Strengthening Programme

- Develop a theory of change specifically for the institutional strengthening programme to ensure that activities and outcomes align
- Reflect on the tension between research equity and research excellence in the design of CLARE
- Include a dual approach to capacity strengthening in which individual fellows directly contribute to institutional research capacity strengthening
- Have a critical mass of fellows within institutions rather than spreading them thinly
- Clarify the aim of the early career researcher support between supporting fellows/participating ECRs, or the wider community of ECRs within participating institutions
- Ensure institutional strengthening is a cross cutting element of the CLARE framework
- Allow all institutions participating in any element of CLARE to participate in the institutional strengthening programme
- Address the need to build a portfolio of research grants through developing institutional climate change research strategies through institutional partnerships
- Have three, potentially mutually exclusive, streams of institutional strengthening: ECR support, climate change strategy support, and scale up from CIRCLE
- Include clear guidance within all CLARE framework application proposals regarding expectations for institutional strengthening
- Look for opportunities to build platforms for communities of practice between ECRs and institutions
- Take opportunities to connect with other funders and African institutions working on institutional strengthening in Africa

1. INTRODUCTION

Africa is particularly vulnerable to the environmental, social and economic impact of climate change. Indeed, the IPCC has indicated that Africa is likely to emerge as the most impacted region by 2100¹. Despite a level of consensus surrounding the current and future impact of climate change upon the region, there remain significant uncertainties in relation to its exact nature. A better understanding of this potential impact has become critical to developing sustainable and cost-effective responses, however, the level of support and resources required to build a solid research base are still lacking.

The Climate Impacts Research Capacity and Leadership Enhancement (CIRCLE) programme aims to strengthen climate change research within sub-Saharan Africa through a dual approach. Firstly, supporting individual academics to undertake research through the CIRCLE visiting fellows (CVF) element of the programme, while also working with the universities to improve their capacity to support the delivery and promotion of quality research through the Institutional Strengthening Programme (ISP). By doing this, CIRCLE seeks to enable African researchers to develop relevant local solutions and to improve the uptake of research that directly contributes to local, national, and regional policy agendas. This capacity strengthening initiative is led by the Association of Commonwealth Universities (ACU) www.acu.ac.uk in partnership with the African Academy of Sciences (AAS) www.aasciences.africa, Vitae www.vitae.ac.uk, and the Natural Resources Institute (NRI) at the University of Greenwich www.nri.org, funded by the UK Foreign, Commonwealth and Development Office (FCDO), formerly the Department for International Development (DFID).

The purpose of this independent review is to assess the impact of the FCDO's investment in institutional capacity strengthening through CIRCLE, and generate learning that will feed into the development of the FCDO's new Climate and Resilience Framework (CLARE). The review specifically aims to draw evidence-based lessons that will inform future programme design in research capacity strengthening, as well as providing recommendations for monitoring evaluation and learning (MEL) metrics that could be applied within related programmes. This review focuses on the past to identify good practices and models for future programmes.

Capacity Development International (CDI) was contracted to deliver an independent review of the institutional capacity strengthening element of the CIRCLE programme between January – July 2021 (Annex 5, terms of reference).

2. REVIEW OBJECT, BENEFICIARIES AND OBJECTIVE

The **object** of the review is the participating institutions who are part of the CIRCLE programme. The review focuses primarily on institutional capacity strengthening, including its relationship with individual capacity strengthening.

The **beneficiaries** of the programme are:

- Participating institutions
- Researchers within those participating institutions
- African Academy of Sciences (AAS)
- The wider climate change research/practice community

The **objective** of the review is captured in four focal areas:

1. The design, delivery, and perceived potential impact of the institutional strengthening strand of the programme.
2. The relationship between the individual and institutional strands of the programme as a model for capacity strengthening.

¹ <https://www.ipcc.ch/report/ar4/wg1/>

3. The design, delivery, and perceived potential impact of the strengthening of the African Academy of Sciences (AAS) strand of the programme.
4. The monitoring, evaluation, and learning (MEL) of the institutional strengthening objectives, with a focus on designing an MEL framework for future programmes.

3. METHODOLOGY AND APPROACH

The review used a realist, theory-based approach that is both formative and summative. Participatory approaches were used in the design of the evaluation by means of a scoping workshop involving stakeholders reviewing and unpacking CIRCLE's existing programme theory of change (ToC). Preliminary findings were reviewed, and recommendations developed for future programmes. A range of stakeholders and beneficiaries attended this workshop (n=18) and the subsequent preliminary findings workshop (n = 16). This included representatives from participating universities across sub-Saharan Africa, as well as delivery partners (AAS, NRI, Vitae, ACU), and the funder (FCDO). Discussions in both workshops were captured in real time.

The outputs and discussions from the scoping workshop were used to design a theory of change (ToC) for the evaluation (Annex 1) to capture essential elements of the inputs, activities (and associated outputs), outcomes, impacts and potential synergies specifically of the institutional strengthening programme. The ToC aims to fully outline the extent of the complex work provided by the programme, whilst ensuring the review is not overly detailed.

Each element in the ToC and accompanying assumptions form the basis of the evaluation framework (Annex 4). This was organised according to the OECD/DAC evaluation framework. The framework also identifies how the indicators relate to the four focal areas identified for this review. In many cases, an objective measure of whether an outcome has been met, or an assumption held true, is not possible due to the lack of data or difficulties of measurement. In these cases, the indicators focus on perceptions of whether these outcomes have been met. Hence our primary data collection method was key informant interviews supplemented by an e-survey. The ToC and evaluation framework were finalised and agreed upon with the CIRCLE evaluation steering committee prior to employing them in the development of the data collection tools. A range of open-ended questions were designed to avoid overly complex question guides.

The evaluation framework is grounded in the evaluation team's experience and knowledge of current academic thinking in the fields of strengthening research capacity, leadership development, institutional strengthening and embedding capacity strengthening within institutions. Programme documentation was used to provide context to the evaluation and was only incorporated into the analysis when it contained data unavailable through the primary data collection of the evaluation for example budget information.

Sampling was pragmatic and purposive whilst seeking to be representative in its selection of participating institutions. Informants from AAS and eleven sample institutions (see figure 1) participated via remote interview. Our site selection criteria included:

1. Involvement in extension phase
2. Geographical spread across Africa
3. Size of postgraduate student population (range)
4. Urban/rural mix
5. Nature of institution (university, research institution etc)
6. Age of institution (established, emerging)
7. Senior leadership involvement (enabling vs challenging environment)



Figure 1 Eleven sample ISP participating institutions – numbers in brackets indicate number of interviewees

The total number of key informants interviewed was 74 with the breakdown from each category given in the figure 2, alongside the original estimates of numbers.

Interviewee category	Estimated number of interviews	Actual number of interviewees
ACU Programme team (current & former members)	5	5
Vitae (Delivery Partner)	3	2
NRI, University of Greenwich (Delivery Partner)	2	1
AAS (Participating)	6	2
ISP Lead (participant institutions)	11	14
ISP Lead (non-extension institutions)		2
Individuals centrally involved in the institutional strengthening, including ISP champions, CIRCLE visiting fellows, other key stakeholders, ECR	44	34
Senior Leadership (participant institutions)	11	9
FCDO	1	2
Other stakeholders (Wellcome Trust etc.)	2	3
Total number of interviews	85	74

Figure 2 Numbers of interviewees by category

The collection of qualitative data was designed to ensure that every indicator would have data collected from at least two sources within each category of informant. Saturation was also sought and once achieved questions were no longer a focus of the remaining interviews. On completion of the key informant interviews, a short e-survey was sent to the leads within each participating institution (n=30). The response rate was 62% (n=18) with a denominator of 29 institutions. Of these, 50% were from institutions that were not in the sample. The survey focused on prioritisation of options for future programmes and testing possible indicators for a future MEL framework. This in turn added to the data available for analysis in this evaluation. The voices of partners and other stakeholders provided an external viewpoint, allowing triangulation from both internal and external perspectives. Qualitative data was analysed using a bespoke data analysis solution that has been developed and managed by CDI. This allowed rich qualitative data to be captured in real time during interviews, which is then coded against the indicators derived from the ToC. Additional themes can also be derived from the data to help inform changes to the ToC that are based on the reality of participants' experiences. This

data analysis solution allows us to use robust research techniques whilst delivering within a short timeframe. The stages and timing of the evaluation are illustrated in figure 3.



Figure 3 Timeline and stages of the evaluation

The deliverables were inception report, evaluation report, future MEL framework and webinar.

3.1 LIMITATIONS

Measurement of project impact is problematic for any institutional strengthening programme due to the challenges of attribution, as well as the high possibility that the length of time between interventions and impact is beyond the evaluation timeline. Hence, evaluation of impact is largely based on participants' current perceptions of impact and its potential in the future. In some institutions there had been significant staff turnover resulting in limited participants being available to interview that had a good knowledge of the programme. In addition, it was difficult to gain access to appropriate senior leadership within participating research institutions. Whilst robust, adapted research methodologies were used, the limited time available necessitated quicker and less formal analysis and synthesis techniques than would be generally used within a research study. Due to the timelines the survey was formulated before the full preliminary analysis. Poor connectivity resulted in several challenging interviews with a range of different platforms having to be used to get sufficient call clarity. Whilst we sought to evaluate the impact of the institutional strengthening programme, we conducted few interviews with Early Career Researchers (ECRs) who were not CVFs. In addition, despite reaching out to ISP Leads who were not part of the extension funding only two responded. Furthermore, due to changes happening at AAS, only a limited number of interviewees were able to participate. The COVID-19 pandemic meant that all interviews had to be done remotely and hence did not allow the two country visits to four sites which were linked to additional outputs of case studies. Only small case studies are included in the report embedded in the report text as appropriate.

3.2 ETHICS

Participation in the process was not mandatory and all respondents were provided with full information as to; the purpose of the evaluation, the processes undertaken including data collection, storage and destruction, their own role and contribution, and how their contribution may be reflected in the reporting. Explicit consent to interview was sought before the interview commenced. All interviews were treated as confidential unless explicit permission was granted by the respondent to identify or attribute their comment in the reports. All data collection was GDPR compliant. To comply with data protection a list of interviewees is not included in this report.

4. INSTITUTIONAL STRENGTHENING PROGRAMME: OVERVIEW

The CIRCLE programme works to strengthen climate change research within sub-Saharan Africa through an innovative dual approach to research capacity strengthening with two principle aims:

1. To strengthen the capacity of African scientists to undertake research on climate change and its local impacts on development (CIRCLE visiting fellowship (CVF) programme - individual capacity strengthening)
2. To strengthen the research capacity of participating African institutions (institutional strengthening programme - ISP)

The premise underlining this dual approach is discussed in the alignment with good practice section of the report.

The institutional strengthening programme (ISP) began in 2015 running parallel to the fellowship programme until March 2018. Thirty one institutions from ten African Countries (Ethiopia, Ghana, Kenya, Malawi, Nigeria, South Africa, Sudan, Tanzania, Uganda and Zimbabwe) participated in CIRCLE. The timeline in figure 4 highlights the core ISP support provided by CIRCLE delivery partners during this period.

The key activities that the ISP supported were designed to: establish a cross departmental implementation group (ISP team), conduct an internal analysis to identify current practice using the principles of the UK Concordat, complete a gap analysis, prepare an action plan to improve provision, implement those actions, review progress and update the action plan accordingly. Action plans were submitted annually to Vitae and ISP teams could apply for small grants to implement their proposed activities. Institutions were also supported through centralised face to face annual champions workshops and the training of trainers workshops in mentoring and the Researcher Development Framework (RDF) www.vitae.ac.uk/rdf. ISP champions (senior staff) and leads (coordinators) were responsible for driving the ISP in their respective institutions. The centralised workshops also provided a space for institutions to share experiences and best practice. Email, Skype and telephone technical support was offered to participating institutions.

Two extensions were granted by the funder following the initial ISP timeline:

- Extension 1 (2018-19); to continue the ISP and further monitor the impact of the ISP across the institutional network
- Extension 2 (2019-21); to undertake scoping studies to inform the design of the capacity strengthening strand of the Climate and Resilience Framework Programme (CLARE), and to contribute more fully to the understanding of how to strengthen institutional capacity

During the extension period, the twenty institutions who had successfully applied for the extension were encouraged to apply for additional ISP small grants to further strengthen and embed ISP activities. In total there were four rounds of the ISP Implementation Fund (August 2017, November 2018, October 2019 and December 2020). Institutions were given the opportunity to meet and share best practice at additional champions workshops, as well as through a series of funded case study visits. Continued financial support was also provided to support CVFs to publish and to apply for research uptake grants across all cohorts.



Figure 4 Timeline of ISP support provided by CIRCLE delivery partners

The ISP was collaboratively designed by the delivery partners with major input from Vitae and ACU. Vitae led the institutional training programme, with inputs from delivery partners during the workshops which were attended by representatives of all partners. NRI provided specific inputs to the ISP through workshops and a report regarding climate change research. There were elements of training content that cut across the CVF and ISP element of the programme, such as the Researcher Development Framework² (RDF).

5. FINDINGS AND DISCUSSION: INSTITUTIONAL STRENGTHENING PROGRAMME

The findings and discussion were initially structured using the OECD/DAC evaluation criteria for development programmes, moving through relevance, effectiveness, efficiency, impact and then sustainability. These findings specifically relate to the ISP programme. This is followed by additional sections of the report that look at; the relationship between the institutional and individual element of the programme, the role and strengthening of AAS, recommendations for a future programme and a future MEL framework.

In each of the initial sections under the OECD/DAC framework the sub-headings are taken from the theory of change and the references provided at the end of the title. For example, Resources [11]. See Annex 1 for the theory of change. The findings from the data are presented below the heading, and references are made in bold to the sub-sections of each of the elements in the theory of change. For example, **[I1a] Small Grants**. Following on from these findings, there is a section sub-headed 'Discussion' which outlines the opinions and recommendations of the evaluation team. Most sections contain boxes summarising enablers, barriers, recommendations, and good practices.

² <http://www.vitae.ac.uk/rdf>

5.1 RELEVANCE

This section of the report will assess the degree to which the programme was aligned with participating needs and accepted good practice in the field.

5.1.1 Alignment with the needs of beneficiaries

The CIRCLE call to institutions was extended beyond ACU member institutions and was open to universities and research institutions within the sub-Saharan Africa region. Whilst the call was open to non-anglophone institutions, the academic operating language of the programme was English. Selection of institutions was based on the results of an in-depth needs assessment survey, carried out during the programme inception period, that looked at the number of ECRs working in appropriate disciplines, as well as institutional need and commitment to strengthening research management support systems and policy. Applicant institutions were obliged to commit to the fellowship programme, as well as the institutional strengthening element of the programme. Participating research institutions ranged from young (0 to 20 years) and developing institutions (21 to 50 years), to well established universities within the sub-Saharan Africa region (51 + years). With this extensive range of participating institutions, the programme was designed to be adaptable to the context of each participating institution, recognising that each would have different starting points and needs.

“The design of the programme was around a journey rather than reaching a certain benchmark. In some countries and institutions, there were already structures in place, so they could hit the ground running. In other countries there was less government investment where the position and value of higher education is different.”

Delivery partner

The institutional strengthening strand of the programme, with its focus on supporting early career researchers (ECRs), academic mentoring and enhanced institutional policies and frameworks, was seen as highly relevant and as being aligned with the participating institutions. Young and ‘disadvantaged’ institutions identified multiple needs in supporting ECRs and research strengthening, and therefore the focus on ECRs was particularly valued. Senior leaders and ISP leads described how CIRCLE directly contributed to achieving their institutional priorities.

“Previously ECRs has been left to find their own way... I think CIRCLE filled a void in our research programme.”

ISP Lead

The ISP was seen as a route to developing future research leaders through its focus on enhanced ECR training, mentoring, career pathways and institutional policy strengthening.

“There was a clear gap on what the programme wanted to do compared to other funders... It covered significant distance within the chain of leadership and advancing science... Strategically there was a reasonable focus.”

ISP Lead

Another university described how CIRCLE had helped them retain first class graduates into staff posts and had contributed to a productive research culture that directly aligned to their ambition of research excellence. Participating institutions aspired to establish research centres and units as a means to expanding this aim.

“The university needs a lot of capacity building and the ISP activities have provided enormous capacity building support to staff.”

ISP Lead

Formal mentoring was identified as a gap and participating institutions embraced the opportunity to involve mid and senior level academics, and, in some cases, non-academic staff as mentors.

“We do it informally, but we think it is time to take it to a higher level by institutionalising it.”

ISP Lead

CVFs and ISP team members described how the ISP small grants and research uptake funds increased research outputs and improved the quality of their teaching, contributing to the specific mission and vision of each participating research institution. For some ‘disadvantaged’ institutions, allowing CVFs to conduct a one-year off-site fellowship provided a degree of tension as there was not always institutional capacity to cover their teaching load.

With the increasing prominence and importance placed on climate change research both globally and within sub-Saharan Africa, the focus of the programme has been widely welcomed by institutions.

Discussion

There was a clear consensus that the CIRCLE programme aligned well with institutional priorities and met the individual needs of CVFs and of ECRs from the participating institutions. The emphasis on ECR strengthening, formal mentoring and enhancing institutional policies had filled an important gap and this has been perceived as contributing towards the vision and mission of the participating institutions, as well as their aspiration to conduct world class research. The programme helped younger institutions to develop structures and systems that had been missing, while the more established institutions had been able to build on existing structures and systems. An important benefit of the institutional-led needs analysis approach was that each institution was able to develop and strengthen structures and systems at their own pace, based on their agreed priorities. CIRCLE was viewed as being unique in terms of its dual approach; its focus on both individual and institutional capacity strengthening was highly valued. For some of the less well-resourced “disadvantaged” institutions, releasing core junior academic staff for fellowships, while there had been limited teaching capacity, proved problematic. This required sensitising senior leadership to the purpose of the programme in order to encourage them to approve staff release for the fellowship training. This highlights the need for having an enabling policy environment that strengthens ECR support, and the need for building a critical mass of both academic and support staff to bolster teaching, research and service.

5.1.2 Alignment with good practice

This section reflects on the design of the CIRCLE ISP and its alignment with good practice. Recommendations for future institutional strengthening programmes are discussed in later sections of this report.

Most key informants identified that the CIRCLE programme followed good practice as far as they were aware of current thinking in the field.

“I think the programme embraced everything and followed good practice.”

ISP Lead

In recent years there has been increased attention on research capacity strengthening within low- and middle-income (LMIC) countries and in the past decade there has been a significant increase in research and capacity building investment in sub-Saharan Africa, primarily, from the global North. Donor funding for research capacity strengthening has taken various forms including vertical research projects with a capacity strengthening sub-component, north-south or south-south partnerships that aim to strengthen research capacity, centres of excellence approach, networks and consortia which aim to build long term organisational capacity, and ad hoc training.

There are multiple stakeholders and alliances who have been driving this agenda forward including; ESSENCE on Health Research, WHO/TDR, Alliance for Accelerating Excellence in Science in Africa, FCDO, Sida, NIHR, IDRC, Gates Foundation, UKCDR, UKRI, Wellcome Trust, Royal Society, British

Academy, LSTM Centre for Capacity Research, Association of Commonwealth Universities, INASP, African Academy for Sciences among others. It is beyond the scope of this evaluation to synthesise current knowledge and gaps in research capacity strengthening although drawing on recent evidence (grey and published literature) key themes of relevance to the design of the CIRCLE ISP are highlighted in figure 5.

Research, innovation and development funding	Often not prioritised by LMIC governments' with limited national research funding available for sub-Saharan African universities/research institutions
Systems approach	Sustainable capacity strengthening is required that responds to needs at different levels (individual, organisational and network level) and is tailored to the local context
Research impact	Long term investment required to deal with structural deficiencies, alignment with national needs and priorities and weak demand for research in policy making
Balancing research excellence with research equity	Funding biases entrench gaps between those who have and have not
Research management capacity	Multiple gaps in sub-Saharan African universities/research institutions which affects researchers' ability to obtain funding and manage research projects
Career pathways and incentives	Key barriers to research production relate to lack of career pathways, a research culture and incentives for academic staff to produce high quality research
Research information system	Lack of adequate ICT infrastructure hampers production, management and dissemination of research and limits 'big data' research

Figure 5 Key themes in research capacity strengthening from the literature

The CIRCLE programme adopted a dual approach to research capacity strengthening focusing on both individual and institutional capacity strengthening. The individual element aimed to strengthen the capacity of African scientists to undertake research on climate change and its local impacts on development whilst the institutional strengthening programme aimed to increase the capacity of African Universities/research institutions to support the development of their early career researchers and develop a coordinated and strategic approach to climate change research. This dual approach was designed on the premise that individual capacity strengthening alone is insufficient.

Existing experience and evidence³ indicated that the long-term impact of international scholarship and fellowship programmes is largely determined by the institutional context into which junior researchers return. The evidence also states that a dedicated team that can link researcher development to institutional objectives can be instrumental to the sustainability of researcher support programmes. There are indications that institutions providing researcher support programmes are more likely to succeed in building critical mass within strategic focal areas of research, whereas weaker institutions potentially encourage ECRs to seek opportunities elsewhere. Hence having an institutional strengthening strand of CIRCLE (ISP) potentially supports home institutions to create a more enabling environment for the returning fellows' and the wider pool of ECRs within those participating institutions.

The programme design was directly informed by learning from the Nairobi Process⁴, a British Academy-led initiative which aimed at stimulating debate around Africa- UK research collaboration and the provision of researcher support in African higher education. A key finding from the Nairobi process was the need to support researchers early in their careers and enable dedicated time for

³ Moss C (2016), The Nairobi Process. The next generation: Ideas and experience in African researcher support, British Academy & Association of Commonwealth Universities, London, UK.

⁴ <https://www.thebritishacademy.ac.uk/projects/knowledge-frontiers-nairobi-process/>

researcher development away from other administrative and teaching responsibilities within a supportive institutional context. This is the fellowship model utilised within CIRCLE.

Vitae, the lead delivery partner for the design and implementation of the ISP, had significant experience of the UK and European higher educational sector. The models, frameworks, and toolkits (Annex 3) used in the ISP were mainly drawn from the UK/European sector and applied and adapted flexibly to the sub-Saharan African (SSA) context. These models and frameworks are widely accepted to be gold standard in the UK higher education sector. The African Academy of Sciences and Association of Commonwealth Universities both with significant experience in the research context within SSA, were able to bring a grounded perspective to the ISP.

“I felt confidence in Vitae delivering the institutional strengthening programme. I observed their methods and the way they were workshopping and what they are delivering. Vitae ways of conceptualising research development are a gold standard within the UK. I never thought anything other than that they were providing state of the art support.”
Delivery Partner

An experiential learning approach was adopted by Vitae and supported by the delivery partners who actively participated in all trainings and workshops. The design encouraged exchange and learning between institutions, interactive group work, peer review and feedback sessions (see effectiveness section). The learning approach was welcomed by the participating institutions who expressed satisfaction with the technical content, resource materials and methods employed by the facilitators. Vitae used training of trainers’ workshops, to build the competence and skills of ISP team members, who cascaded the training within their respective institutions, and at the same time, built ownership and leadership for the ISP. Experiential learning and training of trainers for capacity development has been widely used across LMIC countries and is widely accepted as good practice⁵ for embedding and cascading learning.

“We had a chance to bring people from different countries together to go through one training and then go back to our countries to implement and train our colleagues. For me that is talking about good practice that is how it should be done. You get to know what is happening in other countries - and learn about the limitations and opportunities there.”
ISP Lead

The ISP team was intended to be a permanent improvement structure within the participating institution and the design aimed to encourage cross departmental membership of the ISP team. In the evaluators experience, we would advise against introducing new ‘project related’ structures but rather align with and strengthen existing institutional structures focused on research leadership and research capacity strengthening. These might be part of the research office or continuing professional development office or improvement committees.

Current thinking in climate change research was mainly provided as inputs into the CVF element of the programme but also was provided in the ISP workshops and through the NRI 2018 report, “Organisational Strategies and Structures for Climate Change Research in sub-Saharan Africa”. NRI are recognised as a specialist research, development and education organisation of the University of Greenwich, UK with a focus on food, agriculture, environment, and sustainable livelihoods.

Discussion

Investing in institutional strengthening is good practice and responds to a well-documented need in African higher education institutions. In relation to these key themes, CIRCLE primarily was focussed on the career pathways and incentives and within that on ECRs. Working at multiple levels (individual and institutional) aligns with good practice but there was less focus on the network level. There are difficulties in focusing in one area of research capacity strengthening as the system is interrelated; for

⁵ Vallejo, B., and U. Wehn. 2016. Capacity development evaluation: The challenge of the results agenda and measuring return on investment in the global south. *World Development* 79: 1–13.

example, if strengthening the capacity of ECRs through training and mentoring increases their success in writing successful bids then they quickly need good financial systems and contract compliance systems to work within their institution. The interconnectedness of research capacity needs makes institutional strengthening a complex issue. However, it is also unrealistic to expect research programmes to be able to invest across all aspects of research capacity strengthening needs and so it is inevitable that such investments will primarily focus on one element. As stated above it has widely been accepted in the literature that strengthening institutions to support ECRs is a need across sub-Saharan Africa.

The design of the programme aligns well with good practices in capacity development, frameworks and models for researcher development and current thinking in climate change. Participating institutions were given the opportunity to adapt tested gold standard models from the higher education sector in the UK and to adapt these models to their own context and needs. How these approaches worked in practice is explored in more detail in the rest of this report.

5.1.3 Alignment of inputs and activities with the ToC and purpose of the programme

The log-frame impact statement, outcomes and outputs relating to institutional strengthening are shown in figure 6. There are two main outcomes for the programme: “High quality researchers in African research institutions accessing research funding opportunities and generating internationally recognised knowledge and evidence to respond to climate change impacts in Africa”, and “Understanding of how to strengthen institutional capacity to undertake high quality research into climate impacts in Africa.”



Figure 6 Extracts from the programme log-frame that relate to the ISP

The output relating to the ISP states, “African based research institutions have strengthened capacity to support and enhance the career progression of research staff early in their careers”. This has changed quite considerably from the original log-frame for which the output was, “selected high performing Africa based research institutions with effective and quality assured research training and management systems on climate change”. The indicators for this objective are shown in figure 6 and are discussed in more detail in the future M&E section of this report.

The focus on ECRs, which is clear from the final version log-frame, reflects the focus of the activities and capacity development inputs from the delivery partners and ISP teams. There were also inputs from the delivery partners, and activities on the part of the ISP teams, that contributed to strengthening the institutions in relation to climate change. As a result, the theory of change reflects these elements which are not captured in the final log-frame.

Analysis of the effectiveness of strengthening institutions in relation to climate change must be tempered by the fact that this was not the main focus of the ISP activities. However, it is justifiable to include them as they could be central to accessing research funding opportunities and generating internationally recognised knowledge and evidence that responds to climate change impacts in Africa as stated in Outcome 1.

The focus on institutional strengthening was based on providing a more conducive environment for returning CVFs, however, much of the focus of the ISP was on providing a more conducive environment and capacity strengthening for the wider group of non-CVF ECRs. The implications of this are important for scale and monitoring, as well as evaluation, and are discussed at various points within this report.

The theory of change used for this evaluation was originally derived from the workshop held with stakeholders from the delivery partners, funder, and participating institutions during inception. It was refined during the analysis of the data, based on those emerging themes that had been captured in the original log-frame, or collapsing themes that did not emerge strongly from the data. All the changes made to the log-frame are highlighted in red and summarised in Annex 1. The structure of the theory of change, however, was not changed significantly through this process. The only major addition to the ToC was to add project management as a major element which had been omitted from the original.

5.1.4 Complementarity with similar initiatives

Key informants identified similar initiatives that were complementary to CIRCLE. At an institutional level, one informant described how the Structured Training for African Researchers (STARS) programme, a precursor to CIRCLE that supported a blended learning programme for ECRs in Africa, had helped boost their capacity to implement CIRCLE.

“The people we had trained and some of the ones through STARS were useful in CIRCLE. They became our critical mass, having been exposed to doing research. So, it was easy for them to become the vehicle to reach others.”
ISP Lead

Other programmes referenced by ISP team members included: the African Women in Agricultural Development (AWAD) programme, Sida support for research capacity strengthening of faculty members (Masters and PhD level), Future Leaders – African Independent Research (FLAIR) post-doctoral fellowship programme, and the Climate Research for Development in Africa (CR4D), also funded by FCDO. ISP team members provided examples that displayed how aspects of these programmes had complemented CIRCLE. This included using and adapting learning materials from the AWAD mentoring model to supplement the mentoring activities within the CIRCLE programme. Cross fertilisation with other programmes was mainly attributed to individual efforts rather than a coordinated approach.

At a programme level, delivery partners described a range of funders and programme actors that were involved in various aspects of institutional research capacity strengthening within sub-Saharan Africa. However, there had been little cross fertilisation or synergies developed between funders or delivery partners. It was also noted that collaboration and shared learning was more common within the same research area, as opposed to in the field of institutional capacity strengthening that was often seen as an add-on to scientific research programme funding.

“For example, if we examine PIs, we can see that they are tapped into peers who are researching in the same field, however, there is a risk of less cohesion in the capacity strengthening space.”

Delivery partner

One informant identified responsibility for coordination and learning resting jointly between funders and programme actors.

Discussion

The identification of complementary activities and synergies, at institution and programme level, has been generally uncoordinated and any development can primarily be attributed to individual efforts. There remains greater potential to join up learning between programmes, an ambition that would be welcomed by participating institutions, delivery partners and funders. The CLARE framework is a good example of using a portfolio approach that could maximise opportunities for a more joined up approach. This is discussed in more detail in the Future Programme Design section of this report.

5.2 EFFECTIVENESS: INPUTS, ACTIVITIES AND OUTPUTS

Input, activity, and output indicators from the theory of change will be used to assess the effectiveness of the programme. This section will also look at the underlying barriers, as well as enablers to participation.

5.2.1 Capacity Strengthening [I2] and Learning and Tools Provided by the Programme [I3]

The human resources provided by the delivery partners are discussed under efficiency. The **training and workshops [I2a/b]** consisted of thirty-two sessions which comprised of ten RDF workshops, nine mentoring workshops, seventeen specific topic trainings (researcher training) and two ISP awareness building and engagement workshops. Training and workshops provided by the delivery partners were highly valued, however, key informants' descriptions of this input proved difficult to distinguish between the CVF training and workshops and those provided as part of the ISP. Workshop participants particularly appreciated the opportunity to network with one another, to understand what is feasible within different contexts, to share and cross fertilise ideas and thinking, and to benchmark against each other in relation to the ISP.

“When you attend these meetings, you can quickly see the gap between your institution and the other institutions in terms of obtaining the objectives. You can then be cajoled into action if it is apparent that you are lacking behind because of various reasons.”

Senior Leadership

“Peer support was part of the champions workshops as we got them to share with each other on how things worked within their own institutions.”

Delivery Partner

One informant recommended that, in order to further benefit networking, collaboration and understanding of different institutional contexts, future programme should consider hosting the training at different participating institutions.

“Good to revolve around the participating institutions, so that we have cultural experiences and learning among the different institutions. You learn through your eyes more than is told.”

ISP Lead

The participants valued the face-to-face contact with other SSA institutions and felt that the workshops also provided a unique space to have direct contact with the delivery partners (Vitae, NRI, AAS and ACU), all of whom were present and contributing their experiences to the workshops. Training inputs were described as flexible, and “good discussions” were allowed to develop. Breaks and evenings also provided a valuable space for further informal networking.

Training delivery was highly rated by participants, who enjoyed the participatory nature of the training, as well as its intensity and productivity. Whilst Vitae was the lead institutional strengthening provider, NRI also participated in most of the ISP training and workshops, providing inputs in three big cross cutting issues: interdisciplinarity, engagement with communities, and engagement with decision makers, as well as presenting on publication avenues and ethics. NRI also produced a report on organisational structures and strategies for climate change research. The research uptake element of training was described by some researchers as being “transformational” in the design and implementation of their own research. Whilst there were attempts by the delivery partners to provide online training, uptake was low with preference being for face-to-face interaction.

Normally, two participants from each institution attended the workshops/training. The choice dependent upon workshop content, the current ISP team membership, and availability. It was not always the most senior staff members who attended.

“Everything about the training was good for me... Vitae teaching about what they are doing in high income countries and networking is one of the greatest assets that any individual or institution can have. You get to see good practices elsewhere and practice them in your own institution.” **ISP Lead**

The intellectual content provided by Vitae of **frameworks and learning [I3a]**, and **tools [I3b]** from the UK context were highly regarded. An extensive range of models, frameworks and methodologies were introduced during the champion sessions (Annex 3) including the UK Concordat and Researcher Development Framework.

The **UK Concordat** to support the career development of researchers is an agreement between stakeholders to improve the employment and support for researchers and researcher careers in UK higher education. It sets out clear standards that research staff can expect from the institution that employs them, as well as their responsibilities as researchers.

Researcher Development Framework (RDF) is a professional development framework for planning, promoting and supporting the personal, professional and career development of researchers in higher education. It articulates the knowledge, behaviours and attributes of successful researchers and encourages them to realise their potential.

Toolkits were also provided during the workshop sessions which included:

- Fellow’s Development Toolkit
- Gap Analysis and Action Planning Toolkit
- ISP and Institutional Engagement Toolkit
- Mentoring Toolkit
- Programme Development Toolkit
- RDF and RDF Planner Toolkit
- CIRCLE web pages (restricted to CIRCLE members)
- CIRCLE guides – (need to sign up to access)

Content was perceived as being relevant and useful; participants valued learning from international practice and adapting tools/frameworks to their own context. Participants described the institutional strengthening radial planning tool as a practical tool that allowed them to choose priorities to work on within their own institutional context. When elements of the UK Concordat did not apply (eg HR systems), they could be ignored, but overall there was very high buy-in to the UK Concordat and the element of aspiration in being guided by international standards.

“The training materials, RDF tool and development cards, ISP template and Concordat – all these resources helped a lot in our framings and driving the ISP programme.” **CVF**

The RDF was widely known by the CVFs, who have used its planner to guide their own professional development within the fellowship programme and beyond. The RDF open-source materials and development cards were also being utilised in ISP workshops in order to assist participants in identifying priority competencies for CIRCLE from both a strategic and personal viewpoint. This informed the design of the ISP, as well as the development and delivery of training targeted for ECRs (publishing, proposal writing, communication skills, data analysis, ethics etc.). Some universities had embraced the RDF more than others. Chinhoyi university have integrated the RDF into their PhD programme and mentoring policy. Other ISP teams described how the RDF has mainly been embedded at departmental level when CVFs and ISP champions were present, and that CVFs used the RDF on a personal basis and for mentoring mentees. In Ethiopia, the RDF was translated into Ahmaric.

In many cases the use of **electronic resources [I3c]** was hampered by connectivity issues. Where the RDF planner could not be accessed online, or was unstable, paper-based versions and the RDF cards were used. One ISP lead described the stress of being unable to use the online version of the RDF planner during his lecture and instead having to rely on hard copy versions. In most sample institutions, utilisation of the electronic RDF planner seemed to be mainly amongst the CVFs. Even amongst CVFs, there was a reported drop off in the use of the RDF planner over time. One institution reported that participants were wary of using the electronic version of the planner due to security concerns and doubts about continued access.

Training of trainers [I2c] workshops were provided on the RDF and on mentoring/supervision with the aim that ISP team members could replicate this training on a larger scale within their own institution. Champions workshops were clearly focused on the “how to” aspects of setting up the ISP and provided step by step guidance on the process of forming the ISP, gap analysis, planning and actions as well as on the underpinnings through the concordat and the RDF. Participants valued this experience, as well as the opportunity to strengthen their planning and facilitation skills. All training material was distributed to participants for them to adapt and use within their own institutions.

The initial aim was for Vitae to visit participating institutions in order to provide **advisory inputs [I2d] and follow-ups [I2e]** in relation to implementing the ISP. However, this was reported as being complex to organise, and so remote support (telephone, Skype and email) was offered as an alternative. The uptake of this support was generally low, however, face to face advice and feedback during workshops/training was highly valued.

Barriers to remote support included: competing priorities, connectivity problems and, difficulties in rescheduling calls. However, informants identified that more feedback and follow up would be helpful in a future programme.

“The issue is now the uptake and how subsequently you implement this within the institutional setting. The materials provided were helpful and they [Vitae] also made some effort afterwards to stay in contact, although I do not think that was forceful. I think maybe some contacted them more depending on the issues.”
ISP Lead

“The follow-up from Vitae looked good on paper but did not work so well in practice. Those conversations did not happen regularly enough or with enough focus. Both [Vitae and institutions] had a lot going on.”
Delivery Partner

Vitae provided annual follow-up and feedback on action plans via email, providing a simplified format for user friendliness and greater traction. However, there was limited information on the impact of this feedback process, or whether the feedback was used to improve the ISP action plans. It was reportedly difficult in some cases to track progress as each year the annual plans differed significantly.

Basecamp was used as an electronic platform for the programme. Several ISP members referred positively to the utility of the Basecamp for sharing, but they reported that its use had declined in recent years.

"I really learned a lot from CIRCLE, not because of the funding, but because of the e-platform that was established. We were many from Africa and from the UK. The discussions that we had after the trainings were really interesting. I would like this type of support to continue." **ISP Lead**

Discussion

The content, methodology, tools, materials, and facilitation of training were clearly valued as being relevant and of a high standard. They were generally accessible and adaptable to the sub-Saharan Africa context. The RDF materials were appreciated by individuals and institutions, although the online RDF planner was less widely used, primarily because of connectivity issues. Unfortunately, connectivity issues are likely to persist in the short term due to a complex interplay of economics, infrastructure, geography, personal finance, and institutional investment. For this reason, providing hard copy or offline option, with alternative e-versions, is currently recommended for institutional strengthening programmes. Where access to online tools is provided, clarity is essential in relation to potential access issues. This applies to Basecamp and to the online RDF planner.

Whilst train the trainers workshops were utilised for the RDF, there were informants stating that those trained internally, rather than directly by Vitae, had less confidence in utilising the RDF within their training and mentoring. Therefore, this is an area that would potentially greatly benefit from additional inputs; a peer-to-peer mentoring process might support adoption, or a series of virtual master classes to embed the knowledge.

Face to face technical input and advice and support from the delivery partners was highly rated, however, the option to provide technical support to the ISP teams outside of the training workshops never met its full potential. This was partly attributed to competing priorities and scheduling problems. It could be argued that this was a missed opportunity to sustain momentum, and that institutional technical assistance visits may have had greater value. Whilst visits from delivery partners can raise the visibility of the programme to institutional leadership this also has to be balanced with costs. Regional champions could be one possibility to addressing the cost of visits from delivery partners. An exploration into different modes of technical assistance is an area that could be developed in future programmes so that institutions can access trusted expertise when required in a way that suits them, whilst also recognising that some institutions may not, be in a position to respond to or access all the assistance offered due to emerging internal barriers effecting their absorptive capacity.

When ISP leads were asked to prioritise their future funding needs in the e-survey, results highlight that increased funding to access international expertise was a low priority in comparison with scaling up support to ECRs, infrastructure and equipment and cascading training to reach other institutions (results are presented under Future Programmes).

The importance of creating space, platforms, and exchange visits for south-south inter institutional sharing and learning cannot be underestimated. There is clearly a strong desire for such opportunities. The grouping or pairing of institutions working on similar initiatives could also be considered, potentially being a valuable benchmark mechanism for institutions and a means for mutual support. There is also potential for this to be a virtual process. Whilst there are budgetary, equity, and logistical implications to the implementation of this recommendation, training rotation between participating institutions would provide additional opportunities for networking and cross fertilisation.

Summary: Capacity Strengthening and Learning and Tools Provided by the Programme



Barriers

Programme level

- Low uptake of online training
- Low uptake of follow-up/technical assistance opportunities relating to ISP

Institutional level

- Access to stable internet/computers



Enablers

Programme level

- Tested tools and frameworks from the UK context
- High quality workshops, training and training of trainers
- Networking opportunities during face to face training
- Peer support and sharing
- E-platform for inter institutional learning and sharing

Institutional level

- Ensuring the right people were selected to attend the trainings and workshops



Recommendations

Programme level

- Balance access to online materials with offline/hard copy options
- Pairing/grouping institutions together who are working on similar initiatives
- Continued use of project planning/material e-platforms to enable communication and exchange
- Provide additional support post training of trainers in relation to complex new tools/concepts eg RDF and review whether this helps with spread
- Budget for institutional visits to provide technical assistance and follow up

Institutional level

- Ensure that all opportunities for follow-up or technical assistance are utilised to maximise benefits from the programme



Good Practices

Programme

- Providing space in workshops for inter-institutional sharing and learning
- Utilising proven evidence based internationally recognised tools and frameworks

5.2.2 Beneficiary Institution Implementation of the ISP [A1]

Implementation of the ISP was guided by Vitae through workshops and the training of key members of participating ISP teams. Vitae supported an experiential learning model in that each ISP team developed their own institutional strengthening activities relevant to their needs.

Adapting principles, frameworks and learning [A1a] for each participating institution was an important first step as it was recognised that each institution would have a different context and starting point. ISP leads, champions and other team members outlined that there was a value to being made aware of different frameworks, tools and learning, while recognising that adaptation due to different contexts and bureaucratic challenges was not always possible. Most informants did find that the majority of the content was relevant and that it was relatively straightforward to adapt to their context.

“We were not aware that some of these things existed – they enlightened us. The UK Concordat guided us – these principles were a very good guide to developing ISP activities.” **ISP Lead**

“It was difficult to adapt everything because of the local context. Some things can be easier to accept than others. It depends on the situation - a lot of things can influence whether issues can be adopted... Even the RDF, when you go through it, there are some issues which cannot be accepted. Some you need extra energy to diffuse them.” **ISP Lead**

ISP team members were unanimous on the importance of **sensitisation of university staff [A1b]** about the ISP and **gaining institutional buy-in from senior university leadership [A1f]**. Most of the participating institutions described this as challenging and time consuming, although two ISP leads described senior leaders as extremely supportive from the outset. Obtaining approval from the Vice Chancellor and comprehensive sensitisation of the institutional leadership were both identified as crucial to supporting planned ISP activities. This contributed to understanding and transparency in relation to the ISP aims and helped to ensure that ISP activities were not occurring in isolation of other university initiatives. Where there were lower levels of interest, one to one and face to face meetings assumed great importance.

“We have to speak with integrity and build trust...” **ISP Lead**

It was only through bringing senior leadership on board that senior staff participation could be encouraged. Some ISP teams invited senior leadership to become champions and resource persons to the ISP, providing them with recognition and a more defined role within the ISP.

“Everybody was aware because I am also a member of management of the university - we have our voice at the highest level of administration - I think this drives it. Moreover, the VC [Vice Chancellor] is a research loving person, so anything that will enhance research and visibility he buys into that.” **Senior Leadership**

The need for cross-departmental working and sensitising university departments was fundamental to encouraging the uptake of new policies and guidelines that the ISP were developing.

“I find it useful if we work as a team and plan together with the other departments. If I am to do a workshop, we engage other stakeholders so that they buy in and support our activities it will not be isolated.” **ISP Lead**

The **beneficiary led gap analysis [A1c]** underpinned the focus and design of ISP activities. Following on from Vitae delivered training, each ISP lead was responsible for leading a beneficiary led gap analysis, conducted within each institution, and involving a range of core institutional staff that would

often include administrators. Suggested workshop outlines were provided by Vitae. A combination of workshops, departmental meetings and one to one meetings were held.

“During the gap analysis the work was not on me, I had to involve all the staff. We had two days to do the gap analysis so that everyone understood what we are looking for. At the end they all saw themselves as part of the decision-making process; this helped us to run the programme.” **ISP Lead**

“We had small meetings with people that we put in the ISP group and from our department, other departments and individual informal meetings. We put together an idea of the gaps and where they thought we should focus. We also asked questions in departmental meetings.” **ISP Lead**

This was seen by some as an ‘eye opening moment’, where staff members reviewed the principles of the UK Concordat to support the career development of researchers. Using this process, participating institutions reported on how they could identify and prioritise core gaps that were aligned with their university mandate.

Establishing **cross department implementation teams [I1d]** was the responsibility of the CIRCLE lead and champions. Whilst guidance (ISP team composition, roles, and responsibilities) was developed by Vitae, membership was decided by each institution. The inclusion of at least one CVF in the team was encouraged, and it was intended for the teams to become permanent structures. Membership varied in size and spread; in some institutions, whether due to funding, limited senior engagement or institution size, membership had been limited to smaller teams within one department.

“We were a core team of four supported by other staff and university officers. You have to look at this from existing university systems and structures. You need to get on board relevant people who are at particular levels in the system. CIRCLE is a relatively small project and therefore the extent to which you could move processes and the size and nature of the team had to be premised on the resources available. So, in our case we looked at the focus in terms of the thematic area of interest.” **ISP Lead**

For some ISP teams, leadership was attached to a role rather than a person, and so staff turnover occurred when administrative terms ended. In other cases, ECRs were automatically enrolled into ISP teams bringing enthusiasm, energy, and experience with the RDF. However, some ECRs provided limited or no time to ISP activities as they moved straight into PhD programmes. Examples were given of high levels of participation from the research office, whilst in other cases administrative, CVF and senior staff participated as resource persons to the ISP team, such as trainers or facilitators. Building on existing structures was cited as a key enabler.

“The formation of ISP teams was excellent as key players including CVFs are involved in planning and implementation of projects. The team work together in action planning, gaining buy-in, implementing and monitoring action plans. There is a high level of participation and coordination of the ISP from the research management office to the ECRs in my University.” **CVF**

In some cases ISP champions, leads and team members no longer contributed to the ISP due to a move to new roles or institutions. For example, in the University of Fort Hare, South Africa, only three of the original seven ISP team members remain at the institution.

The **identification and role of ISP champions [A1h]** was an important aspect of the design of the ISP. Champions were members of the ISP team from senior positions within the institution who supported ISP teams in navigating university administrative structures and systems.

“If you have someone who is senior leadership saying it is important then it is legitimised. There was always a will but not always strategic buy-in or resources to deliver some of the very ambitious things on the action plans.” **Delivery partner**

ISP champions facilitated decisions on time and within budget allocations, as well as ensuring that CIRCLE actions requiring university approval passed through the appropriate committees. In the initial Champions workshop (2015) very senior ranking officers attended, which contributed to buy-in and commitment from senior leadership to support the ISP as a Champion or in a resource role.

“The support from the university management was huge in the first place and that was made possible because one of the CIRCLE champions is the Deputy Vice Chancellor, administration - that makes our programme smooth and always easy to access the university management.” **CVF**

Having senior management champions on the team also contributed to junior members (CVFs) gaining insights into senior roles and the development of policies. It also raised their visibility with senior management, especially significant in large institutions. A champion and lead implementor aimed to be present at all ISP meetings, with the champion having an oversight role and the implementor responsible for promoting agreed ISP actions, however, reports suggest that this did not always occur in practice. When Champions were promoted into higher office this could enable better support to CIRCLE ISP. In other cases, team members took on multiple roles.

“Our VC asked me to represent him in all the meetings. He asked me to be the chairman of the ISP.. Then I also was a champion for the programme. As a champion and then the chair of the ISP and co-ordinator of CIRCLE as a whole.” **ISP Lead**

For the ISP **action planning [1e]**, many of the ISP teams were very clear about their priorities and sought consensus in any given situation. One ISP team who did not apply for the ISP extension phase described the challenge in bringing the different elements together and the need for the process to be more structured.

“I do not think it was properly structured from our side. For those issues handled by the research office that was good, but if you take the ISP there were bits and pieces of things that we tried to do and hold meetings, but there were too many pieces of the pie.” **ISP Lead, non-extension**

Vitae introduced the institutional strengthening radial planning tool to help teams plan their actions and identify how any specific ISP action relates to the other Concordat principles. To avoid an overwhelming workload, teams were encouraged to work on no more than 2-3 actions at a time. Vitae also introduced a simplified template to facilitate the planning process. Examples of the range of ISP activities identified included:

- Developing a new staff induction programme
- Developing a Researcher Development Framework (RDF) lens, to establish priorities for researcher support
- Improving the structure of career development pathways and continuing professional development for ECRs
- Strengthening staff recruitment and appointment processes
- Incorporating a gender lens across university appointment and promotion procedures
- Improving staff promotion policy
- Developing line management and research management training for research managers in the university
- Creating a formal mentoring programme
- Establishing a work ethics and a research ethics committee
- Improving poor connectivity and low bandwidth

According to the ISP Case Studies Report produced by CIRCLE in 2020, over 270 **actions were implemented [A1g]** between 2015 and 2020 by ISP teams across the 31 countries. Key informants reported that implementation was smoother in younger institutions. This was due to a less entrenched bureaucracy and a lack of policies already in place to support ECR strengthening. Within more mature

institutions informants reported lengthy processes of negotiating the correct pathways and structures. The CIRCLE ISP Final Report (2019) describes a higher completion rate of actions by the mature institutions whereas key informant interviews reveal a greater ease of implementing planned actions in the younger institutions. For ISP teams who had engaged champions, highly motivated ISP leads and support from senior leaders, they reported greater ease in implementing their planned activities.

ISPs working within existing university structures reported that this strengthened implementation. For example, Chinhoyi, who accessed the Centre for Lifelong Learning, believed this made the process more effective. In some cases, external prompts from ACU, such as requests for updates, helped maintain momentum. Managing staff expectation of honoraria was required at one university for the implementation of ISP activities that were more often associated with externally funded programmes. In this case an official letter requesting their engagement was sent to staff members that also outlined that no one involved would be receiving honorarium. All ISP leads described the challenges of balancing their workload while delivering ISP activities during prolonged periods of lockdown. There were also university strikes to navigate, and for Mekelle University the process was disrupted by widespread conflict and unrest in the whole Tigray region.

Monitoring and evaluation of action plans [A1j] varied but tended to occur primarily through activity reporting at ISP meetings. Some evaluation of specific activities occurred within the ISP, particularly participant evaluation of ISP trainings, and these were reported to have been routinely conducted and discussed at ISP meetings. The University of Ibadan, Nigeria, described how they are conducting an evaluation of the direct training programmes delivered through those ACU grants that are not targeted at CVFs. Some institutions described plans to monitor and evaluate the formal mentoring programme established under CIRCLE. Future monitoring and evaluation is discussed later in the report.

“Evaluation after the training were done by the participants. But in terms of assessing what has been done with ISP that lies with the management. If you ask me to evaluate this, it is difficult.” ISP Lead

In relation to M&E of the ISP action plan this appeared to be less systematic, and it was often driven by the need to submit annually updated plans to ACU/Vitae. This led to limited data being available on the numbers who had been trained or mentored due to the interventions, or on the impact of these interventions. There were even challenges in relation to obtaining consistent updates on those action plans and activities that had been delivered.

When we tried to get progress updates on action plans, that was not forthcoming. They [ISP teams] provided a new action plan, so difficult to ascertain progress on the original plans. Delivery partner

Discussion

The participating institutions clearly embraced the CIRCLE experiential learning approach. They were able to adapt tools, principles, and frameworks to their own context. This occurred by means of the formation of teams, structured gap analysis, and the development and implementation of action plans.

ISP team composition varied in size, structure, and reach. This related to programme funding, institutional complexity, and senior level buy-in. Changes in staff roles and turnover of ISP team members presented challenges for continuity, but it also created greater influence at institutional level should champions achieve promotion. Therefore, regular updates to senior leadership are essential to manage changes in staff roles and turn over at institutional level.

Supportive senior leadership, as well as engaged champions, provided a conducive environment in which to implement activities from the action plan. Whilst action plans were updated on an annual basis, and specific training activities were evaluated, routine monitoring and evaluation of the ISP action plan was not systematic. This represents a potential missed opportunity for building the capacity of ISP members in M&E, as well as for demonstrating reach and outcomes to institutional

leadership. Future programmes should strengthen M&E of the ISP component at both institutional and programme level. Future M&E is discussed in more detail later in this report.

Summary: Beneficiary Institution Implementation of the ISP



Barriers

Institutional level

- Turnover of ISP team members
- Limited availability of some CVFs
- Difficulties obtaining senior leadership buy-in
- Expectations of honoraria/incentives



Enablers

Enablers Programme level

- UK Concordat and RDF
- Training and support materials

Institutional level

- Staff sensitisation across departments
- Face to face meetings with senior leadership
- Including CVFs in ISP team
- Involvement of research office
- Building on university systems and structures
- Engaged champions
- Promotion of champions to senior levels



Recommendations

Programme level

- Strengthen M&E skills and provide tools for ISP teams to monitor their interventions

Institutional level

- Plan regular updates to institutional leadership to address changing roles and staff turnover



Good Practices

Programme level

- Experiential learning model guiding institutions through the process but allowing a bespoke response
- Encouraging involvement of senior leadership in champion roles and champions workshops

Institutional level

- Integration of existing structures within the ISP
- Inclusion of senior management champions, administration and CVFs in ISP teams
- Conducting evaluation of training or mentorship interventions

5.2.3 Programme Level Outputs and Learning [A2]

Whilst there was not a high level of feedback from participating institution informants on the **peer institutional case studies [A2a]**, the process of learning from peers was positively reported in relation to these visits and to the opportunities within the workshops. This was further reinforced in the preliminary findings workshop. Participants from the participating institutions stated that it has often become easier to gain access to interventions/policies/actions that have been successfully implemented by other African institutions. It was, however, highlighted that this privileging of external knowledge over internal knowledge was not necessarily positive in terms of institutional improvement processes. Some delivery partner informants felt that the learning from the peer exchange visits was not always evident. It was recommended by participating institutions, however, that opportunities for peer learning should be strengthened in future programmes.

The **Good Practice Guides [A2b]** were developed by Vitae based on the experiences of the participating institutions and expertise of the delivery partners. The full versions are available to all CIRCLE participating institutions with a slimmed down version available as open access. The guides were circulated to participating institutions for feedback before finalisation and contain examples of good practices from selected institutions. Whilst participants were aware of the guides, there was little evidence of them being utilised. However, this may have partly been due to their launch coinciding with the outbreak of the pandemic. There was a plan to evaluate the utility of the guides to non-participating institutions, but this was also not possible due to the pandemic.

NRI produced the **Climate Change Organisational Strategies report [A2c]**. This was due to be presented in person at a workshop at the end of 2018, however, due to travel issues, it had to be presented remotely. There was awareness amongst some of the interviewees of this report, but limited concrete action linked to its findings. This was possibly due to the timing of the report in relation to the planning process of the ISP and to the fact that most of the ISP actions were focussed on ECRs rather than climate change. The report is open access.

There was evidence that **programme learning processes [A2d]** using an adaptive approach had been taken to the programme design to address problems or improve results. A good example of this is the addition of the institutional strengthening and research uptake funds. Learning was also shared between delivery partners. For example, Vitae brought expertise in researcher strengthening, as well as systems and policies, to support research. They also gained knowledge about working in the development arena and different international contexts.

One of the outcomes in the log frame is '**Enhanced understanding of how to strengthen institutional capacity to undertake high quality research into climate impacts in Africa**'. Delivery partners and participating institutions were asked to outline what they had learned about institutional strengthening. Their responses are summarised below.



Learning

Delivery Partners

- Career development is multifaceted and needs a multidisciplinary approach, time and resources
- A self-service model (using videos) was possible rather than just enhanced support (training and follow up)
- Better to focus on a small number of models, frameworks and tools
- Useful to intertwine the individual and institutional strengthening
- Without large resource input you are only able to take small steps

- Fledgling institutions need support to their financial systems in order to be able to manage external funds
- Participating institutions need the right mix of people in their ISP teams to make it work
- Easier for change to happen in smaller more agile institutions
- Important that returning fellows have access to equipment to continue their research
- Possible to achieve a lot with a small amount of resources
- Institutions are a complex and dynamic environment in which to effect, attribute and quantify change
- Institutional strengthening is dependent on people
- Each institution has its own culture and hierarchies

Participating Institutions

- Structured programmes (eg. mentoring) allow equal access to participation amongst ECRs
- Addressing gender in programmes is very important
- Repeating messages and training is vital in effecting culture change
- Continued involvement of senior administration is important in enabling change
- Formalising customary practices into institutional policies/guidelines/strategies
- Impact linked to informed institutional strengthening coupled with budgetary allocation
- Commitment to engagement needed by both institution and funding agency
- Need commitment to overcome obstacles and challenges
- Importance of involvement of the Research Office
- Working collaboratively/teamwork
- Leadership enhancement
- Funding is crucial to being able to bring about scalable interventions at a sustainable level
- Need to create buy in at all levels
- Process important to ensure quality – particularly participatory processes
- Institution has more human resources and capability than it is aware of, or is harnessing for its own growth and development

There were also some questions or tensions remaining:

- Does the model of having fellows visit other institutions reduce the potential to strengthen their home institution?
- Tension between research excellence and institutional strengthening. If you only strengthen the strongest then the same institutions will always benefit.
- Is it predominantly positive or negative to require in-kind contributions from under resourced institutions?
- It is difficult to provide everything needed to young institutions where there are significant gaps.
- It is difficult to track the results of institutional strengthening.

Overall, whilst delivery partners felt that there had been important successes in terms of the ISP, it was felt that further work was needed to identify what the exact nature of the impact of those changes had been. For participating institutions there was a sense of achievement in what had been delivered within the small funding package. However, there were questions raised by many as to whether interventions would spread to the whole institution. One informant from the survey identified that they had learned that the institution had a greater level of human resources and capability than it had been aware of or had been utilising.

Discussion

Whilst the peer exchange case studies may not have produced the learning products expected, it is clear that peer learning was highly valued and that this should be further developed in any future programme using virtual or face-to-face exchanges to extend peer learning communities. These

activities will require small levels of funding to facilitate much needed face-to-face exchanges that can further leverage the use of virtual platforms.

The learning products including the Good Practice Guides and NRI Climate Change Institutional Strategy Report are high quality products containing useful insights for general institutional strengthening, and insights specifically related to climate change respectively. Whilst their use in this programme may not have been instrumental to the activities of the ISP teams, due to timing and other factors, they form an important basis for future institutional strengthening programmes. Ideally, they should be integrated into the inception processes of any delivery partner's future programmes, such as CLARE, to ensure that the learning will be integrated into FCDO investments.

It is difficult for internal or external stakeholders to identify whether the approach to institutional strengthening used in CIRCLE has been successful as the impact and sustainability are still unproven. For example, whilst a large amount has been achieved with minimal funding, it is unclear whether scale has been achieved and whether it will sustain. However, it is clear that there has been important learning on enabling factors to achieve key building blocks of institutional strengthening. These blocks include the processes of forming institutional strengthening teams, gap analysis and then action planning, as well as frameworks, such as the concordat and RDF, providing institutions with support in benchmarking their current practices. Peer learning, top-down approach, institutional buy in processes, scale up, teamwork, harnessing internal capability, expert inputs and funding are clear enabling factors that have been identified by participating institutions. Whilst the model moved from a more enhanced support model to a self-service model, it is unclear whether an entirely self-service model would work as the workshop element was highly praised by the participating institutions. Although the follow up element was not optimal, it was an element that ISP teams identified as something they would appreciate more of as part of any future programme.

The central role of people in institutional strengthening is stressed by both delivery partners and participating institutions. Getting the right team together and gaining buy in throughout the institution are key themes throughout this report.

Some of the tensions/challenges that remain are integral to both development practice and institutional strengthening, and so they are not easily resolved. Despite this, they do point to the need for clarity in relation to the aims of institutional strengthening programmes. For example, that it aims to strengthen the strongest institutions to conduct gold standard research for the region, or alternatively ensuring that each country can conduct contextual applied research meeting their individual need. Learning devised and presented by CIRCLE has already been incorporated by the delivery partners into their subsequent practices. For example, the model used by AAS for their fellowship programmes has evolved to significantly build on their initial experiences with CIRCLE, as well as subsequent programmes, with more emphasis now being placed on strengthening home institutions, longer time frames and integrated research uptake. M&E at the participating institution level is important for ISP teams to be able to track the reach and impact of their improvements. It is essential to identify to what extent, and over how long a period, this particular approach to institutional strengthening has been, or has the potential to be, successful. However, particularly when only receiving small funds, such M&E needs to be light touch and utilise existing monitoring systems and processes when possible.

External inputs are important to motivate change and benchmark against standards and good/innovative practices, however, creating an internal culture of improvement, and recognition of internal capabilities, is a sustainable approach to institutional strengthening.

Summary: Programme Level Outputs and Learning



Recommendations

Programme

- Integrate the learning products from CIRCLE into the inception phase activities of CLARE delivery partners by means of circulation and webinars
- Extend peer learning in any future institutional strengthening programme by means of the creation of appropriately blended virtual or face to face platforms
- Increase focus on light touch M&E to enable the reach and impact of institutional strengthening to be assessed

Institutional

- Strengthen recognition for the potential of internally driven institutional strengthening programmes



Good Practices

Programme

- Adaptive approach to programme management and design
- Commissioning learning outputs

5.3 EFFECTIVENESS: OUTCOMES

Outcome indicators from the theory of change will be used to assess the effectiveness of the programme. This section will also look at underlying barriers and enablers to change.

5.3.1 Beneficiary Institution ECR Support Strengthening [O1]

Early career researcher (ECR) support strengthening is a core component of the ISP. Institutions have defined ECRs in different ways, some as undergraduate and postgraduate students, whilst others include junior staff positions such as teaching assistants and lecturers. For example, in Embu University a large proportion of staff members were categorised as ECRs. ECR support strengthening included the development of career guidance, continuing professional development, and mentoring, as well as developing or strengthening policies and processes.

Enhanced training and support for early career researchers (ECRs) [O1a] featured strongly in all ISP action plans. ISP teams used the RDF, and/or a needs assessment questionnaire, to identify training needs of ECRs. Core topics for ECR training consisted of both soft and hard skills such as: data analysis, accessing electronic materials, writing for publication, proposal/grant writing, RDF, and career progression, communicating to non-academic audiences and presentation skills. E-Survey, respondents (n=16) highlighted that mentoring, academic writing, and career development, delivered

to Masters/PHD students, teaching assistants and lecturers, were the most common themes for training, see figure 7.

What subjects did you provide training on (please tick all that apply)

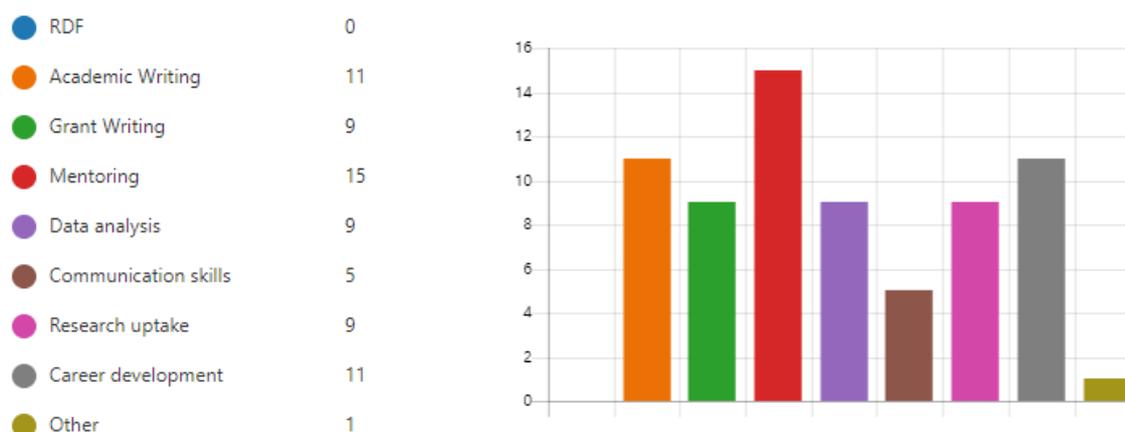


Figure 7 Frequency distribution of training topics for ECRs from survey respondents (n=16) Other was webinars and remote presentation

Training was delivered by ISP team members. This would often be the CVFs or other internal academic and administrative staff, with external staff used when expertise was not available and where there were sufficient funds.

“Most of the time we did not have to bring people from outside, only on a few occasions. We had to make use of the resources we had internally 90% of the time as did not have funding for people from outside.”
CVF

The demand for, reach, content, duration, and frequency of training, varied considerably between the participating institutions, as did the degree to which training was embedded into existing university structures and systems. The reported numbers attending training sessions varied greatly between institutions. E-survey results (n=16) show that 56% of training delivered was institution wide; 38% reported reaching a smaller number of departments and 6% only one department. Survey respondents reported reaching all, or close to all ECRs in 44% of institutions, whilst 56% reached a more limited number.

Michael Okpara, University of Agriculture (MOUA), conducted a rolling programme of training workshops, known as the ‘Research Forum’, that was based on the results of a needs assessment questionnaire to ECRs. The head of department selected themes for the Research Forum. It was reported that up to fifty ECRs attended each session. MOUA also developed career guidance and line management processes to strengthen support to ECRs. Ibadan ISP team collaborated with the research office and trained 14 research administrators in the RDF. They then became the point person for RDF follow-up and support to ECRs. STEPRI in Ghana conducted workshops for both researchers and non-researchers. They reached all of the eight Accra based institutions that are part of the Council for Scientific and Industrial Research (CSIR), but, due to limited funding, were unable to offer training to the other five non-Accra based institutions. In Ebonyi University, the CVFs played a very active role in delivering training on the RDF in 1–2-hour sessions. Training was delivered within each faculty with a limit on the number of participants. All levels of staff were trained, and training was offered university wide. At Chinhoyi University of Technology (CUT), Zimbabwe, the ISP team played a key role in delivering training to postgraduate students during their annual residency week, covering themes such as grant writing and the RDF. This was reported as being integrated into the university-wide support given to all postgraduates.

Strengthened institutional academic mentoring programmes [O1b] is a core outcome of the CIRCLE ISP, and ISP teams reported implementation of formal mentoring schemes that included a range of activities, including, staff sensitisation, recruitment of mentors, development, and delivery of training for mentors and mentees, drafting and approval of university mentoring policies, guidelines and handbooks. Whilst many universities reported the occurrence of informal mentoring before CIRCLE, none of the sample institutions had formal mentoring schemes in place beforehand. The content, reach, spread, and impact varied across the sample institutes. In the e-survey, 13 institutions out of 18 stated that they had developed mentoring policies, guidance, or schemes, of which 38% reported that the mentoring policy had been approved. A further 23% stated that the mentoring policy was developed outside of CIRCLE, while 31% stated they were in the process of drafting or approval of policy, and 8% stated there was no current process in relation to mentoring policy. Eight of the thirteen institutions stated that the mentoring scheme had been implemented and that the cadres reached included postgraduate students, early career, mid-career, and senior researchers in figure 8.

Cadres Reached: Please tick all cadres that can access/are being targeted for mentoring through the mentoring scheme

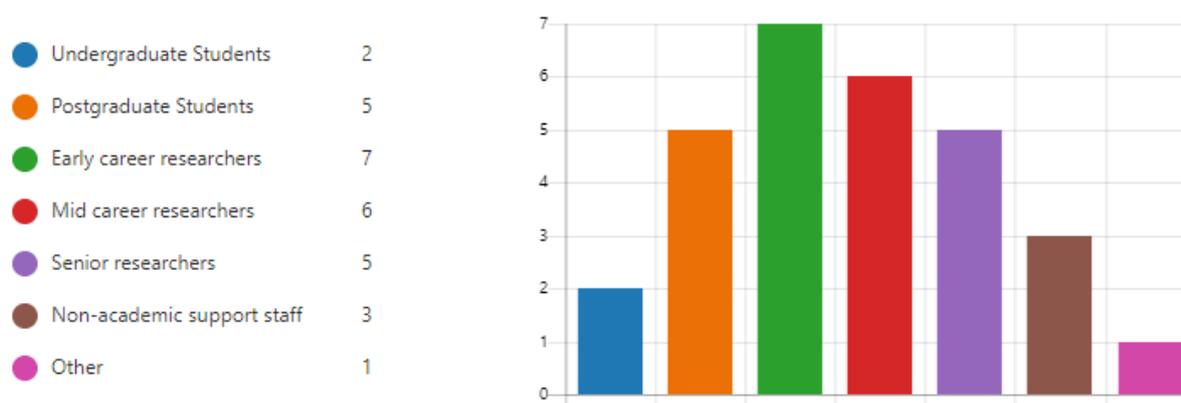


Figure 8 Cadres targeted for mentoring through institutional mentoring schemes n=8

Reported reach within these eight institutions varied from a small number of eligible students/staff (n=2), a good number (n=3), most eligible students/staff (n=2), and all eligible students/staff (n=1). Nine of the 18 respondent institutions stated that accompanying mentoring guidelines had been developed and seven respondents stated that training materials for mentors had been developed.

There was widespread appreciation of the importance of mentoring and how it differed from a more traditional supervision model. Sample institutions described an increased understanding of the respective roles of mentor and mentee, and many were optimistic that mentoring will spread across the university. Persuading senior staff members to be involved could be challenging and on occasions required sensitisation, often through face-to-face meetings. For young institutions with a high proportion of ECRs, identifying sufficient senior staff mentors was also problematic.

“We have struggled to move from supervision to mentorship. We do not have many seniors to be mentors, most staff are ECRs.” **ISP Lead**

CVFs also played a key role in mentoring other ECRs and acting as role models.

“I am mentoring masters students and one of them had their first publication and is grateful for that and motivated. This is part of the testimony that this programme has helped me to help other ECR who are growing in their profession.” **CVF**

Informants described a mix of individual and group mentoring sessions; the latter being used to widen the reach of mentoring if senior staff members were limited. Informants reported limited use of the RDF within their mentoring schemes, and this is backed up by the e-survey data which shows that three out of the eight institutions who have implemented mentoring reported that they had embedded the RDF within their mentoring programmes. Mentoring was reported to have included discussions around career plan objectives, personal effectiveness, publication, grant management and work-life balance.

Whilst most institutions have set up a voluntary mentoring programme, Ebonyi University aims to have mentoring as a compulsory requirement for senior staff linked to promotion and other benefits.

“We were trying to send the mentoring to management to make it compulsory so that everyone is involved - so that professors that felt that they have reached their zenith they mentor. If we have it as a policy - that is a standing order that every senior lecturer will mentor juniors automatically. We have not got it mandated yet, but then it will be compulsory. It will help us a lot.” **ISP Team Member**

MOUA, Nigeria have established a voluntary mentoring programme, including sensitisation and approval across all colleges bar one.

The University of Energy and Natural Resources (UENR) are working towards establishing a university-wide voluntary mentoring programme that embeds into the university mentoring policy that had been developed under the CIRCLE programme. They also stated that the National Accreditation Board has expressed interest in the mentoring programme.

Chinhoyi University of Technology, Zimbabwe offer mentoring to undergraduate and postgraduate students and ECR staff, with the process introduced to students during resident’s week. Currently they reported covering around 400-500 research postgraduates, and they have been using one centre as a model for others to copy within the university.

The number of ECRs per mentor varied considerably between universities. One mentor described how they had 10 postgraduates and 20 undergraduate mentees and were using a mix of individual and group mentoring sessions, while other informants reported that they had between 2 and 5 mentees. At Mekelle university in Ethiopia, mentoring was described as addressing a gap between senior and junior staff, with close to 100 ECRs being matched with mentors.

Significant progress was made in the development, drafting and or updating of **enhanced institutional policies and frameworks [O1c]** across participating institutions. This included changes regarding career promotion. For example, at Embu University, Kenya, they have included evidence of networks within their promotion criteria, as well as recognising multi-disciplinary research.

The e-survey (n=18) highlights the stage of development of key policies in the participating institutions, see figure 9. For those policies that had been approved by Senate, policy implementation ranged from being piloted and implemented across parts of the institution to institution-wide implementation. Not all these policies, however, had necessarily been developed through the CIRCLE programme.

	N/A	Drafted	Under Review	Awaiting Approval	Approved	Approved and Implemented
Diversity/Gender	3	2	1	2	3	7
Recruitment	5	1			3	9
Induction/Orientation	1	2	1	2	2	10
Promotion	1	1		1	4	11

Figure 9 Frequency table of stage of development of policies across e-survey respondents (n=18)

Ebonyi State University reported that they have adopted the RDF, including training for all researchers up to senior staff level. The university registry has been retrained using the Concordat to improve advertisement of posts, including the use of a gender lens, as well as focusing on internationalisation. They reported that three new policies were awaiting approval from senate, namely policies on promotion, gender and RDF. Promotion criteria have been adjusted to publication in high impact journals. At Chinhoyi University, the ISP team contributed to the development of a research ethics policy, gender policy, research policy and mentorship policy. MOUA have developed an induction programme for new staff, with the HR director having taken up responsibility for career guidance, and a research ethics policy is being developed. Overall, responsibility for policy implementation, and its monitoring, rested with institutional senior leadership. When asked about policy impact in the e-survey, a wide range of responses were received, including reports of positive impact on the ECR research environment, increased publications, and increases in female managers and students.

Gender diversity is being implemented at all levels, recruitment, appointment and promotion. This has created significant impact not only at institutional level, but also in the country at large. e-survey

Other respondents expressed that policy implementation had not yet been evaluated, or that they were not in a position to respond. Barriers to policy development and implementation were numerous and included: time and resource, expertise, lack of institutional continuity and leadership, lack of integration, cumbersome approval stages, slow buy-in, lack of evidence informed policies, and adherence to formulated policies.

Discussion

ISP teams and their institutions have been very resourceful in developing and delivering training and support to ECRs, mainly sourcing facilitators internally rather than externally. Many CVFs have played a core role in facilitating training, although there is clearly a balance between CVFs delivering training and being able to commit time to develop their own research careers. Many CVFs described a desire to 'give back' to the institution after completing the CIRCLE fellowship award. All ISP teams appreciated the ISP small grants (discussed later in this report) and the institutional support, but also described limitations in reach due to funding.

Formal mentoring has been embraced by participating institutions through both voluntary or compulsory processes. Job descriptions should clearly be revised accordingly. It will be important that mentors are incentivised to take on mentoring, and that this is linked to the institution's promotion policy. Younger institutions, who have a high proportion of junior staff requiring mentoring, will find identifying sufficient senior staff to be problematic, however, they could consider pairing with more established institutions and investigate options for remote mentoring and support. Achieving the full potential of formal mentoring as a university wide programme will require continuity and concerted effort, while a lack of monitoring and evaluation (M&E) across the different participating institutions will make assessment of the reach and impact of mentoring difficult. M&E systems should be user friendly, but a small set of indicators is essential in capturing learning and demonstrating the impact to senior leadership.

Drafting new institutional policies and frameworks and obtaining approval takes considerable effort and persistence; achieving these crucial first steps is testament to the work of ISP teams. CIRCLE has provided robust support to the ISP teams in identifying policy gaps and guidance and developing new policies and institutional frameworks. However, the move from Senate approved policies to ensuring that such policies are actually implemented, with the aim of inducing behaviour change, is far more challenging. ISP team members valued opportunities for inter-institutional sharing and learning when they were at the policy development stage. Sharing learning and encouraging inter-institutional benchmarking on policy implementation could also be very beneficial.

Even when policies are in place, they need support until they become part of the system
Participant preliminary findings workshop

Future programmes should provide greater support on policy implementation, monitoring and evaluation through inter-institutional sharing, learning and benchmarking.

Summary: Beneficiary Institution ECR Support Strengthening



Barriers

- Limited funding to cascade training
- Making time and balancing mentoring with other administrative duties
- Individual focus on publishing/personal gains rather than institutional development
- Persuading senior colleagues on the need for mentoring
- Lack of sufficient quantity of senior staff to take on mentoring roles
- Mentor – mentee personality clashes
- Instability of power and internet/phone connectivity
- Reach of mentoring across colleges/faculty
- Navigating cumbersome university systems for policy approval
- Slow buy-in for approving policies
- University management/leadership turnover
- Lack of staff awareness of new policies



Enablers

- Using internal staff to deliver training (including CVFs)
- Senior level support mandating training for senior cadres
- Training of trainers to increase reach
- Mentoring role counting towards promotion criteria
- Training and sensitisation of senior staff into a mentoring culture and processes
- Collaboration with senior leadership to support development and implementation of new policies



Recommendations

Programme

- Greater support for developing lean institutional M&E systems that can capture reach, learning and impact of the different components of the institutional strengthening programme
- Provide greater support on policy implementation, monitoring and evaluation through inter institutional sharing and benchmarking

Institutional

- Continued working with university research administration to ensure that gains in ECR training, support, mentoring and policy development are not lost
- Younger institutions should consider pairing with more established institutions and investigate options for remote mentoring and support



Good Practices

Programme

- Sharing examples, policies and frameworks for adaptation to institutional context

Institutional

- Training and support based on ECR needs assessment
- Resourcefulness of ISP team, identifying internal facilitators for training
- Working closely with university research administration in the development and implementation of ECR Strengthening training and policies

5.3.2 Increased competence of ECR [H1]

A core aim of the ISP was to go beyond the individual capacity strengthening of CVFs, and to provide ECR-focused institutional strengthening within the participating institutions. The premise being that a combination of training, mentoring and enhanced institutional policies and frameworks would lead to increased competences and improved prospects for ECRs (discussed in the next section). For young universities, strengthening support to ECRs was a core priority.

Soft skills refer to skills that apply in a broad variety of work situations. They apply to domains B (personal effectiveness) and D (engagement, influence, and impact) of the RDF. Key informants identified a range of **enhanced soft skills [H1a]** because of the ISP. Time management, work-life balance, communicating to different audiences, increasing visibility/web presence, facilitation, training, and lecturing skills were all identified as enhanced soft skills.

At MOUA, improved time management and timely completion of postgraduate studies was attributed to training and mentoring support that included goal setting and agreeing to strict timelines.

“A lot of the problem is time management, so we do teaching on this. A lot of people are achieving more than they expected. Because of the improved time management they are finishing their postgraduate studies on time.”

ISP Team member

Improved communication was also cited as a vital soft skill for communicating research to both academic and non-academic audiences. Examples were provided of ECRs presenting at international conferences after receiving of training in presentation skills and being more confident to engage and communicate with research beneficiaries as part of their research uptake work.

“Most of our problems is that we lack the right methods of communicating with each other. Lecturers and students communications has improved. It is also important how we communicate to research beneficiaries.”

ISP Team member

Increased web presence of ECRs also helped increase the visibility of the institution.

“We have had several workshops on visibility of researchers - our ECRs were able to register to improve their visibility online which has also contributed immensely to the presence of the University.”

ISP Lead

At STEPRI, an ISP team member identified how they had improved their skills in facilitating stakeholder workshops, as well as in delivering teaching modules and short trainings; resulting in the

raising of their public profile and their capacity to deliver higher quality lectures and training that provided benefit to individuals and institutions.

Improved writing skills [H1b] was prioritised by all participating institutions, particularly in relation to writing grant applications and academic publishing. One senior Leader noted a marked increase in CVF and ECR publications, as well as successful grant applications. ECRs reported developing the capacity to differentiate between predatory and high impact journals.

“That training has opened my eyes to go to the level I am at now. It helps us to write good papers to publish in high ranked journals.” **ISP team member**

“There is the issue of publish or perish, but it is no longer a problem as people understand better how to publish.” **ISP team member**

Building competence in writing grant applications was a high priority for all researchers. Training and mentoring inputs were reported to lead to better quality grant applications, as well as increased success in primarily winning national and institutional grants.

“We invited resource persons to come and help us as were having issues in writing proposals. Most of our lecturers and researchers have improved and we got funds because of what we learned.” **ISP team member**

Increased leadership and mentorship skills [H1c] was particularly evident for the CVFs who have achieved rapid gains. CVFs have taken on mentoring roles and acted as role models to other ECRs. One senior leader observed how mentoring effectively prepared ECRs to ‘get it right from the beginning’ in subsequent roles.

“ECRs are new, they have just finished their PhD, and they think they have achieved. Sometimes they need someone to hold their hands to tell them this is the beginning. Being supported to carry out research at that point under the mentorship of people in the research field really accelerated their growth. Usually in our case the moment they get a PhD it is assumed they are ready for the market, which is wrong, they are not. Being paired with seasoned researchers, they were able to change their way of looking at things and way of carrying our research.” **Senior Leadership**

ECRs reported better relationships with their seniors and received insights into how to implement their own research.

“I had a good mentor in the ISP team leader. I benefited from the programme. So, there is a good improvement in the college amongst ECRs, they are connected with senior researchers. This is a good change.” **CVF**

CVFs who became mentors described how this helped them develop their mentoring and supervision skills, as well as enhancing their career development. At MOUA, senior leaders have observed how CVFs and ECRs feel more important and see themselves as the next generation of research leaders. It was reported that the ACU funded ‘Next Generation’ workshops had a powerful motivating effect on them.

“You see how these young people are vibrating. They are so highly enthusiastic. They have what it takes, and they cannot stop telling others what they have learned. These collaborations moving the CVFs to somewhere and cross fertilising them and learning skills is wonderful.” **ISP Lead**

Institutions have not yet evaluated the impact of their mentoring programmes, although informants and E-Survey results described a shift towards: a research-driven culture, higher levels of motivation and passion for work among ECRs, more cordial relations between ECRs and their seniors, and

increases in quality publications, research outputs and grant awards. It was not possible to review formal documentation of mentor-mentee interaction, or the monitoring or follow-up of agreed actions. One E-Survey respondent highlighted the need to measure the impact of mentoring.

Much more needs to be done in terms of monitoring and measuring the impact of the mentoring process
E-Survey respondent

Senior leaders and champions observed a **changed attitude [H1d]** and increased confidence amongst ECRs, who were more pro-active in identifying collaborators and increasingly confident in making grant submissions.

“Before they were scared and not even trying, but now we are seeing them putting in applications, not being afraid.”
ISP Lead

“They [ECRs] have confidence which is not a traditional measure and an ability to have collaborators. These things have improved since being part of the ISP.”
ISP Lead

Informants described **improvement in research skills [H1e]**, and increased understanding of how to implement applied research and work with research beneficiaries.

“We have seen both the supervisors and students being more organised, action oriented and results oriented. Quality of the research is also improved. We expect them to produce goods and services from their research. They must also come up with policy briefs, prototypes, and all that. CIRCLE ISP has been very instrumental in that direction.”
Senior Leadership

“It was no longer business as usual, we were trying to do research that met the needs of society and was along with the trends.”
ISP team member

Many of the new master’s students, who previously had very limited research skills, were able to access mentoring and training to develop skills in scientific concepts, data collection, analysis and interpretation, writing and publication.

Discussion

ECRs clearly benefitted from the strengthening component of CIRCLE, through receiving career guidance, gaining new skills, and an increased confidence to apply for funding and publish as a result of mentoring and enhanced training. There were additional benefits to CVFs who became involved with the ISP team with some swiftly moving into more senior positions. They became mentors, expert facilitators and increased their visibility within the institution through engagement with senior leaders and exposure to university administrative systems. However, it was not possible to assess whether this impacted on their time to engage more directly in research.

Researcher development can often focus on scientific skills directly related to research, and it is often criticised for the lack of soft skills or transferable skills training. The ISP teams utilised the RDF to help bring focus onto important soft skills for robust research.

Increased ECR competence was measured mainly through traditional indicators of research production - namely published papers and grant income. Whilst these are important indicators, there is a need to widen the range of indicators to better capture softer core competences of ECRs. Writing skills have focused on papers and grant applications, however, these should be expanded to include the use of blogs and social media platforms that have the potential to increase visibility across academia.

Whilst participating institutions have reported active mentor-mentee relations, evaluation of the impact of the mentoring and is yet to be done. This will be important data to collect such that ISP teams can advocate for wider reach of mentoring with senior leadership.

CIRCLE should be commended for instilling attitudes among ECRs and CVFs in relation to the value of producing useful research that has value to society. This is an aspect of the training that should be developed within any future programme.

The scale of reach of these activities, however, varied between institutions (discussed later in this report). In addition, CVFs were described as having the most significant gains rather than the wider ECR population.

Summary: Increased competence of ECR



Barriers

- Ability to reach all ECR population



Enablers

- Leadership opportunities for CVFs
- Recognition of importance of soft skills
- CVFs becoming mentors and supervisors



Recommendations

Programme

- Continue focus on value of producing research that has value to society



Good Practices

Programme

- RDF provides holistic approach to researcher skills including technical and soft skills

Institutional

- Focus on empowering ECRs to take proactive approach to their own career development

5.3.3 Increased prospects for ECR [H2]

Whilst CVFs have substantially **increased publications [H2a]**, there was less evidence of a wider improvement in publications amongst other ECRs. ECRs are being guided on publishing and are better informed in relation to predatory journals. Informants have reported improved ECR publication

rates, both in terms of quality and quantity. At UENR, Ghana they described achieving a 'culture of publication', while at Ebonyi State University they increased their ranking amongst Nigerian state owned universities as a result of increased publications. It was, however, unclear how many of these publications were from CVFs, existing climate change researchers, or beneficiaries of the ISP training and mentoring programme.

"A lot of publications have been produced on climate change since CIRCLE. We think it added about 30 publications when we analysed it."
Senior Leadership

At Makerere University the link between CIRCLE support and increased publications was tentative.

"We are getting some stats that for the first time to get over 1000 publications, which was an outstanding number which has not been registered before. I cannot say that this is from the CIRCLE project, but there is a possibility that some of these trainings have contributed to that number. By virtue of the size of the university there are lots of attributing factors."
ISP Lead

CIRCLE ISP has helped create awareness about **better promotion prospects [H2a]** and the need to build a solid track record through publishing.

"When I started CIRCLE I had just a few publications... now I have a number of research outputs ranging from book chapters, technical reports and also journal publications. I have been able to apply for promotion using that track record – there has been a growth for me."
CVF

Participating institutions described a range of approaches that they are using to guide ECRs on promotion criteria, build their evidence in line with the criteria, and successfully apply for promotion. At Fort Hare University, South Africa, the Research Office hosted workshops on career guidance and encouraging multidisciplinary research that increases promotional prospects.

STEPRI, Ghana, described delivering training on career progression, and encouraging ECRs to develop a career road map. There were numerous examples where informants identified that the work of the ISP had led to ECRs understanding the need to be proactive in their career. This was identified as being a significant change.

"ECRs are aware that they need to take control of their career rather than waiting for things to happen."
ISP Lead

The impact of mentoring was clearly linked to helping ECRs attain their goals, particularly in relation to achieving their qualifications in a timely manner. At Ebonyi University, Nigeria, mentees have started to achieve results and have been driving the mentoring process. ECRs at UENR, Ghana, have reported on the benefits of having a mentor and a career roadmap, as well as lecturers achieving senior status at a faster rate.

The importance of understanding different career needs and specific issues for female ECRs was highlighted. Young women are often having to balance family and career at this important point in their career timeline. One female CVF applicant described how she was unable to do the CIRCLE fellowship as pregnancy meant she was unable to travel outside the country.

"I could have had a fellowship in the same country in a different institute. But it was not an option at the time. But flexibility for women is important. We, as women, we have to push through. Government should allow us to do things differently if we can. Like arriving at the same goal but doing things differently."
Stakeholder

Increased scholarships/research funding [H2c] was a key priority for ECRs and still presents huge challenges for fledgling African researchers. Support to ECRs provided through the ISP included: mentoring, guidance, and training on proposal writing/scholarships, as well as advising ECRs on

sourcing funding opportunities. It was widely reported that training, mentoring and guidance has resulted in an increase in funding applications and scholarships.

“The trainings we have given to our ECRs has actually increased the number of our staff applying for scholarships and fellowships.” **CVF**

However, there was clear recognition that this is an area that still needs substantial input and investment. ECRs described feeling overwhelmed when looking for scholarships on the internet. Whilst participating institutions observed that ECRs were having a higher success rate in small/seed corn institutional research awards, It was discouraging to find that a lot of research remains self-funded with few ECRs winning national grants.

“Most of our projects are not sponsored. Anything you do is personal effort. It is only a few that get funding from national funds... So, this discourages the ECR.” **ISP team member**

On the other hand, many CVFs have won PhD scholarships and gained overseas fellowships.

Discussion

Increased publications in quality journals was widely reported across the participating institutions. The extent to which this was due to CVFs or ECRs benefiting from the ISP was difficult to ascertain. The intense pressure to publish research in ‘high-impact’ journals, also known as the “publish or perish”⁶ culture, is a well-known global challenge for researchers. While it can be argued that publishing provides an additional workload to intense teaching and research commitments, it is also recognised that this will support the funding success of ECRs and consequently their career trajectories. This is an important outcome from the programme. How to navigate other publishing routes may become an increasingly important factor of the training, including the use of blogs and social media.

The impact of career guidance has led to increased sensitisation of ECRs and an increased awareness of the need to plan career pathways in a more structured and systematic manner. This has led to more focused attention on publishing in high impact journals, increases in successful grant applications, as well as better understanding of promotion criteria.

CVFs have clearly benefited to a great extent from the CIRCLE programme, swiftly moving into more senior positions. The international exposure gained through the fellowship, increased networking opportunities, mentoring, and ISP team membership, have directly contributed to the success of these ‘rising stars’. ECRs look to the CVFs as role models, a situation that has encouraged and inspired other ECRs to explore what can be achieved.

While there is much discussion about increasing research equity, African universities, particularly younger ones, struggle to compete for international funding and scholarships. ECRs should not be expected to fund their own research, a situation that continues to be the norm in sub-Saharan Africa. In a recent INASP study⁷, insufficient access to funding was an issue cited by 93% of ECRs. This was also a major challenge for ECRs within the CIRCLE participating institutions. Future programmes should include capacity strengthening in grant writing skills at both junior, mid, and also senior levels. Funding can therefore trickle down to ECRs. Future programmes should also consider including institutional seed corn funds to support the research costs of ECRs if they are seeking to support the wider ECR community (as opposed to just CVFs) through institutional strengthening. These funds should also be accessible to senior levels provided that their applications offer ECR opportunities. This will have a direct benefit on ECR prospects. Many institutions in SSA already have or are

⁶ Abubakar, K. M. (2016). “Publish or perish” is good for African research, *BMJ*; 352 :i121. <https://www.bmj.com/content/352/bmj.i121.abstract>

⁷ https://www.inasp.info/sites/default/files/2021-04/VOECR%20full%20report_final.pdf

developing institutional seed corn funding schemes. Ideally funding should be provided through or in tandem with developing such schemes. Funding should be flexible providing ECRs the autonomy to use these funds to best effect, including for collaborative research. This directly addresses some of the most pernicious equity issues for ECR where those without access to international scholarships or who are not from privileged backgrounds struggle to fund even small research to complete their studies. It also addresses one gap where capacity strengthening in research skills is not coupled with opportunities to utilise those skills soon after training.

Summary: Increased prospects for ECR



Barriers

- Accessing research funds



Enablers

- Mentor – mentee relations
- Training on publishing, career guidance and proposal writing
- Increased confidence of ECRs
- ECR roadmap
- Proactive approach to career development from ECRs



Recommendations

Programme

- Consider inclusion of flexible funds for institutions to support ECRs with their research costs if seeking to strengthen ECRs cadre within an institution
- Include capacity strengthening in grant writing skills for all levels of researchers in any future institutional strengthening programme
- Ensure that gender is considered in relation to scholarships, in terms of enabling access for women who may have less opportunity to travel

Institutional

- Ensure that gender is considered in terms of promotion criteria



Good Practices

Institutional

- Research Office hosting workshops on career guidance
- Enabling ECR's to have a road map through mentoring

5.3.4 Beneficiary Institutions Climate Change Research Strengthening [O2]

Whilst there were inputs into the ISP specific to climate change throughout the workshops, and through the 2018 'Organisational Strategies and Structures for Climate Change Research in sub-Saharan Africa' report⁸ by NRI, the main focus of the ISP's was on institutional strengthening to support ECRs rather than any other aspect of institutional capacity. Hence, we would expect less ISP activities and outcomes specifically related to climate change research. Much of the institutional strengthening for climate change research related by informants was primarily due to the contribution of CVFs rather than the work of the ISP itself. One informant identified this as a weakness of the programme. There was general agreement in the preliminary findings workshop that any future institutional strengthening programme should have a stream specifically focussed on climate change research. However, the exact scope and shape of this objective should link to the overall aims of the programme.

There was evidence of the **enhancement of institutional structures [O2a]**, although less evidence of impact on **policies**. Some of the structures developed pre-dated, or were launched around the same time, as CIRCLE, whilst others were driven by the returning CVFs. Within some institutions no formal structures had been developed but research groups had been formed, often driven by CVFs. In other institutions, climate change was being infused into the research and teaching within existing departments/faculties/centres. Figure 10 shows the breakdown of approaches to institutional structures of the respondents n=17.

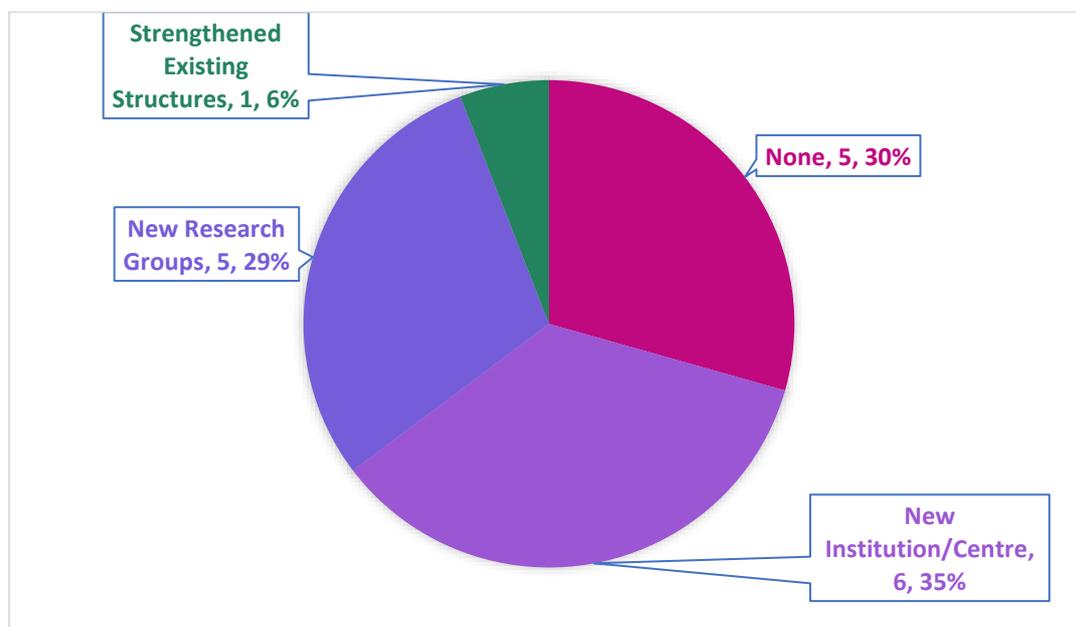


Figure 10 Frequency of institutional structure enhancements from survey respondents n=17

A centre on climate change and gender was set up in UENR Ghana that was largely driven by CVFs, and there is discussion with the university, as well as external funders in Germany, in relation to a centre for climate and mobility. There is also an Earth Preservation Research and Innovation Centre, which was again driven by a CVF, that has links with national agencies to develop disaster early warning systems.

Ebonyi State University, Nigeria, has been given the green light to establish a centre on crop improvement, nutrition and climate change; all the CVFs are involved in the centre, and the process

⁸
https://gala.gre.ac.uk/id/eprint/22410/7/22410%20MORTON_Organisational_Strategies_and%20Structures_for%20Climate_Change_Research_2018.pdf

was driven by the ISP. They will pool the grants that they currently have in this area, while using the centre to attract further grants.

In the University of Fort Hare, South Africa, there is a newly established Centre to Advance Climate Change Research headed by the ISP lead. This is part of a mandate from the national government to establish centres in historically disadvantaged universities.

In Mekelle University, Ethiopia, a Climate and Society Institute was formed in 2015 which was reported to have been strengthened by the CIRCLE programme through the work and skills that the CVFs brought back to the institute. The CVFs have brought further research to the institute through their PhD scholarships. However, in relation to the needs of the Institute in terms of human resources, equipment, and funding, CIRCLE had made a limited contribution. It was acknowledged that this was not a primary objective of the programme.

In the University of Embu, Kenya, climate change has been identified as a thematic area of focus for the university, and several research teams have been formed in response.

In Chinhoyi University of Technology, Zimbabwe, although there had been hope that a new centre would be established, this had not yet happened, and so they were infusing climate change within their research and teaching among different departments and centres. There was, however, discussions about establishing a cross department centre of excellence, and establishing a partnership with government.

In the University of Ibadan, Nigeria, a climate change research group was initially formed with the CVFs and supervisors, then increasing their participation to other researchers who displayed an interest in climate change. A particularly positive aspect of the group was the senior support received in creating proposals. At the time of this review, two grant proposals had been submitted by the group; one national and one international. One institution also talked about temporary research groups forming to respond to proposal calls.

In other institutions, whilst they had not set up new institutional structures, they had taken steps to improve institutional processes and infrastructure in relation to climate change. In MUHAS, Tanzania, the ISP advocated to senior management to start the process of planned laboratory facility improvements. These are now underway. At the University of Ibadan, the Research Management Office was responsible for circulating opportunities in climate change research across the organisation.

The main challenges to enhancing institutional structures were identified as lack of funding, lack of senior expertise in specific areas, and lack of infrastructure/equipment.

“We want for example to do forecasting and prediction, but we do not have the equipment that we need to do it. We have human resources who have been trained abroad and locally. If a farmer asks us when to plant, we do not have an answer as we do not have a monitoring system. We still use secondary information from international forecasting. In the country the capacity is poor, but we want to close that gap. We have these basic problems. Even if we had some resources, we still lack advisors for our PhD students.”
ISP Lead

There was no evidence of **enhanced strategic frameworks [O2b]** within the sample institutions, and no institution reported having a university wide strategy for climate change research. The majority of institutions did, however, state that there was an increased commitment to climate change research. Unfortunately, even within those institutions who had developed centres/institutions, there did not appear to be an associated strategy. Informants from different institutions identified that this was an area where further work was needed.

“I think still we can do more in terms of climate change agenda and speaking with one voice. We have now significantly more since beginning of CIRCLE... but I still think we have a long way to go in terms of coordinating activities and ensuring that people do not work in silos.”
Senior Leadership, Participant Institution

“I think the commitment to climate change, I do not think it will end – we have to put in place things to ensure sustainability.”
Senior Leadership, Participant Institution

There were examples of **enhanced climate change research curricula and teaching [O2c]**. Mekelle University, Ethiopia, now also provides training and has established a Masters and PhD programme. Ebonyi State University, Nigeria, has reviewed their curriculum in applied biology at Masters and PhD level to add courses in climate change; but stated that there were still other departments where climate change could be included. Chinhoyi University of Technology, Zimbabwe, has developed a Masters in Sustainable Development with a full module on climate change. They are also attempting to infuse climate change into other teaching, including in relation to indigenous knowledge management within climate change. The University of Ibadan identified that climate change was being included in curricula, and that CVFs were now more involved in teaching.

In the survey 44% of respondents (n = 8/18) stated that they had provided **training for researchers (non-ECR) and support staff [O2d]**. The subjects covered by this training are identified in figure 11, the training was not specific to climate change although in some institutions climate change was central to the examples used.

What subjects did you provide training on (please tick all that apply)

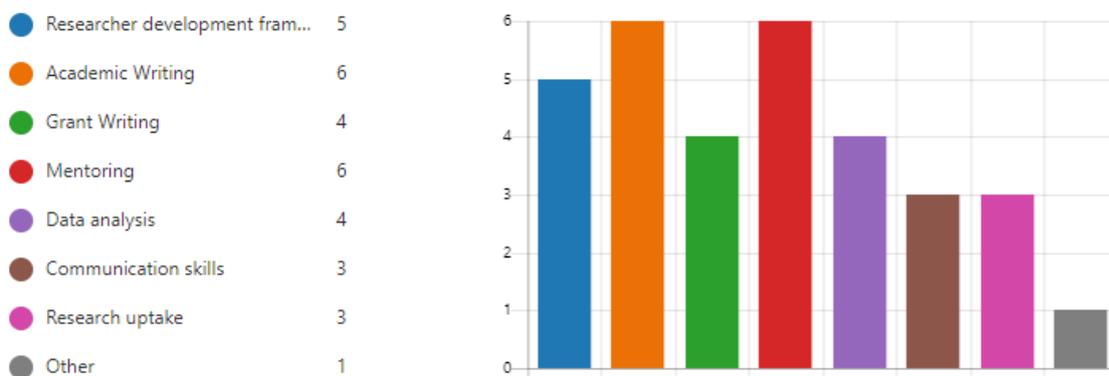


Figure 11 Subjects on which training was provided to researchers (non-ECRs) and support staff (n=8) - other was due diligence in research administration

Of the eight institutions, training was provided to support staff in two, and to senior administrative staff in three. In five of the institutions, training was provided across the whole institution with the remaining three covering a small number of their departments/schools/faculties/centres. Three of the institutions identified that they had reached most of the researchers/support staff in that section of the institution, with the remaining five reaching some of them, or a smaller number. Five institutions had plans to expand the reach of the training, with the remaining expressing a desire to expand the reach without clearly identified plans.

Discussion

The CVFs have clearly been an important driver for institutional strengthening in climate change. They have been instrumental in the strengthening or establishment of new centres or institutes, bringing in new scholarships and grants, and assisting in the improvement of curricula and teaching on climate change. Whilst institutions have been supportive of new centres, and the institutions have been providing them with facilities and services, their sustainability remains dependent on their ability to be

competitive in relation to national and international collaborative funding. It is recommended that future programmes should provide support to institutions to develop their strategy in relation to climate change research and should assist them to improve their competitiveness and ability to attract international partnerships and research grants.

It is important that institutions identify where their niche is in relation to climate change, as well as areas of strengths, weaknesses, and opportunities in relation to this field. This is an area where institutions would benefit from bespoke support at institutional level from experts within the field to enhance strategic thinking.

In addition, institutions require greater support than can currently be delivered to enable them to be competitive by means of proposal writing workshops that utilise a more appropriate mentorship approach. These workshops should build skills in identifying partnership opportunities, through to budgeting and negotiating fair splits within international consortia.

These areas are explored in more detail in the future programme section of this report.

Summary: Beneficiary Institutions Climate Change Research Strengthening



Barriers

- Lack of senior experts in climate change
- Changing institutional priorities away from climate change
- Lack of climate change specific activities in ISP
- Limited research funding in climate change
- Lack of infrastructure/equipment



Enablers

- University strategy encouraging establishment of structures, eg. centres of excellence
- CVFs gaining additional scholarships/grants to undertake research in climate change
- ECRs motivated to undertake climate change research



Recommendations

Programme

- Institutional strengthening programme should have a stream focusing specifically on climate change research
- Improving international competitiveness of institutions requires more than proposal writing workshops, with a mentorship approach being more appropriate support

Institutional

- Link the launch of institutional structures for climate change to a strategy to build research in this area



Good Practices

Programme

- Providing funds to host national or international conferences to strengthen networks

Institutional

- Bringing together interdisciplinary groupings of researchers either formally or informally
- Creating cross cutting climate change content throughout curricula
- Developing new modules specifically on climate change

5.3.5 Strengthened capacity of and relationships between researchers and support staff [H3]

Survey respondents were asked whether, because of CIRCLE, there had been **increased interest in climate change research [H3a]** within their institutions, with 67% reporting a significant increase and 33% some increase (n=18). Increased awareness or motivation in relation to climate change within the institution was also identified as the most important impact of CIRCLE on climate change research by 26% of survey respondents (n=17). One interviewee identified how some of the home supervisors, who were not previously working on climate change, are now “incorporating the issue into work and funding applications”. The success and advocacy of the CVFs was identified as contributing to increased interest amongst other ECRs to conduct climate change research. Many institutions identified that the CVFs had been running meetings, stakeholder forums and workshops to sensitise ECRs, students and other stakeholders on the importance of climate change research.

“So, we have this new trend of relating the research design to what is happening in terms of climate change. ... The CVF gave a beautiful presentation and that motivated people. It has quickened research in climate change.”
ISP Lead

Interview informants identified that CIRCLE had influenced choices about the type of research being carried out, with evidence of integration of aspects of climate change into their research, as well as awareness of the need for greater research in this area. The success of others in gaining grants was also identified as a motivating factor for individuals to integrate climate change into their research. The thematic focus of the institution had impacted on motivation levels to carry out climate change research, with institutions that were not so obviously focussed on this area, such as Muhimbili University of Health and Allied Sciences in Tanzania, reporting a more difficult process in gaining traction. In one institution climate change was already highly prioritised as a research topic but CIRCLE was reported to have widened the scope of the research. In some cases, this increase in motivation was limited to a limited number or single department, again tending to be those most easily aligned with climate change, such as agriculture and natural resources. However, awareness and motivation were being increased in other departments as a result of the teaching and research of the CVFs.

“At the beginning some of the CVFs, who are from disciplines like medicine and engineering, never believed that they could go into climate change. They did not think that it was related, but the fellowship makes them interested in climate change, and they are aware of the impact. They are reflecting that in teaching and research.”
ISP Lead

Survey respondents were asked about **increased skills and more effective researchers and support staff [H3b]** as a result of the training for these cadres. Improvements reported by both survey respondents and interviewees included:

Researchers

- Ability to independently conduct training
- Successful grant applications
- Volunteering to be part of research teams
- Research paper publication
- Quality identified through monitoring research outputs
- Collaboration including interdisciplinary collaboration
- Quality of lectures
- Quicker completion of postgraduate studies

Support functions

- Collaboration between different research support offices
- Communication skills

Small Case Study: Michael Okpara University of Agriculture, Nigeria

Michael Okpara University of Agriculture, Nigeria, undertook a range of activities targeting researchers and support staff. A two-day service delivery workshop was held with senior management to identify gaps. Mentoring and ethics workshops had been held with researchers and support staff and another workshop was pending at the time of writing. Other monthly trainings focused on communication skills and proposal writing. Support staff were reorientated regarding file management. As a result, files are moving more smoothly between offices without the intervention of the researcher. Staff induction processes ensure that there is clarity regarding duties and responsibilities.

“The staff orientation when they see that you are serious about deadlines, then they see that this is the culture for success. That has changed behaviour and attitude to these things.” **ISP**

The change in focus towards applied research has been communicated beyond the ECRs. This focus beyond researchers to support staff was partly enabled by the attitude of the previous Director of Research who identified that non-research staff were crucial to the delivery of research, and so actively reached out to them. The training programme through the ISP was identified to have impacted positively on staff ethics, teaching culture, responsiveness, cooperation and commitment to interdisciplinary research, and willingness to participate in proposal writing.

STEPRI, Ghana, ran training for support staff in communication skills, building their capacity to interact with funders and officials. They were also sensitised about the importance of knowing funding conditions and how this is linked to their ability to progress within their roles. This was identified as being a clear motivating factor. One informant also identified how involvement in facilitation processes for the ISP was a capacity development opportunity in relation to how to develop and run workshops.

Training was also linked to the motivation to work more effectively. Some informants from other institutions identified that there remained a gap in project management skills for support staff.

There were many examples of informants stating that the ISP had **strengthened capacity to win funding or publish [H3c]**. Examples given would often include ECRs and CVFs, however, there was also an impression that the general ecosystem surrounding response to climate change related calls had improved. When asked about the most important impact on climate change research as a result of CIRCLE, 35% of survey respondents (n=17) stated that this was increased research outputs or proposals. Some institutions identified that the CVFs were utilised as a de facto research group that

were being encouraged to respond to any climate change calls. In other institutions, an increased willingness to submit grants, or be involved in research teams, was linked to the training undertaken for ECRs and other cadres of staff. Examples of grants won included Climate Research for Development in Africa (CR4D) supported by FCDO under the WISER Project, for which a number of CVFs had been successful. There were institutions who identified that they had experienced good levels of success winning grants. For example, Ebonyi State University have had two EU grants, as well as national and institutional funding for climate change research. One ISP lead identified how the training had helped them to improve the quality of their publications, as well as their ability to achieve funding and leverage collaborations.

There were a significant number of institutions who were only in receipt of institutional and/or national funding. Within the survey respondents (n=18), 50% of the institutions had solely received national and/or institutional funding, with the other 50% obtaining these alongside international funding. Institutional funding had often been seed funding, and national funding, whilst varying in size, was not at the same level of investment that can be seen from international funders. Barriers to accessing international funds included: lack of skills, lack of collaborators, lack of experience, Covid 19, competing priorities, ineffective financial systems (institutional and national), lack of motivation to apply for funding, lack of access to information on funding opportunities, high level of international competition, limited experienced grant writers and potential primary investigators, and geographical separation from funders.

Informants identified that there had been increases in the number of publications and particularly those published in quality peer reviewed journals. Examples given, often referred to the CVFs rather than the wider group of researchers. The University of Embu identified that their publications in climate change had risen from 3 in 2013 to 20 in 2019 and is predicted to reach 30 during 2021. Although not all growth could be attributed to CIRCLE, for a few institutions it was reported that increased research grants and outputs had contributed to improved ranking of their university.

Whilst **shared understanding of professional and career development [H3d]** did not emerge as a core theme from the interviews, there were examples of changes that can be inferred from the responses. One of the benefits of the training, relating to the principles of the RDF, was identified as a more proactive approach to professional and career development amongst ECRs. This was exemplified by the RDF before being taken up by the wider group of ECRs. The element of time planning was highlighted as useful for senior and junior academics, resulting in earlier completion of studies and better management of supervisory responsibilities.

Where mentoring schemes had been implemented with training for senior and junior academics there was evidence of **shared understanding and increased skills in mentorship [H3e]**. In Michael Okpara University of Agriculture, Nigeria, training of mentors was provided within each college on a voluntary basis. This training was linked to improved communication and relationships between junior and senior academics, as well as a better understanding of the nature of formal mentoring.

An unexpected outcome of the mentoring scheme was the increase in two-way learning with innovative research techniques flowing from junior to senior colleagues. In Mekelle University, Ethiopia, mentoring was voluntary, and a credit system had been developed so that mentoring counted towards required teaching commitment. There was also a plan to certify mentors. In 2020 there had been six staff who were mentoring students.

There was little evidence from the interviews of **higher levels of protected time for research [H3f]**. CVFs were increasingly drawn into administrative roles, and hence their ability to directly deliver climate change research was reduced. There were delivery partners who identified that the duration of the scholarship was too short. This was resulting in challenges for CVFs who were attempting to deliver their publications, while also being expected to deliver sometimes higher teaching loads than normal as an increased contribution after having been away on their fellowship.

Discussion

The CIRCLE programme has contributed to an increase in interest in climate change. There was also evidence in some institutions of increased effectiveness in writing and winning proposals. Within the ISP teams there was an increased understanding of professional and career development and mentorship.

It is clearly reported by the participating institutions that, between the actions of the ISP and the returning CVFs, CIRCLE has been contributing to an increased interest in climate change. This should contribute to an increase in climate change research within these institutions. Where training had been undertaken, targeting research staff and/or support staff, positive feedback has been received indicating that skills and effectiveness had been significantly improved. Strengthened capacity to win funding or to publish seemed to relate to a complex interplay between; the CVFs, motivation and training of ECRs/researchers, increased capacity to respond to calls and reinvigoration of senior staff.

Whilst throughout this report there are examples of successes in developing winning proposals, or joining winning collaborations, there are still a significant number of institutions that are not currently competing in the international research marketplace. As a result, they remain disadvantaged in terms of their capacity to conduct research at scale, and to bring in sufficient funding to underpin institutional strengthening. Hence, it is essential to support institutions to be competitive in terms of a portfolio of national, regional and international funding, if a sustainable approach to institutional strengthening is to be achieved. This will require greater input than basic training in writing winning proposals, and ideally should utilise a mentoring approach that can provide inputs in real time when responding to real calls. It should also cover how to identify opportunities, potential collaborators, negotiation, as well as budgeting for research and individual and institutional capacity strengthening.

In terms of shared understanding of professional and career development and mentorship, there was evidence of significant improvement in the ISP team members understanding in relation to these elements. The degree to which this had spread throughout the institution, however, varied significantly and was difficult to determine for both the ISP teams and the evaluators. The ISP team members and CVFs, however, will almost certainly continue to champion CIRCLE's approach to career development and mentorship, and many are currently, or will in the future, hold senior positions within their institution's administration. This, however, has a negative side, also leading to reduced opportunities for them to pursue their own research interests.

Protected time for research remains a particularly difficult issue to solve in under-resourced institutions with high numbers of students and teaching requirements, as well as staff being drawn into administration early in their careers. It appears that research will only be given more weighting in terms of time allocation when it is linked to substantive funding and prestige for the institution.

Summary: Strengthened capacity of and relationships between researchers and support staff



Barriers

- Lack of senior researcher buy in
- Lack of experience in successful proposal writing and/or international collaborations
- Lack of access to funding opportunities
- Competing priorities (teaching and administration)



Enablers

- Recognition of the important role of support staff in research
- Identifying gaps in support for research staff
- Senior staff with a track record of winning international funding
- Forming research groups to respond to calls



Recommendations

Programme

- Increase the focus on the skills and processes needed to build a portfolio of climate change research



Good Practices

Institutional

- Providing training to support staff and researchers based on identified gaps/problems
- Dissemination events on climate change research by CVFs to raise awareness and interest

5.3.6 Strengthened climate change research institutional arrangements [H4]

The interviews suggested that decisions on **informed choice on institutional model [H4a]** were driven more by institutional norms and possibilities than by CIRCLE, although the motivation to strengthen institutions came largely from CIRCLE, particularly the CVFs. There were four main approaches:

- Strengthening pre-existing centres or institutes for climate change research
- Setting up new centres for climate change research
- Strengthening links between researchers, or forming research groups across departments/faculties
- Strengthening climate change research and teaching within specific departments/faculties/centres that are not entirely focussed on climate change

In some institutions there has been a drive from the top levels of the institution to set up centres of excellence. The benefits of having a centre of excellence were identified as contributing to being taken seriously within the institution, assisting in pooling track record/expertise, and therefore being more attractive to funders, providing priority access to institutional research funds, and having status with external bodies, including government.

Small case study: UENR, Ghana

UENR established a centre of climate change and gender, which was in the process at the time of writing of being split into a centre for climate change, and a separate centre for gender. It was CVFs who were instrumental in driving forward the establishment of the centre. As with other institutions, it was identified that the ability to form the centre was partly enabled by the university's aspiration to have more centres of excellence, alongside the motivation gained from CIRCLE.

“For now, it is a small centre and we cannot do a lot. In actual fact, as a result of CIRCLE, it is shaping our discussion and focus as far as climate change is concerned for the university.” ISP

The centre is supported by the university in terms of providing space with equipment and supporting/publicising activities of the centre in terms of outreach and training. However, as the quote suggests, the level of research grant obtained by the centre remains limited, with much of the work highlighted as part of the centre being related to the research uptake grants from CIRCLE.

There have also been unresolved discussions about the degree to which the centre should encompass all those schools with an interest in climate change, or just the School of Natural Resources. Regardless of this, links have been made within the institution across three schools who have an interest in climate change. Informants still felt, however, that within the institution, and across national institutions, climate change researchers remained widely dispersed.

“There is interest in climate change, but it is scattered. Most often you see north-south collaboration rather than south-south or within the country. But I think we are making progress.” **ISP**

Another CVF drew on the training from CIRCLE during negotiation with political leaders, and as a result has established the Earth Preservation Research and Innovation Centre incorporating a number of MoU's (some signed and some still in discussion) with national agencies to work on disaster early warning systems and training for their staff. There are plans for office space to be allocated as part of these MoU's.

Plans for establishing a centre on climate and mobility are being developed with funding and input from an international organisation based in Germany. The aim is that both institutions will take on some budgetary responsibility for the centre, which will be hosted at UENR.

CVFs at Chinhoyi University of Technology, Zimbabwe, are thinking strategically about how to leverage a centre of excellence that will enhance links with external partners by means of creating platforms, linking with government, and holding symposia.

Increased engagement with policy, decision makers and research beneficiaries [H4b] was significantly linked to the research uptake funding element of the CVF scheme. This funding scheme, and the training provided in the workshops, had generated a keen interest in research uptake amongst many CVFs, and amongst a wider group of stakeholders. Applied or innovative research provided additional points for promotion in some institutions, for example, Chinhoyi University of Technology, Zimbabwe.

Beneficiary facing meetings relating to their research were held by many of the CVFs, involving district level officials and end users (often farmers). At the University of Embu, Kenya, it was identified that there had been little previous engagement with farmers or government institutions, but they have now significantly increased, and as a result, community engagement had improved. At the University of Fort Hare, South Africa, research uptake processes resulted in local government funding to support home gardens.

“A key lesson for me and [my institution] is the need to engage more stakeholders, and especially I would call the end users. All climate change research is supposed to benefit the very vulnerable... We have learned the need to translate what we are doing ... into something that can be useful for the end user, in this case the smallholder farmer. Another lesson is that ... we also need to inform policy. A publication should not just sit in the journals.” **ISP Lead**

There were examples of stronger links having been made with national government. In Chinhoyi University of Technology, Zimbabwe, one of the CVFs was now the institutional focal point for the Climate Management Department of the Ministry of Environment, Tourism and Climate, which was taking the lead in mainstreaming climate change into development planning. This process involves working alongside focal points from other state level universities, and also brings a level of funding into the university to provide training.

The University of Embu, Kenya, were invited to be on the committee of the Kenya Climate Change Working Group, working on national conferences and with farmers in the Embu region on mitigation.

The University of Ibadan had organised national conferences to bring together researchers and policy makers.

One informant felt strongly that more support was needed, not only from external funders such as national government, but also from the institutions themselves, in order to ensure that research uptake was properly supported. Research funds from national government was insufficient to support research uptake, while institutions did not have enough funds to support routine nurturing of beneficiary or policy maker platforms/relationships.

A small number of CVFs had become lead authors to the IPCC. Whilst this was largely an outcome of the CVF element of the programme, it has significant import to their institutions, as well, raising their visibility alongside the individual CVFs, and providing a platform for international influence.

The fact that the CVFs were often drawn from different departments/faculty/centres within the institutions has directly contributed to increased **interdepartmental collaboration [H4c]**. This was also true of the home supervisors and ISP team members. In Michael Okpara University of Agriculture, Nigeria, mentoring and workshops were organised across four colleges. UENR, Ghana, identified that interschool collaboration pre-existed the CIRCLE programme, but that the CVFs strengthened that. **Interdisciplinary collaboration [H4c]** was identified by one informant as being fuelled by a desire to write successful proposals. This interdisciplinarity had also been encouraged through the placements of the CVFs with supervisors from different disciplines, therefore encouraging a multidisciplinary mindset amongst the fellows. STEPRI reported that they were a multidisciplinary institution by design, and that working across divisions was expected. In this sense CIRCLE had strengthened what already existed. One informant identified that there were different working cultures across departments that had been creating barriers to collaboration. These barriers were particularly strong in relation to norms of writing/presenting ideas, both for proposals and papers. There were reportedly fewer barriers when working alongside each other in communities. The University of Embu, Kenya, developed guidelines on transdisciplinary working that are still awaiting further feedback and dissemination.

There were relatively few examples of **collaboration with industry [H4c]**. Ebonyi State University, Nigeria, however, were seeking a partnership with industry in relation to innovative automated systems designed to regulate water pumping in line with electricity availability.

Collaboration with external institutions [H4c] was evident. Many informants spoke about engaging with sister universities in their region. Some of the institutions had ran international or national conferences/workshops, from which a key part of the stated benefits were the strengthening of links with external institutions and individuals.

Ebonyi State University, Nigeria, are holding conferences on a yearly basis which have helped make links with other institutions. One of the CVFs at Ebonyi State University is collaborating with other Nigerian universities, and a Ghanaian university, through the Climate Research for Development in Africa (CR4D) grant that they achieved. The CVFs have also formed an association in Nigeria, holding a national meeting to bring together CVFs and other stakeholders. CVF research findings were presented and circulated at this meeting, and the association aims to have a lead role in setting the agenda for climate change research in Nigeria. The launch meeting was co-funded by CIRCLE and participating institutions, with CVFs paying their own travel and accommodation to attend.

Collaborations have also been formed that have seen CVFs based in different countries present joint proposals. Links have also been made between CVFs and supervisors within both Africa and Europe. In addition, some institutions have used ideas developed through CIRCLE to build international partnerships. For example, the University of Embu's work with colleagues in Russia and South Africa. Whilst examples of collaborations are being seen, including joint proposal submission, not all collaborations have successfully brought in funds as of the time of this review.

Discussion

There is clearly scope to develop strategic thinking about the institutional structures and focal areas that institutions would be best placed to develop in terms of climate change research. Structures have been largely dictated by norms within institutions, and focal areas dictated by active individuals with specific research interests, rather than a strategic decision-making process that examines the institutional, national, and beneficiary needs. Where development of new structures has been linked to government there has inevitably been clearer strategic focus. It is believed that this would be an interesting focus for a new programme, with the potential to twin developed and less developed climate change departments/centres, with the aim of undertaking strategic planning for those with less developed strategies. The report by NRI would be an excellent starting point for any such activity. Again, funding would be a crucial underpinning to the sustainability of any of these structures. This has already been addressed within this report.

It was striking to the evaluation team that CIRCLE had created a visibly positive change amongst researchers in terms of their attitude to the importance of research uptake, as well as relationship building with both end users and policy makers. It is believed that this will have a far reaching and cumulative effect in terms of both the focus of future research and the approach taken to dissemination. There were cases where this has led to more sustainable platforms either being developed, or institutions being invited to contribute to them. The model of technical working groups is tried and tested, and it is positive that CIRCLE has contributed to some of the participating institutions being more integrated into these platforms.

Lack of previous experience in research uptake processes was also evident from the interviews, and it is important that future institutional strengthening programmes include training in this area. This is a demonstrated capacity gap within many African institutions and is of crucial significance in relation to climate change research.

Positive steps had been made in terms of increased collaborations both internally and externally. As within any academic ecosystem, it is likely that some will fail, while some succeed. The steps towards interdisciplinary research, although evident, still had room for improvement in many institutions. This is understandable, however, given that the CVFs were individual projects, and that multidisciplinary working was not a focus of the ISP. There remains an opportunity for funders to make multidisciplinary working a requirement in collaborative research funding within African institutions.

Summary: Strengthened climate change research institutional arrangements



Barriers

- Lack of university support to set up research centres
- Changing institutional priorities when key administrative post holders change
- Differences in cultures between disciplines



Enablers

- University policy and support for research centres
- Senior management with passion for research
- Funding for research uptake
- Existing interdisciplinary working practices
- CVFs drawn from different departments



Recommendations

Programme

- Future programmes: partnerships with more experienced institutions to develop strategic plans for climate change research and structures
- Future programmes: continue to provide capacity strengthening in relation to research uptake
- Future programmes: consider how to strengthen interdisciplinary working in any funded research programme

Institutional

- Future funding: building in funds for research uptake when negotiating with funders or partners



Good Practices

Programme

- Focus on research uptake within the workshops and frameworks

5.4 EFFICIENCY

The relationship between the inputs and the outputs will be explored with particular focus on the small grants scheme. In addition, the processes and resourcing of the programme will be explored.

5.4.1 Resources (small grants and human capital inputs) [11]

This section focuses on two aspects of the inputs into the ISP; the small grants and the human capital inputs. The design of the programme was based on previous experiences of the ACU driving institutional strengthening with minimal funding but with technical inputs. The approach seeks to address problems of sustainability, wherein providing significant funding only results in short-lived improvements that cease once the funding ends. Funding rounds for the institutional strengthening programme were added into the design during programme implementation as a response to feedback from participants stating that activities were hard to deliver without an element of funding and were largely maintained through programme underspends.

There were four rounds of **small grants [11a]** offered to participating institutions to support the ISP between 2017 and 2020. The first three rounds had a combined total grant amount of £115k and an average total grant per institution of £3.7k⁹. The expected size of the grants was halved in the final year due to cuts made to programme spending following the pandemic. The funds were primarily used by institutions to support training costs and were widely supplemented by in kind contributions (venue costs, staff time, logistical costs), or in a few cases, additional funding from either the central funds of the institution or other projects. Most institutions felt that they had managed the funds well and had achieved significant value with small amounts of funding. For example, Ebonyi State University

⁹ Figures taken from the ISP Case Studies Report 2020

reported running six workshops using a grant of 4,800 USD. Members of the ISP stated that they had adapted their plans and expectations according to the size of the funding. However, all institutions stated that the funding had been insufficient to meet their needs. This was particularly in relation to spreading interventions to the whole institution.

One good practice from the sample institutions was accessing central funds built up by levying a percentage of grants for capacity development activities as part of an institutional policy applied to all external grants; another is embedding such training in already funded activities, such as resident's week. Individual institutions also found ways to create new expectations and cultures around development activities that enabled their delivery at ultra-low or no cost, for example, managing expectations regarding incentives or delivering training in routine departmental meetings.

Institutions who had multiple sites in widespread geographical locations, or large numbers of ECRs, found the funding significantly lower than needed to cover the needs of the whole institution. For example, one informant from a participating institution raised the problem of having a mentoring policy/guideline without sufficient funds to train mentors on how to apply it. Of the survey respondents (n=18) seven were in institutions that had multiple sites in more than one city/town/area, and six had multiple sites in one city.

In addition, some institutions highlighted a need to invest in infrastructure and seed funds for research. They felt that this was essential to provide an enabling environment for CVFs (and ECRs) in which to conduct climate change research at the level expected from their fellowships. The ISP funding was seen as seed money to demonstrate effectiveness. Some respondents identified utilising their own personal funds to supplement activities, particularly in relation to travel costs. Some informants felt that the low level of funding for the ISP reflected less commitment to this element of the programme than to the fellowships.

"If you have good planning with good technical support from the supporting institutions, even with a small amount of funds, you can achieve a lot." **Senior Leadership participating institution**

"The programme did not have adequate resources to ensure that many of the things we talked about could actually be advanced. There was excitement about possibilities of changing systems with this knowledge. But in terms of actualising those within specific systems there was limitations. So certain things could not be done to a level where somebody can say we have strongly changed this and that." **ISP Lead**

From the perspective of ACU, the burden of administration in relation to the size of the grants was imbalanced, however, a benefit of providing the small grants was that institutions were required to report on progress in relation to ISP activities.

Whilst the research uptake funds were identified as being part of the CVF element of the programme, many informants identified them as contributing to institutional strengthening through the development of policy, academic or beneficiary relationships and platforms and increasing visibility of the institution. However, some informants felt that it would have been more impactful to fund institutional strengthening activities in relation to research uptake, rather than merely facilitating dissemination of the research. Again, accessing funding, even for small amounts of travel, to communicate with beneficiary groups was identified as problematic.

"On the RDF, the idea of going to the community to bring out the science to the community, translating it for them... The idea is brilliant but there are not the funds to do the activities. Not just having a meeting... A one-off annual meeting will not do much." **ISP Lead**

Recommendations made by informants in relation to the small grants included: providing funds for office equipment, having stipends or incentives to motivate staff engagement, increased funding for research uptake to enable engagement throughout the process and greater investment in less

developed institutions. A question posed by informants was whether it would be better to invest in a limited number of institutions rather than spread these resources thinly.

There was unanimous praise for the **human capital [11b]** and expertise provided by the delivery partners for the programme. For the ISP this was mainly accessed through the workshops and materials provided. Expertise was widely seen as being world class.

Discussion

The ISP teams have achieved a lot with limited resources. It is also clear, however, that if the aspiration is to reach all ECRs within an institution, more substantive funding or creative approaches to delivery will be needed. The programme highlights a key difficulty for many institutions in finding enough funds to sustain important developmental activities, even if they only have small running costs, such as recurrent training for ECRs. Having an institutional policy to have a capacity development levy on research funding is a good solution. It is recommended that funders allow such levies within their rules. It is recommended that where institutions find ways of delivering development activities at very low or no cost such practices are shared and encouraged amongst participating institutions.

In future programmes it would be useful to differentiate between costs of the ISP activities accordingly:

- a. Developmental costs
- b. Running costs – piloting
- c. Running costs – whole institution

The ISP programme should provide sufficient funds to undertake (a) and (b), and then assist ISP teams to explore how they can budget and sustainably attain sufficient funds to reach whole institutions. Focusing on these issues from the start may support institutions to outline realistic goals in terms of what they can attain, as well as supporting them to make the case for additional funding to other funders or allow creative solutions to low/no cost delivery. This will be essential in preventing investment wastage by both the external funder and the institution. This lost investment can also be caused by sub-optimal implementation because of adopting policies/guidelines without sufficient resources for whole institution sensitisation and training. At the time of writing, the evaluators would state that the model of providing small funds in enabling whole institution strengthening in a sustainable manner requires greater work. In addition, successful change programmes in other contexts usually require significant resourcing, therefore, identifying ways of providing them at low/no cost is another area that requires greater attention to specifically identify what works at what scale.

There is a difficult balance to be made between enabling institutions to benchmark their performance holistically across wide ranging aspects of good practice, while creating expectations of the scope and scale of institutional strengthening that is feasible within the funding available. Whilst the message of feasibility was a central part of the workshops, it is evident that the process created an appetite for change that could not be met by the funding. Hence, there is a case for any subsequent programme to have a fund for CIRCLE participating institutions to scale up the institutional strengthening activities initiated within CIRCLE.

There is potential for more synergy between research uptake activities and institutional strengthening activities in any future programme. The ISP could have a focus on policy/guidelines and platforms in relation to research uptake, whilst fellowships should include funding to do research uptake in relation to the specific research undertaken by the fellows. It is recommended that this individual element is not competitive but is built into every fellowship.

Enabling synergies between projects and funders working in the same institution is also a potential strategy to enable institutional strengthening at scale. The mechanisms of doing this are beyond the scope of this evaluation, however, some recommendations in relation to the CLARE framework are included later in this report.

The importance of senior management in facilitating access to external and internal funding and resources demonstrates the need for a top-down approach when seeking to strengthen institutions.

Application and competitive processes should be balanced to match the size of grants. Competitive processes are often used where there are only limited funds, and so carry a significant burden on both the managing agent, and the institutions making the application. Therefore, it may be appropriate to use a non-competitive process should only small amounts of funding be available.

Summary: Resources (small grants and human capital inputs)



Barriers

- Lack of incentives results in delays
- Strikes and pandemic changed funding needs
- Insufficient funds to reach whole institution
- Difficulties accessing funds (national and institutional bureaucracies)



Enablers

- Supportive senior management facilitates access to funds/in kind contributions
- Requirement to report on utilisation of funds ensures activities are actioned



Recommendations

Programme

- Use light touch application processes for small grants
- Share good practices of how to sustainably deliver and fund capacity development for staff
- Facilitate costing of development, pilot and whole institution interventions
- Fund for CIRCLE participating institutions to scale up initiatives started under CIRCLE ISP
- Integrate research uptake into the institutional strengthening programme
- Facilitate the collection of evidence on the 'small grants' model of funding for institutional strengthening



Good Practices

Programme

- Adapting the programme to feedback from participating institutions

Institutional

- Mekelle University: Co-funding the roll out of mentoring with another project
- Ebonyi State University: Co-funding trainings with funds held by the research office from a percentage levy on grants

5.4.2 Project Management and Governance [I4]

Overall, informants were positive about the **project management [I4a]** and **governance [I4b]**. Participating institutions highlighted the good communication from both AAS and ACU and stated that the programme was well designed and organised. Opinions about the Basecamp software that had been used in the programme varied from finding it useful to it being difficult to use. There was also a lack of clarity amongst participating institution informants surrounding whether the platform would remain available once the programme ends. The steering committee included members of all delivery partners, representation from FCDO, and at least one independent member who acted as chair. Delivery partner and funder informants identified the steering committee as a useful and effective governance mechanism. They played an important role in delivering probing questions, helping with ideas to address problems, identifying improvements, and resolving disputes. There was a recommendation that the steering committee could have continued to meet for the duration of the programme, even as it developed a more limited scope and scale.

The **delivery partners [I4c]** identified that they had complementary roles. ACU had previously worked with Vitae and with AAS, but the partnership between all four delivery partners, ACU, AAS, Vitae and NRI, was a new one. Whilst there were adjustments that needed to be made in terms of expectations, or methods of working, delivery partners felt that challenges had generally been addressed, and that the partners had worked well together. Delivery partners formed a management group and were also on the steering committee. There has been staff turnover in some of the delivery partners (AAS, ACU, Vitae) that creates challenges in terms of continuity, institutional memory and relationship building. In terms of the **summary M&E [I4d]** ISP lead informants identified that reporting was not a problem, However, a few informants identified that they would have preferred more frequent evaluation or monitoring to assist them with time management of the activities. ACU identified that the monitoring of the ISP was less formalised than for the fellowship element of the programme, being more focused on activity reporting. Action plans were utilised to identify those actions that had been achieved, as well as how to support institutions with delays or barriers to implementation. However, it was widely reported that the monitoring and evaluation was based on a significant number of assumptions about the impact of actions, and, therefore, did not allow significant learning about the processes of institutional change. Both participating institution and delivery partner informants felt that there would have been benefit in more detailed discussions on progress; one participating institution informant recommended quarterly quick follow ups. At the outset, follow up calls were scheduled between Vitae and participating institutions. However, these were to prove challenging to schedule. Follow up via email and analysis of actions plans was also reported to be challenging, with limited response and little continuity between plans. Informants from ACU identified that the log-frame could still be improved in terms of the indicators used for institutional strengthening; whilst also acknowledging that it is intrinsically difficult to attribute and measure such changes. Delivery partners identified that M&E of the ISP was mainly the remit of ACU, but that they would have been happy to have more involvement. Programme learning has already been discussed.

Discussion

Overall, it was reported that the complement of delivery partners, project management and governance processes worked well. It is clear, however, that there is scope for improvement of the monitoring and evaluation. Potential indicators and approaches to future M&E have been included later in this report. It is unclear from the data collected for this evaluation as to why there was no clear correlation between the expressed desire for more follow up from participating universities and the effort made to engage with follow up processes. However, this is an area that would need to be addressed in any future programme. It may be that changing attitudes towards remote workshops and meetings mean that scheduling regular follow up sessions, using platforms such as Zoom or Teams, might be more acceptable in the future.

Summary: Project Management and Governance



Barriers

- Different cultures of practice and working between delivery partners
- Staff turnover within delivery partners



Enablers

- Good relationship with funders
- Collaborative working between partners
- Clear governance roles
- Simple reporting processes
- Improvement culture



Recommendations

Programme

- Discuss options and agree follow-up processes with participating institutions in start-up period of programme



Good Practices

Programme

- Clear governance structure with input from independent member(s)
- Separation of management and steering group committees

5.5 IMPACT

It is difficult to measure impact of capacity strengthening activities due to issues of attribution and timescale. As a result, any data on impact will be largely based on perceptions of potential impact. Achievement of the log-frame outcomes and outputs in relation to the ISP is addressed in the conclusion of this report.

5.5.1 Perceived Impact

E-survey respondents were asked what they felt was the most significant improvement that they could attribute to CIRCLE and what effect it had and the results are summarised below.

Achievement	Effect
Enable us to identify the major gaps in the ISP of our institution	ECR were able to write papers, proposal for grants and secure their PhD and higher academic posts in the university
Mentorship and training of ECRs that have resulted in improved and increased research outputs, and translation of science into practice through engagement of different stakeholders	CIRCLE ISP has made a great difference at individual and institutional level. However, this impact is limited to some of the researchers and students.
Establishing research center	Increment of climate change proposal Develop their writing skill Develop their climate research proposal writing Increase their capacity to publish the papers
Mentoring programs such as guidelines, and training uptakes	Research planning for Postgraduates
Increase research publications and academic promotion	Strengthening capacity in climate change studies
The university has been advancing its teaching and research on climate change related areas	The university has won many international projects The university has developed and is implementing different policies and working documents The university has established different MSc and PhD programs The institutions becomes known in its research and teaching activities of climate
Improved mentoring support for fellows	Increased interest in climate change research
Awareness has increased on research development	Networking opportunity has increased
One Associate professor came out of the CIRCLE CVF Two PhD holders thanks to the ECR CVF and Research uptake CIRCLE	Research Skills Training is now a permanent feature for all ECRs specially MPhil and DPhil ECRs Mentorship will become a University policy Developed - self confidence, self esteem, skills for proposal/ grant writing and research skills, manuscript writing and publishing skills
The University is better able to compete with other well known Universities in Africa now. Mentoring has been instituted, ECRs have been trained, more grants obtained and publication numbers have increased	Their capacities have been sharpened, University policy on promotion has been made supportive for researchers
It has increased leadership will and support for development of early career researchers	Participants were impressed by the knowledge impacted, and encouraged to pursue their search for further career development

Achievement	Effect
More ECRs joined the Climate Change Research group of the institution Mentoring, RDF, performance evaluation and research planning	Good name of the university was projected at the international community.
The focus given to early careers and support staff is an added opportunity including the tools and guidelines provided for institutional strengthening	Produced climate conscious and enlightened trainees which can serve seeds for future institutional and individual capacity building in the areas of climate research.
It exposed the staff involved to participants from elsewhere in Africa and to the methods of Vitae	
PhDs have come out of that training	Quality and of papers
It has been able to give visibility to the plight of ECRs, bringing structures and coordination to the disjointed activities.	The institution has been able to better harness the contributions
Providing enormous capacity building support to staff The training of young early career researchers in developmental research initiates the next generation in the long term impacts on staff development and professional progression	The difference has been to lead the frontiers of research in Agriculture for national development in a sustainable manner, and to train highly rated graduates in agricultural discipline equipped with entrepreneurship skills

5.5.2 Embedded Change in Beneficiary Institutions [S1]

The CIRCLE programme included a workshop on embedding institutional strengthening to help institutions explore how to embed, and ultimately sustain, improvements gained by the programme. Institutions took different approaches to embedding that were also influenced by the scale of the interventions. At institutional level there were embedding capacity strengthening strategies used within existing structures, such as Research Offices or Residency Week. Where interventions were mainly at the Departmental or Faculty level then they had become the accepted way of working amongst certain staff. This section looks at some of the aspects of embedded change identified in the scoping workshop.

At Ebonyi State University, they described the importance of consultation with academic staff to plan for embedding and sustaining CIRCLE achievements beyond programme funding.

“I was part of the winding up training in Kenya which focussed on embedding. We came back to strategise on how to sustain through wide consultation with academic staff. Staff recommended that we have the RDF trainings periodically and we have also included the RDF for PG supervisors training which happens annually and for new academic staff. We have made plans that these trainings will happen beyond the life of the ISP.” **CVF**

Despite the launch of new centres, the reported increased interest in climate change, and the global rise of its impact, none of the sample institutions were aware of a **university-wide climate change strategy [S1a]**. They described an implied commitment through the encouragement of developing research centres in this field, but key informants were of the view that more progress should be made to further climate change research within the institution.

“A university wide strategy is not really talked about. It is not mainstreamed in the university research agenda. It is a bit silent, but it is happening at department level and also in various curriculum in various departments. It is getting into the teaching curriculum.”

ISP Lead

STEPRI observed that their parent body, CSRI, is driving interest in climate change research, and that institutional interest in climate change research has improved since their engagement with CIRCLE. Examples were given of institutions providing small institutional grants for research addressing climate change. However, key informants observed that at the present time, the climate change research agenda was being promoted by individuals rather than at institutional level. This is despite matching the focus at specialised institutions such as: natural resources at UENR, agriculture at EMBU, and agriculture at MOUA. It was recommended by several informants that enabling the development of a climate change research strategy would be useful for any future programme.

“Climate change and gender are key issues at the present time. I do not see anyone’s research without a climate change element. I think it boils down to getting the people at management level to get this enshrined into the constitution and allow a system that would take it to the grassroots so that people in the different colleges can help solve the climate change challenge. We cannot say we do not have issues to solve.”

CVF

“The university has not taken climate change on as a policy. It is at individual level that these objectives have been met. I recommend that if there is any new programme, they [leadership] should be informed. It is better to be top down. Not us informing them. When it is done that way, it is better.”

ISP Team

Access to climate data [S1j] was reported to be variable across the sample institutions, even though it has a direct impact on the ability of institutions to examine climate change effects on different sectors and sub-sectors of the economy. One informant highlighted that they were dependent on international forecasting data having been unable to provide specifically targeted forecasts to local beneficiaries, such as small holder farmers.

A positive and unforeseen outcome from CIRCLE has been the contribution of three CVFs as lead authors for the IPCC, which has clearly precipitated **enhanced ability to influence the research agenda [S1i]** at a global level. CVFs have also been invited on frequent occasions to speak at climate-related events and conferences. Staff from sample institutions have also been invited to be part of national technical working groups or the equivalent. At the time of writing, however, these relationships have been mainly individual and not linked to an institutional climate change strategy.

Improving research culture [S1b] was seen as being central to institutional strengthening. Chinhoyi University described how a strong research culture is developing whereby the quality of research being produced by students has improved, and that research is not perceived as a ‘box ticking’ exercise. They also described a strong government commitment to industrialisation and innovation that contributed to a strong research culture.

“Our government introduced education 5.0 which has five pillars; previously we had research, teaching and outreach, but they added innovation and industrialisation. It makes our education system more responsive to contemporary issues such as climate change. The drive and reason why research has to be done has improved.”

Senior Leadership

Key informants described how the CIRCLE ISP had helped academic staff contribute to building a research culture within their respective departments and in some cases beyond, including: mentoring, proposal writing, research ethics, increasing multidisciplinary research, research uptake, engagement and communication of research findings.

Enhanced effectiveness of research teams and researchers [S1h] is central to institutional strengthening and embedding change. Some universities are in the process of strengthening systems through improved structures and policies. ISP teams with members from senior leadership have been particularly influential in policy development and improving structures to support and embed capacity strengthening.

“I am privileged to design staff development programmes so the ISP will continue. Three of us (ISP team) are already members of the senate and so we are responsible for policy for the university. In that way we can participate in policy formulation and are able to influence policies.” **ISP Lead**

UENR, which is a young university, is working towards the development of structures (international relations office, research and grants, student and professional development etc.) required to be an institution that can compete at international level. It was reported that this drive for enhanced effectiveness was directly attributable to exposure to the ISP, as well as relationships with delivery partners and other participating institutions.

“As a young institution you cannot compare us to other tertiary universities... Some have been running for decades and also we need to compete in the international arena. We are developing structures to meet the strategy. This is possible because of the networks we have, the relationship with ACU, AAS and other institutions. You cannot live on an island, you mimic what others are doing. We are being recognised as an endowed university.” **ISP lead**

Participating institutions described how **better and more research [S1m]** is being provided, involving a clear contribution from CIRCLE. For example, Ebonyi State University identified that they have a national grant on food security in climate change for internally displaced people, as well as a Horizon 2020 grant that led them to establish the Centre for Crop Development, Nutrition and Climate Change. They were also a grant recipient from Climate Research 4 Development via ACU. They are now one of the highest ranked State universities in Nigeria based on research publications, and they attributed CIRCLE support as being a key driver to better and more research.

“Before we were doing research but not the level we are doing now as we have people who are trained, we know what it takes to do research and we know how to apply for funding. Many of our ECRs are getting funding, then it is easier than when you use your personal money to do it.” **Stakeholder**

Other participating institutions also identified CIRCLE support as being a key driver to better research. However, attribution of the actual impact of CIRCLE was difficult to estimate for some institutions due to multiple variables.

“Several similar initiatives were implemented making it difficult to attribute the observable changes to CIRCLE program alone.” **Senior Leadership**

However, as has already been discussed earlier in this report, 50% of the institutions who responded to the survey (n=18) had only received national and/or institutional funding for climate change research. The volume of grants was minimal in nearly all sample institutions.

Scaled Improvements for ECRs [S1n]. There were two sets of institutions; those who aimed for institution-wide change, those who worked within a faculty.

“There was a kind of split between the institutions - some of them did what we hoped and did it at an institutional level but some, when they started sending Deans, they kept it within a Faculty. Not exactly 50:50 but two camps. Challenge to fan it out in some, but others had gone quite deep and then were trying to work out how to spread it. I think that in part is a reflection of who came [to the champions workshops].” **Delivery Partner**

MOUA reported that 40% of colleges adopted the mentoring programme. STEPRI was successful in scale-up to the different Accra based institutions under CSIR but were doubtful about reaching all 13 institutions due to logistical and administrative issues. UENR reported that mentoring is a university-wide project with good buy-in, whereas Makerere University, due to its size, felt it was more feasible to limit their activities to departmental level. On occasions, a mix of approaches had been used.

“We felt that it was realistic that if you are going to do something then you need to target it at the lowest level – the most important unit that is where most things happen - departmental level. Notwithstanding that this was conceived as an institutional project. We looked for activities that could be implemented at the institutional level. So, some of the competence building courses or workshops were implemented at the university level, including writing or conceptualising and building capacities in grant writing and leadership.”

ISP Lead

Chinhoyi University reported that mentoring had been adopted by the university but had not yet been implemented university wide. Ebonyi University described how both mentoring and the use of the RDF were working well within their department, but they could not measure exact reach or impact. At Muhimbili University they reported delivering university-wide training and diffusion. At the University of Ibadan success in scale-up was attributed to the approach used, cutting across different areas and departments of the university.

“I think the major thing is the way we went about it because the structure we used cut across all parts of the university, departments, faculty and the postgraduate college. It makes this easier to cut across all departments. This has been a key factor.”

ISP

Many sample institutions identified that lack of funding was a constraint to scaling up. The size of the institution, number of ECRs, and geographical spread of institutions were all identified as further barriers to spreading initiatives institution wide.

Embedding ECR capacity strengthening requires **enhanced access to facilitators/trainers [S1i]**. At Chinhoyi University this was achieved through incorporating ECR strengthening into the annual ‘residents’ week’ for postgraduate students, 40% of which is delivered through the ISP team and resource persons.

“We have mainstreamed CIRCLE activities into the graduate school. We did it by saying that the RDF is key and climate change is key so these should always resonate in our research ecosystem in the university, and we must sustain it. The whole idea of the CIRCLE team being key resource persons. We said every semester all research must go through a compulsory programme. Mainstreaming has been significant.”

ISP Lead

The CIRCLE programme was reported to have brought the issue of **improved diversity [S1f]** to the attention of the participating institutions, although this was primarily in relation to gender. Gender was addressed at some of the sample institutions by means of targeted recruitment policies. At Chinhoyi University female researchers have been directly challenging a deeply ingrained gender biased culture.

“Gender is always equated with women’s issues, but gender is both. We are just four women professors with more than 100 professors and doctors. We had to change a culture which is deeply ingrained. I cannot comment much as the gender policy is new, and I have not really seen its effectiveness and the change that it has brought about.”

Senior Leadership

At Ebonyi State University, it was reported how the gap analysis helped to address the issue of gender balance for key appointments.

“After the gap analysis management became aware of the need to balance gender in terms of appointments into key positions. The current DVC administration that we now have become the first female appointee into that position. Coincidentally, that person is a champion in the ISP programme. In relation to other positions out of eight departments, two Heads of Department are female. One of them is coincidentally a CICRLE champion. I know that, as a result of that gap analysis we are managing to balance gender in their appointments.” **CVF**

One informant stated that it was important to have a balance between male and female CVFs from any one institution to avoid jealousies, or dismissal of the programme as being unfair.

Where CVFs and CIRCLE champions/leads were in key administrative positions, they reported being able to improve the reach of activities and scale-up. The survey data highlights that the reach of enhanced ECR training was reported as institutional wide by nine out of sixteen respondents in the e-survey and fourteen out of sixteen respondents stated that there were plans to further extend the reach of training. Five out of thirteen institutions reported that mentoring had been approved as an institutional policy and eight out of thirteen reported implementation of the mentoring scheme. Of those who were implementing the policy seven out of eight confirmed it was institutional wide.

In terms of **policy/practice work and interdisciplinary research being recognised in promotion schemes [S1g]**, most institutions recognise community engagement as part of the service element of their promotion criteria. In a few cases, institutions had also updated their promotion criteria to ensure that multidisciplinary research did not result in a detriment to publication scores, and in some cases criteria were altered to positively favour interdisciplinary research.

Discussion

One of the biggest challenges in institutional strengthening programmes, especially those that are externally funded, is embedding change. It is recognised that such change is a ‘slow burn’ and will take significantly longer than typical project funding cycles. The health systems cube¹⁰ (figure 12) illustrates the need to move beyond providing support (inputs) and to focus on strengthening; the performance drivers that result in deeper change in relation to: policy, regulations, organisational structures and human behaviour.

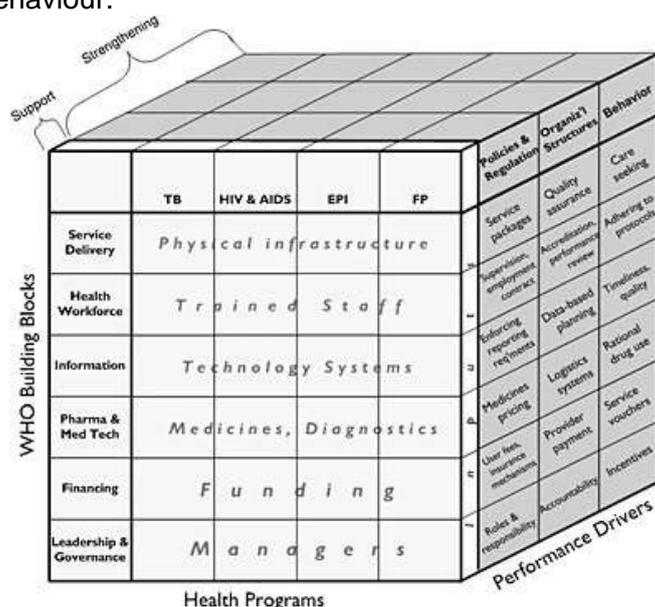


Figure 12 Health Systems Support and Strengthening Chee et al 2013

¹⁰ Chee, G., Pielemeier, N., Lion, A. and Connor, C. (2013), Why differentiating between health system support and health system strengthening is needed. *Int J Health Plann Mgmt*, 28: 85-94. <https://doi.org/10.1002/hpm.2122>

This is effectively the aim that ISP has been working towards in terms of new and updated policies, changes in organisational culture and structures, as well as changes in staff and student relations and behaviour. In some of the institutions there are signs that the implementation of initiatives such as ECR training, mentoring and policies, is being embedded within institutions with clear utilisation of central departments. There is also evidence of changing cultures within specific faculties/departments/units. A top-down approach, utilising central departments and senior administration, was recommended for institution wide changes and this resonates with findings from other institutional strengthening initiatives. Across the institutions, the scale of changes varied significantly from institution wide to a focus on specific faculties/departments. This may have been inevitable given the diversity of institutional sizes, age and structures, however, in order to evaluate impact, it is very important to understand the degree of reach of any intervention within a particular institution, as well as the extent to which it is embedded. The sustainability of these interventions is discussed later in this report.

As detailed before, none of the key informants interviewed were aware of an institution wide climate change policy. This is a missed opportunity for institutions to identify priority research needs of the societies that they serve, as well as their comparative advantage in being able to respond to them. Both factors are fundamental to a strategy intending to gain further grant funding and ensure a coordinated approach to climate change research and uptake of the research at an institutional level. Whilst CIRCLE programme never had an explicit aim to support the development of an institutional climate change strategy, such a strategy would help embed climate change research, and related activities, into the institutional agenda. This would also enable a transdisciplinary approach with suitable platforms to disseminate applied research results. Threats to conducting relevant research, such as lack of access to data, could also be explored within any strategy. It is therefore recommended that climate change research strategy development is part of the options for any future institutional strengthening programme.

Where senior leaders are directly involved in ISP teams, there have been greater opportunities to influence policy and embed an institutional research culture that values research as a core pillar of the university. The ISP has been eye-opening for younger institutions who have been able to leverage networks and relationships to develop and embed research culture and its support systems within their institution. Many young institutions have a number of needs in terms of setting up or improving key systems, however, whilst these systems are essential to support researchers, it may be that this would be too wide a scope for future institutional strengthening within a climate change research framework.

Summary: Embedded Change in Beneficiary Institutions



Barriers

- Lack of senior leadership commitment to climate change agenda
- Access to climate data



Enablers

- Research groups and centres pushing the climate change agenda
- Influential/strategic ISP team members
- Incorporating training into existing post-graduate systems
- Focus on diversity and gender



Recommendations

Programme

- Have an option for developing climate change research strategy within any future institutional strengthening programme.
- Ensure that there is clarity about the possibilities of going to scale with interventions and include indicators relating to reach within the M&E framework
- Consider a top-down approach to institutional strengthening with more structured engagement of central departments and senior administration



Good Practices

Programme

- Including capacity strengthening on embedding initiatives into institutional structures within the workshops

Institutional

- Embedding ECR training into existing institutional structures

5.5.3 Synergies [S2]

There were examples given of **multi-country research projects [S2a]** arising from CIRCLE. In some cases, institutions have gained projects through their existing senior staff and have then involved CVFs or ISP team members in those projects. Mekelle University, Ethiopia, had a collaboration with a university from Colorado, USA, and projects funded by GIZ, Germany.

UENR, Ghana, have projects funded by the World Bank, DANIDA, European Commission and German institutions, as well as one in evaluation to USAID. They stated that their collaborations are increasing and a new centre for research and grants is being established to assist this growth. CVFs are either leading or collaborating on many of these international projects. In some institutions CVFs have been invited directly to be part of multi-country research projects or proposals.

Even amongst those institutions who had gained international funds, there were those that identified the process as being challenging. It can be difficult for institutions to pass through the necessary protocols to allow funds to be transferred from abroad. In some institutions there is no research or international office, or it has only recently been formed and remains in development. Communication with potential international collaborators was also identified as being challenging. However, one CVF stated that an indirect benefit of CIRCLE was developing relationships with a significant number of individuals within those departments needed to release project funds. These relationships had enabled easier access to subsequent grants.

There was also evidence of **increased south-south collaborations [S2b]**. CVFs in particular benefited from networking as part of their fellowship experiences at host institutions with other CVFs

and host staff, as well as at workshops and conferences. The workshops for both CVFs and champions were specifically designed to encourage networking, with seating arranged to provide participants with opportunities to share their diverse experience. Within the trainer's workshop, participants were encouraged to generate collaborative research ideas. Being on the AAS database also provided potential opportunities for south-south collaborations, with AAS acting as a hub to match opportunities to African scientists.

"The networks you always meet someone to stimulate your thinking or collaborate with." **CVF**

Three CVFs who were hosted at the same institution, but were from different countries, have formed a research group. They have developed their collaborative research questions and undertaken some self-funded research that CIRCLE subsequently provided funds for them to publish. They built on these relationships, and those with their host institution, to complete a proposal to BMBF, Germany, which would be, should it be funded, one of the largest research projects for their institution. One of the CVFs stated a belief that these opportunities would not have existed without CIRCLE.

Whilst in most cases these connections were at the individual level, in a small number of cases they were being developed at a more institutional/departmental level. For example, in Makerere University, Uganda, they are exploring how to strategically leverage links with a host university in Kenya through examinations of students and collaborative grant proposals.

In UENR, Ghana, an MoU has been signed with the University of Ibadan, Nigeria, to allow for exchange and co-supervision of students. The link has also allowed for the organisation of an energy conference for West Africa, as well as the exchange of practices and ideas.

"I believe through this programme we have benefited from international linkages.... We can do many collaborations through networking with the partner institutions." **Senior Leadership**

"The exchange amongst universities the CVF went to, or those that came here. This has enhanced the universities linkages, as well as further engagement in climate change and capacity development of staff. This is an additional lesson of CIRCLE." **CVF**

"I would say nothing concrete yet in terms of collaboration with the host institution. But I believe there is still a linkage between the fellow and supervisor, and I believe that there is some sort of collaboration at that level." **ISP Lead**

Institutions also strengthened links with other institutions within the same country. For example, Michael Okpara University of Agriculture, Nigeria, undertook study visits and joint workshops with other Nigerian universities. Some of the participating institutions sought to reach out to neighbouring universities to spread the benefits of the CIRCLE programme and to form collaborations. The University of Embu, Kenya, has utilised the RDF framework to reach out to ECRs in other institutions, and as a result has published a paper with three ECRs at a neighbouring institution. The University of Fort Hare, South Africa, and University of Cape Town, South Africa, have successfully jointly bid for funding, and have developed an exchange programme for staff and students. The University of Fort Hare also invited experts from the University of Cape Town to input into their mentoring training, and to do additional training on research practices.

One of the delivery partners identified that successful and sustainable academic partnerships are largely reliant on gaining funding. Whilst there are identified successes, there is also a significant number of collaborations that are yet to attract funding. Some institutions identified that the research uptake funds had been central to developing partnerships and gaining benefits from national government opportunities.

Several institutions identified that there was increased demand for training in some cases from both academic and non-academic staff. There was also evidence that the **training was valued and**

sought by other departments [S2c]. For example, at Chinhoyi University of Technology, Zimbabwe, the ISP team were requested to provide additional training: how to communicate research findings to non-academics, how to write a grant, how to utilise ICT in research.

An additional synergy from the CIRCLE programme was a **new initiative [S2d]**, the idea of a member of one of the participating institutions that was developed with ACU. The initiative is a series of workshops, NextGen, aimed at developing the next generation of researchers. The workshops utilise the experiences of CVFs. At the time of this report being written, there have been three workshops delivered, with further workshops interrupted by the Covid 19 pandemic.

Discussion

There are examples of multi-country research projects, which although difficult to directly attribute to CIRCLE, have definitely been enhanced by it. However, CIRCLE is directly responsible for stimulating south-south collaborations, many of which have already delivered concrete actions together. This is an important additionality for the programme. However, it is difficult to disentangle how much this is due to the CVF rather than the ISP element. However, designing in opportunities for different levels of participants in the programme to network, exchange and share experiences has been shown within this programme to stimulate further collaboration. The care shown to explore how to stimulate this type of interaction in workshops has been exemplary.

The passion with which some of the ISP members have delivered, and taken on board the lessons from CIRCLE, is demonstrated by the demand for the training within institutions, the willingness of individuals to spread learning to other institutions, and the development of the NextGen workshops.

Summary: Synergies



Good Practices

Programme

- Planning networking and sharing opportunities within workshops
- Mixing up seating arrangements to stimulate networking between countries, institutions and individuals
- Being open to discuss new initiatives or potential added value with participating institutions/individuals

5.6 SUSTAINABILITY

The sustainability of the improvements made within institutions is a key part of this review. This section looks for evidence of the degree to which policies are implemented and adhered to, strategies are followed, and structures and budgets have been implemented.

There were varied perspectives on whether the institutional strengthening programme would continue and sustain post funding. Many individuals from the ISP teams are in positions of influence and their ideas and skills are utilised at an institutional level.

“The project lead person for CIRCLE is helping my institute to come up with a strategic plan for the next 3 years that impacts on the system at different levels.”
Senior Leadership

However, **clear roles for ongoing implementation and M&E [S1c]** within the institution were identified as a priority, otherwise ISP activities would ‘dissipate’. When asked if there were plans to keep the ISP as a permanent improvement structure, the majority responded positively (figure 13).

Is it planned for the ISP to become a permanent improvement structure within your institution?

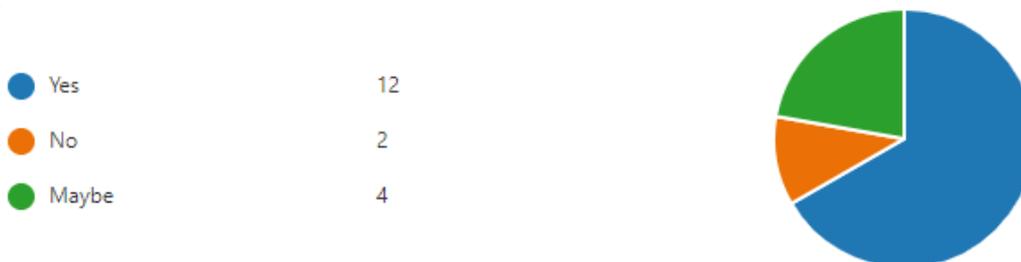


Figure 13 Responses from survey respondents (n=18) in response to making the ISP a permanent structure

However, in the University of Fort Hare, South Africa, it was reported that only three of the original seven members of the ISP team are still at the institution. It was also common in all sample institutions for senior administrative roles to be on a temporary rotation, creating a challenge to the momentum of the ISP initiatives.

“For me I am just managing a centre for climate change I do not have the power to come up with a policy on rigorous mentoring but the Research Office and the Office of the Academic and Research, Deputy VC can have an impact on take up in the institution. But the present management is not much aware of the impact of CIRCLE because they are new people.” **ISP Lead**

Another institution feared that the good progress made with ECRs could reverse without sustained inputs of resources.

“I would not like the gains from CIRCLE to wash down the drain... that is what I am afraid I am beginning to sense. Some young people who have been impacted to a certain extent; they will go backwards. The work will almost be washed away.” **ISP Lead**

One key informant commented on the prevalent ‘project mentality’ in most research institutions. They stated that as project funding ends, so does that specific project, unless it has already been embedded as an institutional programme.

“The ISP, I can say it is not very active now. In the university we receive calls we apply for funding we do a project - once the project ends unless you have actually developed them into programmes that is when it can be sustained.” **ISP Lead**

Another key informant believed that that ISP efforts could easily cease without continued external engagement, such as monitoring and evaluation.

“I want to believe that there is a thread linking the respective ISPs in the institutions. If that thread still exists, I think people will struggle to keep ISP going. If there is no thread, I am afraid it will not continue. If there is occasional evaluation of the ISP from CIRCLE, even if the programme is stopped, that would keep it going.” **ISP Lead**

Other informants were more optimistic due to the strong buy-in and engagement achieved with senior institutional leadership during ISP implementation.

“Capacity strengthening, we have done very well. Mainly because we actually made a conscious decision to embed the CIRCLE team into the Research and Graduate Studies School. So whenever

we have a residents week for students doing MPhil and also DPhil. We have a programme that is in our academic regulations.” **Senior Leadership**

“They say it is CIRCLE programme but it is part of the university as it is part of their timetable. We have had three semesters when CIRCLE was not funded but we were asked to present.” **ISP Lead**

“The footprints of CIRCLE will remain in terms of the networks that we already have which we will continue cashing in on when the opportunity comes.” **Senior Leadership**

Key informants identified the need for sustained engagement with top level leadership as policy change and decision-making power, including assigning roles and responsibilities for long term ECR strengthening activities, rested with them.

“So, a question is how do you sustain projects? I think the idea had more to do with firmly engaging the top leadership. There was an effort for it to be signed by the VC, but that is not enough. They sign documents every other day. Again, this has implications for resources. If you meet them together in implementation at the beginning this is much more than just signing. I am talking about a targeted effort with the senior leadership.” **ISP Lead**

Policies adopted, implemented, and adhered to [S1d]; Most policies were still in the process of being adopted, and there was little knowledge or evidence around adherence to policies. Ensuring policy implementation and monitoring in the long term was seen by ISP team members as an institutional and administrative responsibility rather than the ISP. In some cases, informants identified that there was insufficient staffing to ensure that policies or initiatives were implemented, whether at central or faculty/departmental level.

“The challenge has been the workload on the administrators. If they could get a designated person for mentoring policy coordinator then it would be the responsibility for them to ensure that all new ECRs were mentored by an academic.” **ISP Lead**

Key informants from the participating institutions described how good progress had been made in policy development, but that more impetus was needed to reach wholesale adoption and implementation.

At STEPRI, the ISP lead was confident that a ‘change in perspective’ would remain in relation to the gender policy and mentoring, however, there was less clarity in relation to the way training would continue. STEPRI’s aim was to spread the mentoring policy to all 13 of the CSIR institutions but had insufficient resources to reach those outside of Accra. Whilst the mentoring policy had been submitted to management, it was not yet approved, and so institutionalisation was not yet achieved. A similar picture was reported across the other sample institutions.

At MOUA, an ethics committee with guidelines had been approved, but other aspects on embedding had stopped due to ISP leadership changes. Recognition of mentoring as a university policy was still pending, although colleges were already beginning to adopt the mentoring policy.

The University of Embu reported that scientific writing and transdisciplinary guidelines had been distributed to staff and students, and that the mentoring policy had been adopted and used across departments by the university. The University of Embu ISP team were confident that benefits would be sustained.

At UENR, mentoring is overseen by the Pro Vice Chancellor for Academics, and the ISP team were highly confident that this would continue regardless of funding.

Mekelle University reported that they had incorporated elements of ISP into university legislation, but that they still required guidelines. Whilst there was a plan to roll out mentoring, some additional support was required due to ongoing conflict in the Tigray region. The university will be working more on rehabilitation, meaning that alternative funds will be required for mentoring and career development.

Muhimbili University of Health and Allied Sciences was confident that the mentoring handbook and guidelines would be used, as they are university documents, and also that incoming junior staff would be assigned mentors.

Ebonyi State University reported that the RDF policy had management approval, and that the Gender and Mentoring policies were currently in the process of approval by Senate.

One ISP lead expressed concern with embedding mentoring due to lengthy Senate approval processes, and the need for allocation of resources to sustain such efforts.

“Culture of mentoring has been adopted, but not vibrant because of funding. There are no incentives to continue... But some are champions... But it is not institutionalised.” **ISP Lead**

Recurrent budgets for training and mentoring [S1e]; Some key informants identified that continuity relied upon starting a process of ‘train the trainers’, as well as safeguarding against ISP team members moving on. When asked about ECR training sustainability, thirty one percent of respondents (n=16) in the e-survey stated that there was agreement that training would be the responsibility of a specific unit/department. Fifty percent responded that training would probably rest with the unit/department that had previously been responsible, and nineteen percent had no agreement about training responsibility. In most cases, respondents identified responsibility resting with the university directorates responsible for research administration and postgraduate teaching.

Only thirty one percent of respondents thought it likely that budget would be available, while sixty nine percent of respondents stated that budget was required for training, but that nothing had been allocated post CIRCLE funding.

There was a very mixed response in terms of the likelihood of training continuing, with thirteen percent of respondents stating it ‘very likely’ that all training will continue after CIRCLE funding ceased. Sixty three percent of respondents stated that it was ‘very likely’ or ‘somewhat likely’ for some of the training to be sustained post CIRCLE funding.

In 88% of the survey responses, it was stated that there were plans to extend the reach of training, whilst the remainder reported intent to extend the reach of training but no present plans. One informant identified how the cascade model of training within the institution was hampered when it got down to the departmental/unit level by poor structures and a lack of funding.

“Selected number of persons were trained centrally owing to availability of funds. The trained persons are expected to activate the train-the-trainer model in order to domesticate the contents of the training at the departmental and unit levels. However, there is a disconnect at this level owing to poor monitoring structure and funding” **CVF**

Despite the range of training and mentoring offered, there remains a need amongst ECRs for continuous skills development and mentoring. This will especially be the case for young institutions that are expanding and do not currently have significant senior level staff.

“We still need more training to bring people up and the new ones. We also need to carry them along.” **ISP Team**

Some ISP institutions have successfully embedded training and mentoring into existing university structures and systems which will increase the likelihood of sustaining ECR strengthening post

CIRCLE funding. Where CVFs and CIRCLE champions/leads were in key administrative positions, they reported being able to improve the reach of activities and scale-up.

The main barriers to sustainability were identified as:

1. Lack of funding
2. Lack of institutionalisation/leadership and administrative support
3. Lack of skilled trainers and mentors
4. Insufficient time

Findings were similar for sustaining training of non-ECR researchers and support staff.

Budget for sustainability of mentoring schemes was identified as a key priority and as a barrier to sustainability; six out of eight respondents stated that budget was needed, but not currently available, although there remains a strong desire to continue their mentoring programmes. Other barriers to sustaining mentoring were the lack of dedicated mentors who had sufficient time, lack of management support, and the negative attitude of some senior supervisors.

At UENR it was reported that there will be a budgetary allocation for the new Centre for Professional Development, but they also expected to require additional funding. Mekelle University is also expecting to be allocated budget for their Institute for Climate Change and Society. Overall, there was unanimity on the need for additional resources to be assigned to training and mentoring to implement and develop the work achieved through the CIRCLE ISP.

“These are nice things [RDF training and mentorship] but there is more that could have been done especially with funding that aims to generate something that is tangible.... We discussed with CIRCLE and we were saying this is not going to change much.”

ISP Lead

Discussion

Sustaining the work of the ISP teams remains a challenge for many institutions. Whilst the majority of survey respondents identified that the ISP would be sustained beyond the programme, the ISP team was still viewed as a programme committee rather than as a structure of the institution. A view that they feel is reinforced by its full title: ‘CIRCLE institutional strengthening programme’.

It is arguable whether keeping the ISP as a permanent structure is a positive outcome as roles and responsibilities for ECR strengthening should ideally be embedded within existing institutional structures. Thus, there is an inherent difficulty in the programme design as a result of ISP work being channelled through climate change departments that would not be the normal constituents of a permanent ECR strengthening committee. The home for institutional strengthening rests with senior leaders and administrative offices of the university. Many of the ISP team members are still focused on developing a solid research track record, and while they will wish to gain exposure and experience in administrative duties, winning and implementing new research grants, publishing, and teaching responsibilities, will be their priorities.

For those institutions who had succeeded in gaining senior leadership buy-in, and have embedded training into existing structures and systems, there was a greater confidence that the ECR strengthening work might be sustained. Even in these cases, however, there are questions surrounding budget allocation from central institutional funds that would sustain the work of the ISP. There will always be a continuous need for ECR training and support, and its long-term impact will depend upon how this support is embedded within institutional policies and frameworks, as well as the capability to sustain a critical mass of skilled staff able to continue to deliver ECR training and support without external funding. Continued close working with the institutional research administration will be vital to ensuring that the gains from CIRCLE are maintained once the funding stream ends.

Sustainability is a difficult issue for any development programme, but there are positive signs in many

of the institutions. The CIRCLE programme should be commended for making embedding change part of the process. Encouraging institutions to think about how to consider sustainability from the outset would be beneficial in future programmes. This should be through the involvement of senior management, as well as through integration of the ISP equivalent that is relevant to the focus for improvement needed within their existing structure.

Whilst there is merit in demonstrating what can be achieved through pilots and departmental led approaches, to ensure that interventions or policies are implemented institution wide we need to see their administration formally take the reins and guarantee funding, as well as maintain structures, roles and responsibilities. Long term funding will continue to be a challenge for sub-Saharan African universities, and it will be important to look for greater synergy between different externally funded programmes in this field. In addition, as argued elsewhere in this report, enabling institutions to grow their portfolio of national and international research releases overhead and/or capacity strengthening levies that will significantly support the sustainability of institutional strengthening initiatives.

Insufficient M&E of the ISP creates difficulties for institutions or evaluators when assessing the impact or sustainability of institutional strengthening. This is particularly true in relation to the implementation and adherence of new policies or reach and impact of mentoring and training. Policy development approval and implementation takes time, and so the measurement of policy impact is likely to be seen beyond traditional programme/project timescales. It makes sense for monitoring to be an institutional responsibility, however, at the present time there has been no indication that there were adequate systems or indicators to enable this. Therefore, enabling measurement of institutional strengthening for internal management purposes would be a welcome addition to any future programme.

Summary: Sustainability



Barriers

- Changes in university administration team
- Alignment with institutional structure, policy and plan
- Project mentality
- Inadequate funding
- Weak M&E of policy implementation



Enablers

- Seniority of some of the ISP members and their ability to influence the institutional agenda
- Senior management support and buy in
- Embedding in existing structures



Recommendations

Programme

- Sustainability should be designed in from the start with earlier and continued engagement/targeted effort with senior leadership
- Provide guidance and resources on lean methods of monitoring and evaluating interventions and policy adherence and implementation

- Support institutions to grow a portfolio of international and national funding that in turn supports the sustainability of institutional strengthening through increased overheads or capacity strengthening levies.

Institutional

- Structures, processes and roles for embedding ECR mentoring and enhanced training need to be agreed and transferred from ISP project responsibility to institutional responsibility coupled with budget allocation, alternatively the ISP equivalent could be integrated into existing structures
- Ensure that ownership of new interventions or policy implementation is transferred to central departments and individuals



Good Practices

Programme

- Including embedding interventions in the workshops

Institutional

- Internal consultation on sustainability
- Embedding training and mentoring into university structures

6. FINDINGS AND DISCUSSION: RELATIONSHIP BETWEEN INDIVIDUAL AND INSTITUTIONAL STRANDS

The findings in respect of the relationship between individual (CVF) and the institutional (ISP) aspects of the programme are captured in figures 14 and 15. Figure 14 looks at the CVF contributions to institutional strengthening, whilst figure 15 looks at the benefits to CVFs from their participation in the ISP. In figure 14 CVF contributions are divided into direct contributions through their specific roles within the ISP, and indirect through additional value that they added.

In most institutions CVFs were involved directly in the ISP. Their roles included: driving activities, resource persons for training and workshops, providing insight into ECR needs and aspirations. CVF's also brought energy and enthusiasm to the ISP.

“The CVFs were then foot soldiers for the champions. We got them involved in the training, they were our resource persons. For me I am now acting as a senior citizen as the CVFs they are working hard, they are working with each other, synergy can be seen, and taking over from the older generation to take the message on. We worked in harmony and unity.”
Senior Leadership

“You carry with you your enthusiasm to ensure the facilitation of the ISP. I think they blend well. Because I was active as a CVF, really active as a member of ISP.”
CVF

“They [CVFs] are the ones running the project. If you talk to any of them, they tell you what we have done. We see it as their project not our project.”
Senior Leadership

The CVFs brought back knowledge from their fellowship experiences that were directly utilised by the ISP. The ISP provided CVFs with a structure to influence change that was based on their new knowledge and experiences. This was identified as being important by both leadership and CVFs. They also motivated the ISP to benchmark themselves against host institutions that the CVFs had attended. Where CVFs were promoted into decision making administrative roles they were able to bring their knowledge from the ISP and CVF to influence changes.

“It allows you to share your experience. As an individual although you have the capacity, resources will not allow you to impact on your colleagues. When the institutional programme is in place it helps you to be able to strengthen other staff. Without it the impact would have been minimal.” **CVF**

CVFs contributed directly as lecturers, mentors, and trainers/facilitators for other ECRs in the institutions, including for their own peers. They advocated on their behalf to the ISP and senior leadership. Indirectly they acted as role models and spread learning through supervision and seminars, as well as motivating other ECR to take a more proactive approach to their own development and engage with climate change research. The CVFs were seen as role models by ECRs who sought to replicate their success.

“I also had to form a local research team and I happened to be the mentor to the young researchers. I was able to breathe upon them and share experiences and improve their capacity. We published together.” **CVF**

“Those who are doing DPhils were employed as lecturers, and MPhils as teaching assistants. So, the knowledge is being snowballed down to our undergraduates. The impact and objective of capacity strengthening has been attained in a significant way.” **Senior Leadership**

“We were the first [fellows] and from the time we came back both of us had moved and leveraged our careers. We were showing an example for others to follow which...is really important.” **CVF**

The CVFs completed their fellowship publications and often formed research groups, developing additional publications and grant applications. They worked with ECRs on publications. This all contributed to the research outputs of the institutions, and consequently to institutional visibility. In some cases this improved rankings. Many CVFs were successful in gaining scholarships and hence contributing to an increase in qualified staff at the institutions; important as there is still a deficit in many SSA higher education institutions. The CVFs ran workshops and dissemination events which contributed significantly to increased motivation to take up climate change research within institutions, as did the research groups and centres that had been formed for climate change research.

“CIRCLE has also served as a springboard to pursuing PhDs amongst the CVFs; this is an important gain for our university.” **CVF**

Small Case Study: Mekelle University, Ethiopia

Of the five CVFs almost all have gained scholarships and completed their PhDs. One of the CVFs has gained a senior administrative role within the University, while another is leading a large five-year international research programme with partners in the Netherlands and Norway. The institution identifies some clear milestones within the programme that underpinned the CVF's success:

1. Selection of the best candidates (internally and by CIRCLE)
2. High quality learning experiences, including from other institutions during the fellowship
3. Presentation of experiences to staff on their return
4. Integration with the ISP

“Their experience was institutionalised through doing activities.”

ISP team

CVF contributions to institutional strengthening

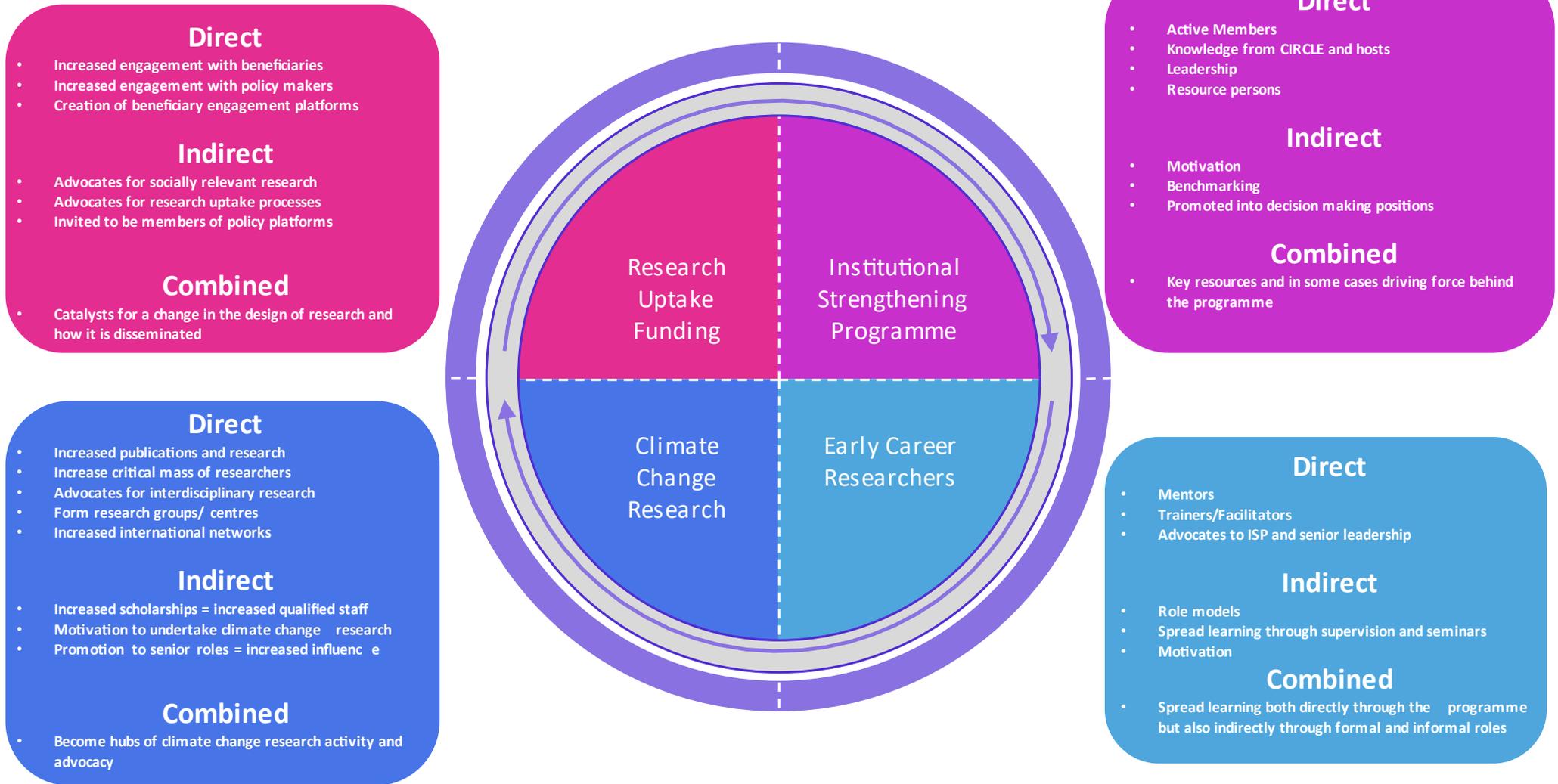
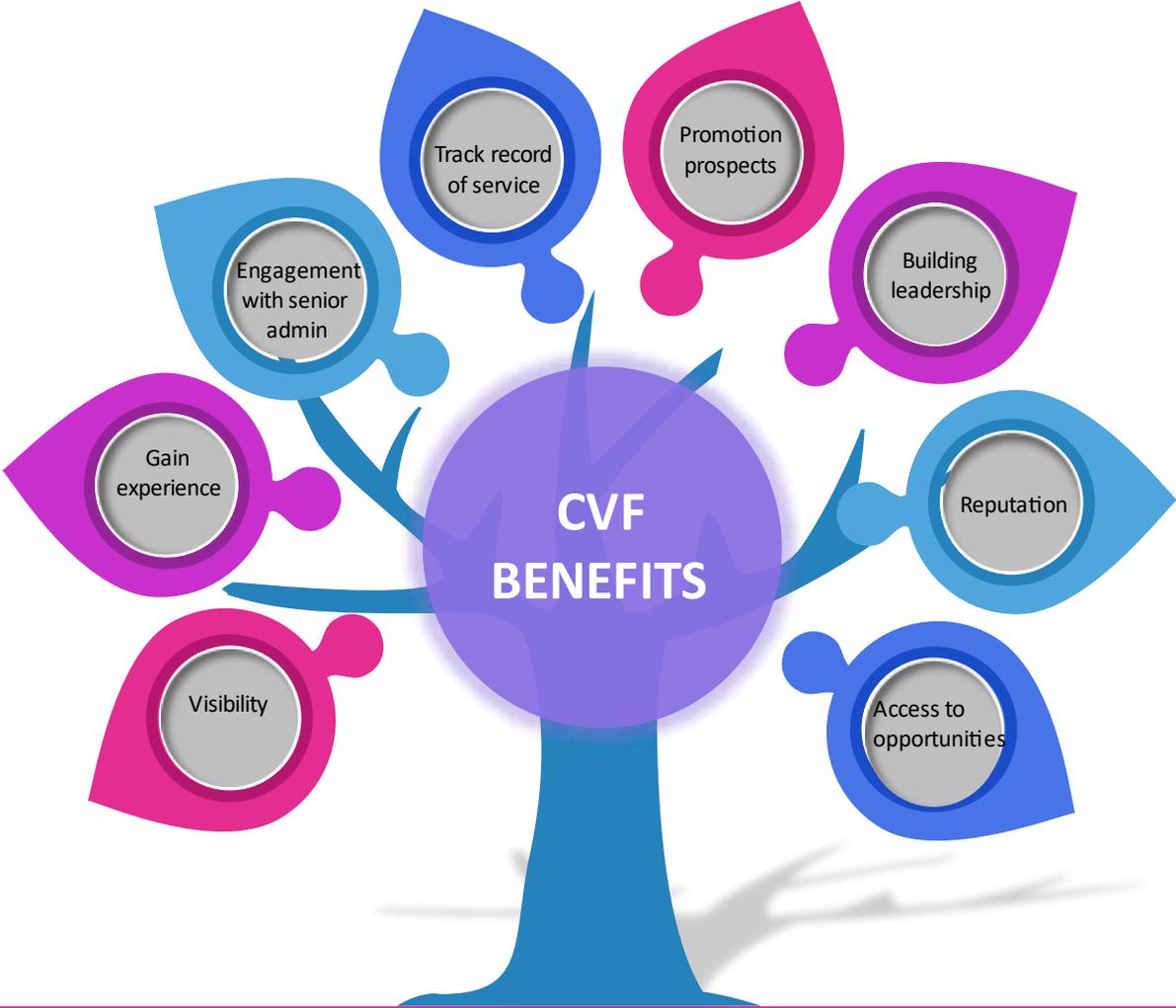


Figure 14 CVF Contributions to institutional strengthening in the CIRCLE programme

Benefits to CVFs of participating in ISP



Barriers

- Seniors attitudes
- Jealousies
- Competing priorities

Figure 15 Benefits to CVFs of participating in the CIRCLE ISP

Key informants from participating institutions identified that CVFs returned as better researchers, and this resulted in gains for the institution through better lecturing, which in turn impacted on students. This also increased visibility through research outputs and contributing to a high-quality research culture. Their increased international networks were also seen as contributing to the strength of the institution. Where CVFs had been promoted to more senior positions such as Head of Department, they were able to exert more influence in spreading the learning from their fellowship experience. Many CVFs have also been promoted from lecturers to senior lecturers or associate professors.

“Each person who went through the [CVF] programme in our university has risen in terms of the number of publications and the leadership role that people have played. In addition, you realise that each of those persons [are] supervising students and they are adopting the principles learning through CIRCLE to those students. You sow a seed, they grow, and the fruits and coming and other seeds are sown.”

CVF

There was widespread praise for the research uptake funding provided for CVFs. The actions funded through this initiative were seen to contribute to the institution through changes in attitude, increased skills in research uptake, and the creation or strengthening of platforms/relationships with policy makers and beneficiaries.

“I think research uptake that was a brilliant idea from that project [CIRCLE]. Because most of the researchers previously we would do research without any connection to the institutions or individuals we were meant to be benefiting. ... [Now] we are making an effort to make research uptake part of post-graduate training.”

CVF

“It is a very important programme because our CVFs have done a lot in terms of research uptake they have made themselves known by the communities. This is good for their visibility and the institution.”

ISP Lead

“After the CIRCLE programme my kind of, ideology changed. Previously I did research for publications, but CIRCLE refocused that it is not about publication, but you are there to solve a problem in society.”

CVF

One CVF had used funds to run a stakeholder forum which then spawned a new organisation that has been running for three years. They have also bought increased visibility to their institution by setting up three conferences and producing a journal.

One ISP lead felt that the benefits that the CVFs brought were mainly ‘by accident’ and felt that there was scope for the link to be more strategic.

Other recommendations regarding the interaction between the two elements were:

- Incorporate leadership and institutional strengthening training into the fellowship
- Encourage collaboration between CVFs and the wider population of ECRs
- Ensure there is a critical mass of CVFs within each institution (>6)
- Expand the remit of the ISP to cover elements of climate change research covered in the CVF to increase complementarity and potential synergies

Benefits to CVFs obtained from participation in the ISP are captured in figure 15. They included: building new skills in facilitation, institutional strengthening, and communication skills with senior administrators. Visibility was enhanced within the institution specifically through CVF engagement with senior administrative staff. The work they undertook for the ISP enhanced their track record of service to the institution, built their reputation and enhanced their promotion prospects. It also gave them access to opportunities through their improved internal networks.

There were barriers to CVF full engagement in the ISP, one of which was competing priorities with PhD scholarships, other research, teaching or administrative duties. In some cases, senior staff were

less willing to give responsibility to CVFs and so they were less able to benefit. There were incidences where other ECR or staff felt that CVF were over benefiting, and they were side-lined. However, this was a rare sentiment within the sample institutions.

Overall, informants from participating institutions felt that the two strands were complementary. There were some exceptions, however, particularly when most of the cohort of CVFs went directly into PhD scholarships and were largely unavailable to the ISP programme.

“The overall view of the participants [in CIRCLE] was that this was the best model compared to others. From experience with other partners and organisations. They felt it was a well-designed model.”

Senior Leadership

“I think the impact would have been less without the institutional capacity strengthening. There is a synergy between the two. I think the complementarity enhanced each of the two. One without the other would mean less than half.”

Senior Leadership

Discussion

There was a strong complementarity between the ISP and the CVF elements of the programme. CVFs strongly contributed to the success of the ISP through being key resources, and in some cases the driving force behind the ISP. Spreading learning directly through the ISP and indirectly through their formal and informal roles, CVFs became hubs of climate change research activity and advocacy. This led to increased publications and research outputs, increasing the visibility of the institution. CVF research uptake funds increased both the aspiration to engage and actual engagement with policy makers and beneficiaries becoming catalysts for a change in the design of research and how it is disseminated. CVFs received significant benefits from their involvement in the ISP, in particular gaining visibility, understanding of how to enact change, and how to facilitate workshops and leadership skills. Participation contributed to their record of service to the institution, which is a component within promotion criteria. The ISP also provided the CVFs with gravitas within the institution.

These strong synergies show that this is a strong model for any future institutional strengthening programme. Ensuring a critical mass of CVFs within any one institution is important, less than four per institution is unlikely to have the same impact. Incorporating leadership and institutional strengthening training into the fellowship is also a strong recommendation. The extension of the remit of the institutional strengthening programme into climate change research has already been discussed and is further unpacked in the future programme section of this report.



Recommendations

Programme

- Continue the model of institutional and individual strands of capacity strengthening
- Aim for a critical mass of CVFs within any one institution with a minimum of four
- Incorporate leadership and institutional strengthening training into the fellowship

7. FINDINGS AND DISCUSSION: AAS CAPACITY TO MANAGE FELLOWSHIP SCHEMES [AAS1-4]

This section briefly discusses the contribution of CIRCLE to the strengthening of AAS's capacity to manage fellowship schemes. However, as discussed in the methodology, due to circumstances outside our control, we were unable to interview senior management at AAS. There has also been significant staff turnover in AAS, AESA and ACU, meaning that this analysis is partial and as such has been kept descriptive with some minimal analysis. The current changes underway in AAS and AESA were beyond the scope of this evaluation and are, therefore, not discussed.

In the design phase of the CIRCLE programme ACU and FCDO (then DFID¹¹), assessed AAS in relation to managing the fellowship element of the programme, with inputs of capacity strengthening. They would not manage the financial payments to fellows; however, this would be done by ACU. As part of the due diligence, it was identified that their financial systems needed significant strengthening. It was agreed to include them in the inception phase with a final review to consider whether to fund the model for the 5 years. The inception phase review was passed. At the time of CIRCLE's launch, AAS was an African-led organisation with good links to African institutions but no experience of managing fellowship programmes. CIRCLE became known as a flagship programme.

"It was really important that it was a south-south fellowship scheme and African institutions learning from each other. On the whole it worked really well." **ACU**

The capacity strengthening elements were on financial management capacity and managing fellowship programmes. A Nairobi based consultant/accountants provided AAS with advice on strengthening their financial systems and oversight. All accounts were brought up to date and audited. Budget was provided for additional staff within the finance department. All of this was put in place before CIRCLE was launched. During the initial phase of CIRCLE, ACU and the team at AAS worked very closely to design and implement the fellowship programme. They worked as one team, based in different institutions and provided capacity strengthening through working collaboratively on all aspects of the fellowship programme. Online collaboration tools were used to produce programme documentation. The cross-institutional team reportedly communicated daily.

"By working with them so closely and in that single team way that was our approach to transfer of knowledge of how to run this. I think that was very effective." **ACU**

Events then overtook the element of capacity strengthening that CIRCLE was providing when FCDO, Wellcome Trust and BMGF undertook a significant programme of investment and institutional strengthening at AAS. This allowed the creation of the Alliance for Accelerating Excellence in Science in Africa (AESA) platform in partnership with the African Union Development Agency (AUDA-NEPAD). The investment was in the region of £8-10 million. The CIRCLE programme was integrated into the AESA platform and lessons from CIRCLE helped AESA develop their approach to fellowship programmes. The learning resulted in changes to AESA fellowships which are now: over one year in length, require 70% commitment to allow for teaching and administrative priorities, integrate research uptake, are home based to promote institutional investment, and have a larger research budget. After this investment, AESA was highly successful in attracting further grants and has developed systems and approaches to fellowship management. At the start of the CIRCLE programme, the volume of grants for AAS was reported to be \$2 million per annum. This has now increased to \$40 million. AESA is housed within AAS but functions on a semi-independent basis, which has reportedly created tensions with the leadership of AAS.

After the development of AESA, the working relationship between ACU and AAS reportedly changed with AESA functioning more independently to deliver the elements of the programme that they were

¹¹ Subsequently in this section FCDO is used for ease although the relevant department would have been DFID for much of the period.

responsible for. Relationships also shifted due to staff turnover at both ACU and AESA/AAS, as well as senior leadership changes at AAS. CIRCLE benefited from the improvement in systems at AESA. At some point AESA/AAS requested more responsibility over the financial elements of the CVF programme. This was not agreed, with the reason appearing to be that the prevailing arrangement was seen to be working well.

Although there were challenges in managing the relationships across the partnership for CIRCLE, informants from AESA/AAS stated they had mutual strengths and were a strong team to implement the programme. The budget allocated to AAS/AESA was said to be adequate and the programme was able to be delivered within this. There was quarterly reporting and frequent communication, although this was reported to have been reduced towards the tail end of the programme. There was little interaction between the individual element of the programme (within which AAS/AESA had a crucial role), and the ISP element of the programme. Some informants identified this as a missed opportunity.

Overall, delivery partners felt that AESA/AAS did a good job of managing the CVF programme. Participating institutions were unanimous in praising its smooth functioning.

AESA has been an attractive platform for funders. This is demonstrated by the portfolio of substantial programmes that AESA has successfully acquired. These include funding from: Grand Challenges Africa, BMGF, Carnegie Foundation, Sida, the Royal Society, and the EU. Delivery partners stated that they were a credible actor in the African research space. However, there were contradictory opinions about the extent that CIRCLE was a contributing factor to this outcome. Some informants felt that CIRCLE had paved the way for subsequent investment, while others stated that the investment would have been made regardless of CIRCLE. One informant identified that CIRCLE was initially better known than AAS in terms of its fellowship credentials. The systems strengthening under the AESA platform far eclipses work done previously with CIRCLE. However, informants stated that learning from CIRCLE has informed AESA's practices in relation to fellowship programmes. For example, in identifying the gap at postdoc level, research uptake grants are embedded in AESA fellowships and there is a team for community and policy engagement. Monitoring and evaluation was also identified as an area of significant learning where subsequent investments have been made within AESA. However, informants stated that they did not think that opportunities had been taken within AESA to build structures that would work across a portfolio or ensured that learning was institutionalised in order to survive the departure of grant managers. This was seen as a significant missed opportunity to embed learning and continuously improve services for research in Africa.

AAS/AESA have developed their climate change expertise and track record since the introduction of CIRCLE. The implementation of Climate Research 4 Development being an example. AAS is an observer at the IPCC. AESA is able to draw on an increasing pool of African scientists in climate change to review proposals and papers, creating a community of practice. One informant identified that they had been able to move into the space due to the seed planted by CIRCLE.

AESA aims to be a one stop shop for the needs of African researchers but recognises that the needs of the continent necessitate other actors within the space who are complementing their efforts. It was evident from the key informant interviews that there are strategic ideas and aspirations within AESA to build more effective programmes, approaches and sustainable structures that further strengthen African institutions, individuals, and the wider ecosystem of African research. These are not explored in detail being beyond the scope of this evaluation.

Discussion

CIRCLE met its aspirations to have the fellowship programme managed by an African led organisation with a focus on African research and researchers. The degree to which CIRCLE contributed to AAS's ability to manage fellowship programmes became moot once the AESA platform had been developed.

Whilst there are currently issues within AAS/AESA that need to be resolved the benefit of having African leadership and strategy leading the development of research on the continent is a huge benefit that should not be undervalued. AESA has demonstrated strategic thinking regarding how fellowships should be structured to suit the context and there are individuals within the organisation now and previously who had big picture vision of how the research ecosystem in Africa could be strengthened. This is an important resource for any future programme.

The relatively small and incremental strengthening inputs that were planned by CIRCLE were dwarfed by the investment in AESA. However, the success of this large investment also brought its own problems. It is difficult to draw any conclusions regarding which approach is better given the incomplete data, and the fact that this was not the main objective of this evaluation. However, it is an area where further study and evaluation would be of definite use to the wider development community.

8. FINDINGS AND DISCUSSION: FUTURE PROGRAMME DESIGN

There were numerous recommendations about future programme design from delivery partners and participating institutions. Firstly, the results of the survey are presented where respondents were asked to rank options for future programmes. Options were derived from the interviews prior to full analysis, however, they remained the most frequent recommendations after full analysis. Following this, a summary is presented of all the recommendations made by interviewees and survey respondents in free text questions. Finally, the recommendations are evaluated and prioritised.

Survey respondents were asked to rank options on the scope of a future institutional strengthening programme within a climate change fellowship and research programme. The results are presented below with the percentage figure showing the proportion of respondents (n=18) who ranked the option first or second out of the five options.

1. Have a focus on assisting institutions to gain research funds that are appropriately costed: 72%
2. Continue focus on Early Career Researchers: 56%
3. Have a focus on developing a strategic approach to climate change: 39%
4. Have a focus on the wider climate change ecosystem in Africa: 33%
5. Add a focus on building international collaborations: 0%

A core theme of the feedback from interviewees was funding. For this reason, survey respondents were asked about their priorities should they receive additional funding. The results are presented below with the percentage figure showing the proportion of respondents (n=18) who ranked the option first or second out of five.

1. Increased funding to scale up reach to ECRs: 83%
2. Increased funding for infrastructure including equipment: 78%
3. Increased funding to reach other institutions through cascade training: 33%
4. Increased funding to access international expertise: 6%
5. Increased funding for south-south collaborations: 0%

A summary of the informant recommendations for future institutional strengthening programmes is presented below. Blue recommendations came primarily from delivery partners/other stakeholders, while red recommendations came primarily from participating institutions, and purple recommendations came from all participants.

Aims/Outcomes

- Create centres of excellence within institutions

- Programme should aim to increase publications
- High level aim should be institutions that proactively successfully seek funding supported by a clear climate change strategy. Institutions should demonstrate a clear vision and outline the resources needed to achieve this
- Ultimately, the programme should contribute to achieving stronger African leadership on climate change

Scope

- Opportunities for increased international collaborations/networking
- Create a climate change-focused platform for universities, that engages the Vice Chancellors and can help mobilise for additional resources
- Strengthen the focus on research uptake, including working with policy makers on the utilisation of research
- Strengthen focus on links between universities and industry
- Focus on applied research
- Need focus on gaining research grants for both ECRs and existing staff
- Still a need to develop systems, policies, strategies and training (academic and soft skills)
- Focus on reaching all ECRs, including postgraduate and undergraduate students, to have the biggest impact
- Focus on postdocs, an underinvested area across most of Africa
- Greater focus on climate change research, specifically within the institutional strengthening programme – could be delivered through institutional twinning
- Focus on one climate related theme in each institution in order to build critical mass
- Widen the scope to include the wider climate change ecosystem, in particular access to climate data
- Make institutional strengthening central to the design rather than an add on to the science
- Use opportunity of CLARE to create institutional strengthening that is joined up across the different elements of the programme

Scale up/Scale

- Follow up funding to CIRCLE institutions to enable scale up within institutions
- Have multiplier funding to enable spread to other institutions within their country
- Increase number of CVFs within individual institutions to create critical mass

Funding

- Provide small research funds for ECRs should impact on this cadre be desired
- Have an emergency fund for institutions whose costs are impacted by civil unrest
- Funding for host institutions to ensure that they can support fellows appropriately
- Funding for institutions to compensate for teaching cover in the fellow's absence (alternatively hosting at home with a 70% workload as per the AAS model)
- Provide funding for research infrastructure/equipment and/or research support systems
- Form platforms with other funders to ensure synergies and complementarity
- Support institutions to grow by providing adequate overheads or core funding for their development

Delivery – Whole programme/ISP

- Option to have international mentoring links virtually delivered
- Continue the gender sensitive approach
- Improve institutional level M&E
- Need strong inception phase and needs assessments to underpin the ISP
- External facilitators should be an allowable cost within the institutional ISP budgets
- Add prizes for institutions to compete for by demonstrating implementation of learning and ideas from the ISP
- Stronger sensitisation and scoping phase to engage institutional level senior leadership at the outset and by means of regular delivery partner visits throughout the programme
- Virtual methods could be used more in future programmes

Delivery – CVF Programme

- Pre-application workshops with potential CVF applicants to improve the quality of their applications and their perception of impact
- More opportunities for collaboration between host and home institutions
- Applications should be judged on content and potential rather than quality of writing and grammar
- Provide fellowship opportunities for undergraduates
- Remuneration for home/host supervisors
- Allow fellowships to take place in the home institution
- Include research uptake within all fellowships
- Make multi/transdisciplinarity a requirement of funding; especially linking social sciences to science and technology
- Provide guidance and ensure that research uptake is properly funded, even if not identified by participating institutions
- More days per fellow needed for international guidance
- Increase the duration and funding for the fellowships

Sustainability

- Involve regional and continental African institutions for sustainability and scale up
- Create communities of practice amongst individuals and institutions

Discussion

There are many recommendations and with a limited budget available it would not be possible to meet all the recommendations in any new programme. The recommendations highlight the huge **need for institutional strengthening** and capacity strengthening for early career researchers and climate change researchers. We would argue that if the aim is to invest in African leadership in climate change research, then institutional strengthening is a vital building block. Investment in individuals without investing in institutions risks these emerging researchers returning to sub-optimal working conditions, rather than remaining in an environment where they can flourish. Only the institutions can provide key requirements for high quality climate change research, such as: multi/transdisciplinary working, infrastructure and support services, institutional track record, financial systems, contract compliance, ethics systems, formal platforms with industry and policy makers. As we see globally, it is institutions that form the ecosystem of African climate change research. Investing in individuals in weak institutions could easily encourage their departure from SSA to pursue better opportunities for their research.

“The relationship is symbiotic... We need stronger institutions and strong competent people to create strong institutions - to manage strong institutions. People need a strong institution to be able to grow and explore their capabilities. The two must be achieved together.” **Senior Leadership**

It is clear from the survey results that the **lack of funding for climate change research**, highlighted earlier in this report is a significant priority for African institutions. This relates to ECRs, as well as in many cases mid and senior level researchers. Managing to consistently win research funding also significantly underpins the ability to build up overheads and capacity strengthening levies that can be sustainably invested into the institution alongside any direct investment from the research. Hence, we would strongly recommend that the strengthening of the institutions’ and the individuals’ ability to respond to climate change research calls is a priority for any future programme. Whilst proposal writing training is important, we would argue that it is insufficient to fully improve competitiveness. Instead, there are a range of skills that need to be built, including: costing research, budget development including institutional/capacity strengthening and overhead costing, negotiation, forming collaborative partnerships, finding opportunities, understanding, and complying with funders’ due diligence and contracting requirements, responding to non-scientific aspects of the call, and generating fundable ideas and a strategic niche. These require building capacity in researchers, as well as support staff and potentially support systems. In addition, there is no replacement for being mentored through actively responding to a real call to write competitive bids from generating and tailoring ideas, through to quality assurance. Building international partnerships and collaborations is also central to accessing international research funds, and whilst this did not score highly in the survey in terms of top prioritisation, it remains an important area of need for some institutions. It is possible that the survey results reflect the prioritisation of immediate needs of individuals above more strategic needs of institutions.

The ability to respond to calls is linked to having a **climate change research strategy**. This requires identifying the strengths, weaknesses, and opportunities for any particular institution to position itself in regard to the science and research questions. Hence, the twinning or partnership idea from the delivery partners could be a good approach, both to developing an institutional strategy, and as part of the work of that strategy. This could also improve institutional competitiveness for national and international grants. Such a strategy could cover other areas raised by informants, including: multi/transdisciplinary working, infrastructure/equipment needs, international collaborations/networking, links to industry and a strategic (rather than research project) approach to research uptake. This would lead to the achievement of the high-level aim from the logframe of *“institutions with a clear research strategy, proactively seeking and getting funding. Institutions should demonstrate a clear vision and outline the resources they require to achieve their vision”*, which in turn would contribute to African leadership on climate change.

Improving climate change research strategies could be done using a **partnership approach**. Organisations willing to partner with less developed institutions could be drawn from host organisations for fellowships, partner organisations within the CLARE framework, or a wider call inviting any organisation with a strong climate change department/centre/institution. They could be built in as an expected output alongside research outputs in the non-fellowship research elements of the CLARE framework. Ideally, these partnerships should greatly outlive the programme funding. Technical assistance could then be provided to the partners on strategic facilitation and planning, as well as a nose to tail approach to proposal development that can ensure a common approach and understanding to the capacity strengthening required. A similar process of gap analysis to that used in CIRCLE would then be recommended. This could be coupled with an institutional SWOT analysis and development of bespoke action plans. Whilst there is much support that can be delivered virtually, initial processes of gap analysis and strategic planning would best be done via face-to-face visits to the participating institution by the partners. It is highly likely that any SWOT analysis will highlight gaps in the research support systems, such as financial management, IT, and communications. Identifying whether strengthening of these systems is within the scope of the CLARE framework, or would require

finding other sources of funding, would be important in terms of the clarity of expectations for the participating institutions.

Whilst institutions can only respond to existent funding opportunities, most of which are based on an excellence model of research, it should be noted that there is now an increasing push back on this model to focus more on **research need and equity**. Institutions that have always been under resourced cannot be expected to compete with historically well-resourced international institutions, however, they have a crucial role to play in providing locally relevant climate change mitigation resource, as well as being an untapped resource for international research. This tension between excellence and equity is particularly important in the context of climate change research. It is a question that should be carefully explored in the context of CLARE, even though it will not be resolved. A hub and spoke model may be appropriate here with centres of excellence receiving investment contingent on their role in spreading ideas, expertise, and skills to other institutions in their peripheries. Whilst this will need some additional funding it is a significantly cheaper model than providing the same investment across a wider group of institutions.

Due to the constraints of funding, it would be important to define the **focus** of the institutional strengthening component. This report recommends a continued focus on ECR strengthening and adding climate change strategy development and implementation, however, there are other areas relating to research support systems that are also important for institutions, see Pulford et al 2020¹². In terms of the early career strengthening element of institutional strengthening, it is recommended to further explore whether the **intention** is to create an enabling environment for the ECRs that benefit from CLARE through fellowships or scholarships, or to create an enabling environment for the wider group of ECRs within participating institutions. Whilst the original intention of CIRCLE was to create an enabling environment for the returning fellows, much of the activities of the ISPs were actually focussed on the wider group of ECRs using the fellows as resource persons. An approach focusing on the fellows might still address some of the policy areas and promotion criteria but arguably would be better focusing on developing climate change research strategies and portfolios as this is what will provide opportunities for this cadre. This has important implications for actions taken, scale of actions required, and the monitoring and evaluation of the ultimate objective. For example, if the objective is to look at the wider ECR community within any institution, then the issue of providing small scale research funding becomes crucial. The overall method of delivery for ISP under CIRCLE has worked well in relation to strengthening institutions in relation to ECRs and would only require tweaks to the delivery captured in the recommendations throughout this report and in the above recommendations.

From the survey results, there is obviously an aspiration on the part of the participating institutions to create an enabling environment for all ECRs within their institution. This is shown by the significant support for funding to **scale up** support for ECRs in the survey results. As this may exceed the budget envelope and scope of the CLARE framework, a scaling up fund could be considered for institutions that participated in CIRCLE to build on their gains. This could be for scaling up within or between institutions. This would not require much input in terms of workshops and technical assistance just limited follow up and funding provided to existing CIRCLE institutions who wish to scale up their gains. Funding should be in tiers depending on the size and geographical spread of the institutions. However, SSA participating institutions across the CLARE portfolio, not just in the fellowship or CIRCLE equivalent element within the CLARE framework, could be provided with the option to **participate** in this climate change institutional strengthening and/or the early career researcher institutional strengthening. Making institutional strengthening genuinely cross cutting across the CLARE framework supports synergy across the different elements of the programme. It will also provide support to those SSA partners for whom climate change is a relatively new discipline, as well as delivering support to those ECRs participating in the CLARE funded research. Institutional strengthening would add value across the portfolio.

¹² Pulford J, Crossman S.J, Begg S, Amegee Quach J, Abomo P, El Hajj T, Bates I. Strengthening research management and support services in sub-Saharan African universities and research institutions. AAS Open Science 2020, 3:31.

Thus we recommend that there are three potential institutional strengthening streams (ECR, Climate Change Strategy, CIRCLE Scape Up) with their eligibility, areas of focus and methods of delivery shown in figure 16. Budget constraints may make these options mutually exclusive, requiring institutions to only select one. Within these streams there could be tiers of support for example:

Tier 1: Self service model. Access to a platform with training materials and examples. Access to annual webinars.

Tier 2: Self-service plus model. Access to a platform with training materials and examples. Funding. Quarterly webinars. Some follow up. This could particularly work for the scale up of CIRCLE participants or the new partnership model for Climate Change strategic planning.

Tier 3: Experiential learning model as per CIRCLE for a smaller number of institutions. This could be coupled to the hub and spoke model outlined above.

Eligibility for the tiers or streams could be dictated by the funder/delivery partners depending on their participation in different elements of the CLARE framework or could be completely open with a competitive process to be in the top tiers.

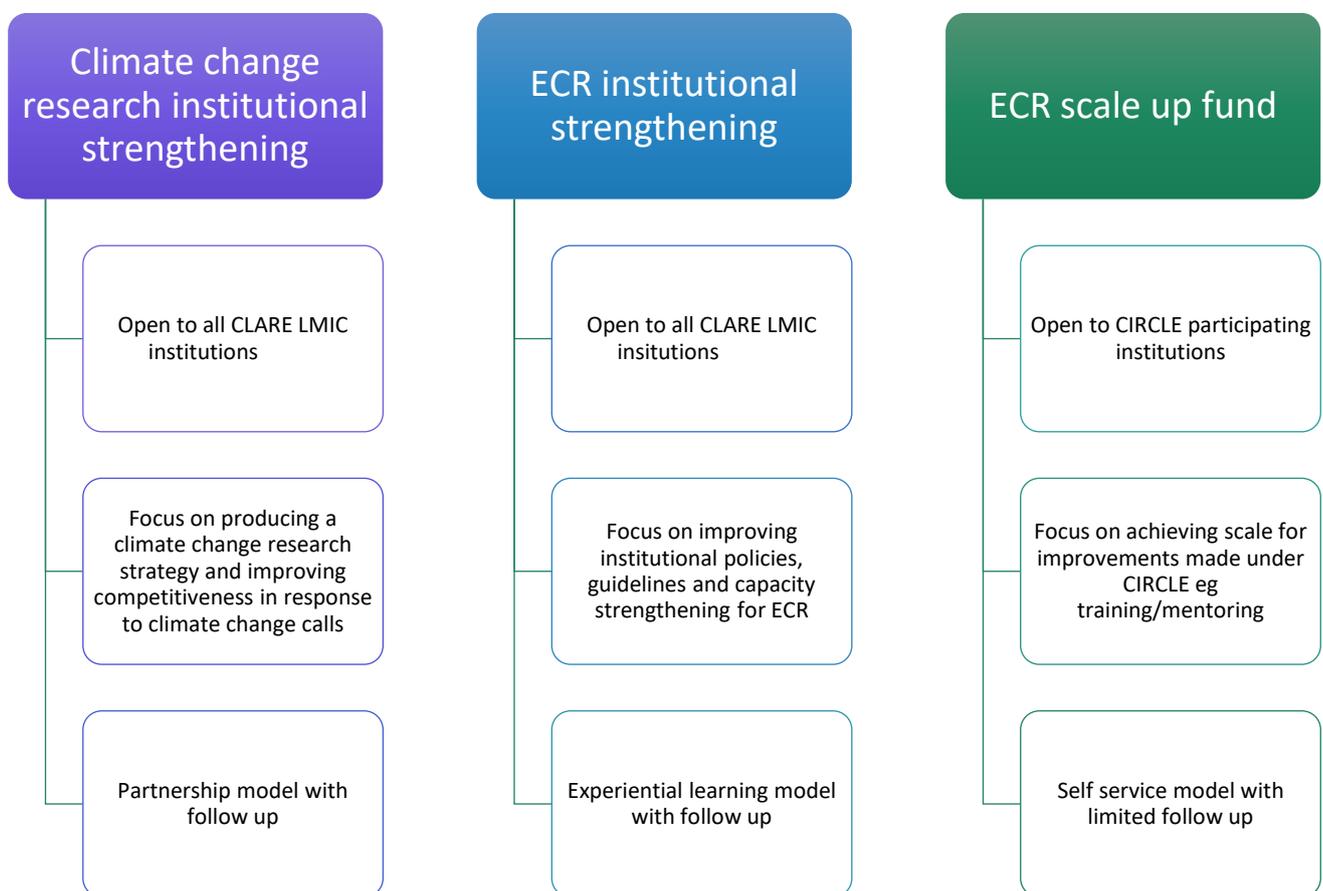


Figure 16 Institutional Strengthening Streams for a future programme showing eligibility, areas of focus and methods of delivery

Consideration of funding infrastructure/equipment or equipment donations¹³ would be required both for the fellowship scheme, particularly if fellows were hosted at home institutions, and for the climate change research institutional strengthening element.

It is good practice to ensure that participating collaborations in the wider CLARE framework adequately cost in additional contributions to individual and institutional capacity strengthening. NIHR

¹³ The Tropical Health Education Trust (THET), UK have done some useful work on equipment donations to LMICs in relation to medical equipment but this might be worth adapting for any future programme. https://www.thet.org/wp-content/uploads/2017/08/THET_MakingItWork_Toolkit_Final_Online.pdf

have done work on ensuring that capacity strengthening is mainstreamed in any call for proposals. **Clear guidance** is provided around their expectations, along with links to further documents to assist researchers in their understanding of key concepts behind institutional and individual strengthening. For example, their latest calls read:

There are clear plans for a focussed programme of research and research management capacity and capability strengthening at individual and institutional level appropriate to the goals of the Global Health Research Group, including at least three academic training posts, appropriate training of research support functions (training in finance, programme, and research management) and informal training opportunities, which collectively enhance professional development and education in research.¹⁴

In terms of **sustainability**, it is well known that institutional strengthening is a slow burn and requires long term commitment. By building in a partnership element to the programme, it would be hoped that the two institutions form a long-term commitment, while drawing in funding from different sources to support long-term goals. Having a scale up fund for institutions who participated in CIRCLE helps create a longer-term investment with greater likelihood of sustainability, protecting CIRCLE's gains.

There are strong recommendations from the informants in relation to creating **platforms and communities of practice**. We would recommend considering how to create communities of practice across the CLARE framework, for example, linking up all the ECR, regardless of whether they are from fellowships, or from within a collaborative research programme. In addition, platforms that can link institutions with similar interests would also be of benefit. The Tier 1 level of support outlined above would ideally be linked to a platform providing support materials and examples of how to undertake institutional strengthening. Ideally this platform should be planned to sustain beyond the programme and be African led.

We would also strongly recommend seeking synergies and complementarity with other **funding agencies** and key African institutions. This should be a measurable objective within the CLARE framework with clear roles and responsibilities for funders and delivery partners.

Recommendations regarding MEL frameworks are discussed later in this report.



Recommendations: Future Programmes

- Develop a theory of change specifically for the institutional strengthening programme to ensure that activities and outcomes align
- Reflect on the tension between research equity and research excellence in the design of CLARE
- Include a dual approach to capacity strengthening in which individual fellows directly contribute to institutional research capacity strengthening
- Have a critical mass of fellows within institutions rather than spreading them thinly
- Clarify the aim of the early career researcher support between supporting fellows/participating ECRs, or the wider community of ECRs within participating institutions
- Ensure institutional strengthening is a cross cutting element of the CLARE framework

¹⁴ <https://www.nihr.ac.uk/documents/third-call-for-global-health-research-groups-remit-and-guidance/24949#Eligibility>

- Allow all institutions participating in any element of CLARE to participate in the institutional strengthening programme
- Address the need to build a portfolio of research grants through developing institutional climate change research strategies through institutional partnerships
- Have three, potentially mutually exclusive, streams of institutional strengthening: ECR support, climate change strategy support, and scale up from CIRCLE
- Include clear guidance within all CLARE framework application proposals regarding expectations for institutional strengthening
- Look for opportunities to build platforms for communities of practice between ECRs and institutions
- Take opportunities to connect with other funders and African institutions working on institutional strengthening in Africa

9. FINDINGS AND DISCUSSION: FUTURE MONITORING, EVALUATION AND LEARNING FRAMEWORK

One of the deliverables for this review is the development of an MEL framework for CIRCLE that will enable measurement of different types of institutional strengthening against the degree to which they have been embedded within the institution.

Some of the delivery partners interviewed for the evaluation had recommendations regarding future MEL. Not all of the recommendations were specific to the institutional strengthening programme, so we have presented all the recommendations, separating them for ease of analysis.

Institutional Strengthening Programme

- Join up the individual and institutional strengthening MEL frameworks to better understand how fellows contribute to their institutions
- Ensure that the aim of the institutional strengthening programme is clear to allow measurement
- Integrate MEL across all delivery partners
- Evaluation visits through the programme to sample partners to do a deep dive into what has been achieved and what the benefits are
- Utilise case studies in the log-frame to show journeys of change; these could be thematic and could also capture the connections between the individual and institutional element of the programme; they could also capture how barriers were overcome
- A more structured approach with quantitative indicators for the ISP (see Figure 17)

Programme as a whole or the CVF element

- Incorporate the wider research ecosystem into the theory of change to show how science can contribute to societal change
- More creative and inclusive targets for fellows other than simply publishing eg personal development, career development
- More measurement of the cohorts on how they progress and influence the institution eg administrative positions held, contribution to institutional improvement processes
- Measurement of the impact of the science undertaken by the fellows eg influence on policy, changes in practices in communities, uptake by industry, uptake by academics

Problems identified with creating an indicator framework for the ISP included the level to which it was specific to the institution and the importance of process. This meant that numerical indicators were particularly difficult to use. Another fundamental problem is the lag time between interventions and impact with regards to institutional strengthening that is often beyond the time-period of the programme, and therefore any monitoring or evaluation. Also, problematic is the need for easily understandable metrics in circumstances where the interventions and impacts are complex and nuanced.

The indicators in the final version of the log-frame related to the number of institutions who had strengthened training provision, mentoring and policies. Whilst these can be directly attributable to the programme, they are not very meaningful, especially as they do not give a sense of the scale of the interventions. If an institution runs one training course you could argue that they have strengthened training provision, but this is not a good outcome for an institutional strengthening programme. In addition, the degree to which a policy had been implemented varied significantly even if it had been approved/developed. Hence, these types of indicators are not recommended.

Normal metrics used within the institutions themselves were research outputs, grants won and participant evaluation of training. These are also common metrics for programmes, along with numbers trained / mentored. Whilst these indicators are obviously a blunt tool when compared to the complex interventions and impacts, they are also relatively easy to measure and form part of standard M&E processes within institutions and are not overly burdensome. They would, however, benefit from having measurement at baseline and then at least two years post intervention with measurement of non-intervention ECRs to create a comparator. It is accepted, however, that this may not be feasible within the funding parameters.

We would recommend keeping these research output type indicators but complement them with case studies that can unpick some of the more complex aspects of the work and its impact. We also recommend using survey data that can be aggregated. The survey indicators will focus on four dimensions of the work; activities, reach, impact and likelihood of sustainability/embeddedness. Process and quality indicators could also be added reflecting on processes within the programme and the institution.

It is recommended that the programme thinks about having an MEL framework that includes the logframe indicators as well as a wider set of indicators. This enables collection of data to provide sufficient information to manage the programme and add narrative detail to funder reporting, whilst not creating an overly complex log-frame reporting burden. Example indicators based on our work evaluating CIRCLE are provided below. The final selection of indicators, however, should only be made once the scope and design of the new programme has been finalised, preferably by working with the evaluators at the inception stage. The indicators and approach provided in this report should be used as a starting point, rather than providing a full evaluation framework for a future programme.

Given the complex nature of institutional strengthening, and its potential as a cross cutting theme across CLARE, we would recommend having a formative evaluation. The evaluation team should be involved from the outset. This would mean them assisting in the development of the theory of change and indicator framework, as well as institutional visits at baseline, midline, and endline (and if possible postline). It would enable feedback to the programme, and allow adjustment and improvements based on findings. The evaluation team could also be responsible for the development of case studies based on their institutional visits and other data.

We would recommend identifying a sample of participating institutions that are stratified in terms of the elements within the CLARE framework that they are part of, their size, their age, and previous involvement in CIRCLE.

In addition to having a programme framework, it has been recommended within this report that institutions are supported to develop their own internal monitoring systems for institutional

strengthening. Again, exact indicators should link to the specific action planning of ISPs or their equivalents. It is recommended to utilise the work done by the Centre for Capacity Research at the Liverpool School of Tropical Medicine¹⁵ to look at appropriate institution level indicators for institutional strengthening. However, as these are likely to be specific to the institution, it is not appropriate or feasible to aggregate them for programme purposes.

Whilst the exact framework will need to be based on the programme design, we recommend thinking about indicators that provide insight into: activities delivered, reach of activities, impact and sustainability. In addition, quality and process indicators may also be useful. Data can be collected from a mix of sources: data captured by the ISPs, surveys completed by the ISPs, case studies created by the participating institutions and either the evaluators or delivery partners. Figure 17 gives an overview of the proposed MEL framework with example indicators for the main ISP activities under CIRCLE. Indicators highlighted in red would be reliant on monitoring by the ISP and should be negotiated as to their feasibility for collection.

There are proposed case studies under different headings. However, in a logframe these would be aggregated as impact or process case studies relating to any aspect of delivery (eg training, mentoring, policy development, climate change research strategy).

Some indicators could be collected through regular surveys, and an example survey that was piloted for this evaluation is included as a separate pdf and can be accessed via the link in Annex 2. Feedback from survey respondents on the clarity of the questions was primarily positive. All aspects of the survey were completed by informants, although the examples of impact were thin and would not be sufficient to form the basis of case studies without significant further work. Where there were aspects that needed further clarity, they have been corrected in the version included in Annex 2.

The programme showed that there were good learning processes designed into CIRCLE and it is recommended that these approaches continue in any future programme.

Figure 17 Overview of a framework for MEL using monitoring data, surveys, and case studies

	Activity	Reach	Impact	Sustainability	Optional: Quality	Optional: Process
ECR Training	No of training courses run by topic	No of ECRs trained by topic Survey question indicating whether few, some, most, all ECR reached Survey question indicating whether training is accessible for ECRs across whole institution, multiple department, one department	Case studies of impact on trainees Survey questions (see Annex 2) No of publications as author, lead author (baseline, 2+ years post training) Research grants written/successful (baseline, 2+ years post training) by type eg national, institutional, international	Survey questions on sustainability (see Annex 2) Case studies of embedding change in institutions	Feedback from participants	No of trainers available to deliver training Case studies of training development and delivery
Mentoring	Mentoring guidelines developed Mentoring training courses delivered	No of mentors trained No of mentees undergoing formal mentoring	Case study on mentees Monitoring data on qualification completion	Survey questions on sustainability (see Annex 2)	Feedback from participants	Case studies on development and delivery of mentoring schemes

¹⁵ https://www.researchgate.net/publication/341916068_Measuring_the_outcome_and_impact_of_research_capacity_strengthening_initiatives_A_review_of_indicators_used_or_described_in_the_published_and_grey_literature

	Activity	Reach	Impact	Sustainability	Optional: Quality	Optional: Process
		<p>Survey question indicating whether few, some, most, all ECR reached</p> <p>Survey question indicating whether mentoring is across whole institution, multiple department, one department</p>	<p>mentored and non mentored ECRs</p> <p>Publication rate mentored and non mentored ECRs</p> <p>No of publications as author, lead author (baseline, 2+ years post training)</p> <p>Research grants written/successful (baseline, 2+ years post training) by type eg national, institutional, international</p> <p>Time to complete qualification</p>	Case studies of embedding change in institutions		
Policy development	Survey question: No of policies in development, drafted, reviewed, in approval process, approved, implemented by type of policy	Survey : Whether policies are departmental or whole institution	Case studies of impact on institution and staff/students	Case studies of embedding change in institutions		Case studies on development and delivery of policies
Climate Change Strategy	<p>Strategy developed</p> <p>Actions due within the strategy actioned (in full, partially, not at all)</p>	Strategy accepted at institutional level, departmental/faculty level or centre level	<p>Case studies on impact of climate change strategy</p> <p>No of publications by single or multidisciplinary (baseline, 2+ years post strategy)</p> <p>Research grants written/successful (baseline, 2+ years post strategy) by type eg national, institutional, international</p> <p>Formal partnerships (national or international)</p> <p>Formal platforms with beneficiaries or policy makers (baseline, 2+ years post strategy)</p>	Trends in research income	Case studies on research quality	Case studies on strategy development process
ISP	Activities delivered	Survey question: Activities focussed on one department, a few departments, whole institution		Survey question: Plans for ISP structure post funding		<p>No of members</p> <p>Turnover of members</p> <p>Case studies on formation and functioning of ISP teams</p>

10. CONCLUSION

Investing in institutional strengthening is good practice and responds to a well-documented need in African higher education institutions. The inputs into the ISP were of a very high quality in terms of the human capital and the frameworks used to underpin the programme. In this conclusion the extent to which the logframe objectives have been achieved will be reflected upon, and a summary of the main recommendations for future programmes will be provided.

10. 1 Achievement of Logframe Objectives

The logframe impact statement, outcomes and outputs relating to institutional strengthening are shown again, in figure 18. In this section we will reflect on Output 2 and Outcome 1. Outcome 2 has been discussed earlier in the report.



Figure 18 Extracts from the programme logframe that relate to the ISP

Strengthened capacity to support and enhance the career progression of research staff early in their careers (Output 2)

The programme has undoubtedly contributed to strengthened capacity to support and enhance the career progression of research staff early in their careers in most of the participating institutions, and all the sample institutions. The ability to benchmark current practices against international gold standards motivated institutions to address gaps. The range of activities undertaken by the ISP teams is impressive. The approach of experiential learning supported by high quality training, workshops and frameworks worked well, allowing each institution to focus their efforts according to their individual needs. However, there are questions about the scale of activities in terms of reach across institutions and the degree to which they are sustainably embedded. In some cases, there has been very successful embedding, and sustainability seems guaranteed. However, in some cases the interventions seem fragile. Lack of budget to go to scale, changing senior management priorities, staff

turnover within ISP teams, unclear roles and responsibilities, are all challenges to sustaining the improvements that have resulted from CIRCLE ISP activities.

The original justification for the ISP programme was to make institutions more enabling for returning fellows, however, the focus in many of the institutions has been on creating programmes facilitated by CVFs for non-CVF ECRs. It has been difficult in this evaluation to assess the exact impact on this group as they were not identified as key informants. However, even when the mentoring and training programmes have focused on non-CVF ECRs, we would argue that the ISP programme has created a more enabling environment for the CVFs, providing them with access to senior management, insight into how policy making and systems work within their institutions, visibility and kudos amongst their peers and seniors. In addition, CVFs will potentially benefit from the various improvements made across institutions in HR policies and systems, including promotion criteria, gender policies and induction policies.

There is an important distinction between creating enabling environments for returning fellows and creating enabling environments for ECRs. Future institutional strengthening programmes should take care to carefully examine the appropriate aim for any institutional strengthening element, and whether the activities planned will contribute to that aim. Building a specific theory of change into the design of the institutional strengthening element of the programme, as well as differentiation between fellows and ECRs, will assist with the alignment of activities to the intended outcomes and aims.

Strengthened capacity of institutions to access research funding opportunities and generate internationally recognised knowledge and evidence to respond to climate change impacts in Africa (Outcome 1)

Both the CVF and ISP elements of the programme were expected to contribute to this outcome. There was evidence that the ISP and CVF programmes have increased motivation levels to undertake climate change research. They have brought new skills and encouraged the development of new institutional structures or strengthened existing ones. This has been largely through the influx of capacity from both the CVF and ISP teams. It is also clear, however, that there is more progress required for the institutions to access research funding opportunities that will allow them to generate internationally recognised knowledge and evidence on climate change in Africa. In this respect the impact on the individuals who have benefited from the fellowship has been greater than the impact on the institutions.

“In my view the higher objectives have not been achieved. The idea is still there but we are far from it. ... The programme made progress in terms of capacitating individuals and they have been influential in terms of their work on climate change .. and have grown themselves. They have had impact in the communities that they are serving.”
ISP Team

Only half of the institutions have been in receipt of international funding. Success in gaining international funding was dependent on a small group of individuals, some of whom are fellows. Hence institutions are vulnerable to staff moving on or retiring. Access to funding is an area where further institutional strengthening is required, as well as a necessary step to enable a sustainable approach to institutional strengthening at scale. Having a good portfolio of research funding which can contribute to institutional capacity development funds, enables a sustainable programme of training and mentoring to be delivered in house. A portfolio of funding at international, national and institutional level, provides opportunities to different cadres of researchers, enabling institutions to create a sustainable critical mass.

Being able to compete in the international research arena requires human capacity alongside some of the building blocks that are discussed in this report relating to climate change: interdepartmental, interdisciplinary, and transdisciplinary working, strong relationships with policy makers, industry and end users, strong national, regional and international networks, research infrastructure/equipment, effective support systems. However, all aspects of institutional need cannot be addressed in one

programme, particularly with a limited budget. As a consequence, many programmes have to focus upon one specific pillar. The focus of CIRCLE was primarily on early career researchers, and this is where most progress was made as a result of the ISP. The CVFs, however, contributed more widely to structural improvements, critical mass, and the attainment of grant money in climate change. Having one framework under CLARE may provide a future opportunity to widen the scope of the institutional strengthening, should it be used as a cross-cutting theme across all elements of the programme. This could address the development of early career researchers and strategic thinking, as well as the capacity to win international grants and conduct high quality climate change research. This thinking underpins our core recommendations, which are presented below.



Key Recommendations

Future Institutional Strengthening Programme

- Develop a theory of change specifically for the institutional strengthening programme to ensure that activities and outcomes align
- Reflect on the tension between research equity and research excellence in the design of CLARE
- Include a dual approach to capacity strengthening in which individual fellows directly contribute to institutional research capacity strengthening
- Have a critical mass of fellows within institutions rather than spreading them thinly
- Clarify the aim of the early career researcher support between supporting fellows/participating ECRs, or the wider community of ECRs within participating institutions
- Ensure institutional strengthening is a cross cutting element of the CLARE framework
- Allow all institutions participating in any element of CLARE to participate in the institutional strengthening programme
- Address the need to build a portfolio of research grants through developing institutional climate change research strategies through institutional partnerships
- Have three, potentially mutually exclusive, streams of institutional strengthening: ECR support, climate change strategy support, and scale up from CIRCLE
- Include clear guidance within all CLARE framework application proposals regarding expectations for institutional strengthening
- Look for opportunities to build platforms for communities of practice between ECRs and institutions
- Take opportunities to connect with other funders and African institutions working on institutional strengthening in Africa

Overall, the CIRCLE ISP has demonstrated that it is possible to motivate significant activity in institutional strengthening with high quality inputs of technical assistance and small inputs of resources. It has demonstrated the centrality of people within institutional strengthening processes, with teams in institutions benefiting from the wisdom of experienced hands and the drive and motivation of early career researchers. Questions remain, however, as to whether this level of investment is sufficient for these improvements to be delivered at scale. Sustainability, as with many development programmes, is a complex issue. For this reason, it has been a focus of the recommendations made for future programmes.

11.NEXT STEPS

1. Webinar of results open to all participants in the evaluation, delivery partners and participating institutions.
2. Management response to the evaluation report. See the Key Recommendations and also the Recommendations from Throughout the Report (next page).
3. Circulation and consideration of findings to individuals planning the CLARE framework.

12.ACKNOWLEDGEMENTS

We would like to acknowledge the following for their participation and support in this evaluation: all interviewees and survey respondents; members of the ISP teams who helped organise interviews for us; participants at the ToC development and preliminary findings workshops; the evaluation steering committee members, and George Lakey, ACU for ensuring we had everything we needed at all times.

RECOMMENDATIONS FROM THROUGHOUT THE REPORT

Capacity Strengthening [I2] and Learning and Tools Provided by the Programme [I3]

Programme level

- Balance access to online materials with offline/hard copy options
- Pairing/grouping institutions together who are working on similar initiatives
- Continued use of project planning/material e-platforms to enable communication and exchange
- Provide additional support post training of trainers in relation to complex new tools/concepts eg RDF and review whether this helps with spread
- Budget for institutional visits to provide technical assistance and follow up

Institutional level

- Ensure that all opportunities for follow-up or technical assistance are utilised to maximise benefits from the programme

Implementation of the ISP [A1]

Programme level

- Strengthen M&E skills and provide tools for ISP teams to monitor their interventions

Institutional level

- Plan regular updates to institutional leadership to address changing roles and staff turnover

Programme Level Outputs and Learning [A2]

Programme level

- Integrate the learning products from CIRCLE into the inception phase activities of CLARE delivery partners by means of circulation and webinars
- Extend peer learning in any future institutional strengthening programme by means of the creation of appropriately blended virtual or face to face platforms
- Increase focus on light touch M&E to enable the reach and impact of institutional strengthening to be assessed

Institutional

- Strengthen recognition for the potential of internally driven institutional strengthening programmes

Beneficiary Institution ECR Support Strengthening [O1]

Programme level

- Greater support for developing lean institutional M&E systems that can capture reach, learning and impact of the different components of the institutional strengthening programme
- Provide greater support on policy implementation, monitoring and evaluation through inter institutional sharing and benchmarking

Institutional

- Continued working with university research administration to ensure that gains in ECR training, support, mentoring and policy development are not lost
- Younger institutions should consider pairing with more established institutions and investigate options for remote mentoring and support

Increased Competence [H1] & Increased Prospects [H2] for ECRs

Programme level

- Consider inclusion of flexible funds for institutions to support ECRs with their research costs if seeking to strengthen ECRs cadre within an institution
- Include capacity strengthening in grant writing skills for all levels of researchers in any future institutional strengthening programme
- Ensure that gender is considered in relation to scholarships, in terms of enabling access for women who may have less opportunity to travel

Institutional

- Ensure that gender is considered in terms of promotion criteria

Climate change research strengthening [O2]

Programme level

- Institutional strengthening programme should have a stream focusing specifically on climate change research
- Improving international competitiveness of institutions requires more than proposal writing workshops, with a mentorship approach being more appropriate support

Institutional

- Link the launch of institutional structures for climate change to a strategy to build research in this area

Strengthened capacity of and relationships between researchers and support staff [H3]

Programme level

- Increase the focus on the skills and processes needed to build a portfolio of climate change research

Strengthened climate change research institutional arrangements [H4]

Programme level

- Future programmes: partnerships with more experienced institutions to develop strategic plans for climate change research and structures
- Future programmes: continue to provide capacity strengthening in relation to research uptake

- Future programmes: consider how to strengthen interdisciplinary working in any funded research programme

Institutional

- Future funding: building in funds for research uptake when negotiating with funders or partners

Efficiency: Resources (small grants and human capital inputs) [I1]

Programme level

- Use light touch application processes for small grants
- Share good practices of how to sustainably deliver and fund capacity development for staff
- Facilitate costing of development, pilot and whole institution costing of interventions
- Fund for CIRCLE participating institutions to scale up initiatives started under CIRCLE ISP
- Integrate research uptake into the institutional strengthening programme
- Facilitate the collection of evidence on this model of funding for institutional strengthening

Project Management and Governance [I4]

Programme level

- Discuss options and agree follow-up processes with participating institutions in start-up period of programme

Impact: Embedded change [S1]

Programme level

- Have an option for developing climate change research strategy within any future institutional strengthening programme.
- Ensure that there is clarity about the possibilities of going to scale with interventions and include indicators relating to reach within the M&E framework
- Consider a top-down approach to institutional strengthening with more structured engagement of central departments and senior administration

Sustainability

Programme level

- Sustainability should be designed in from the start with earlier and continued engagement/targeted effort with senior leadership
- Provide guidance and resources on lean methods of monitoring and evaluating interventions and policy adherence and implementation
- Support institutions to grow a portfolio of international and national funding that in turn supports the sustainability of institutional strengthening through increased overheads or capacity strengthening levies.

Institutional

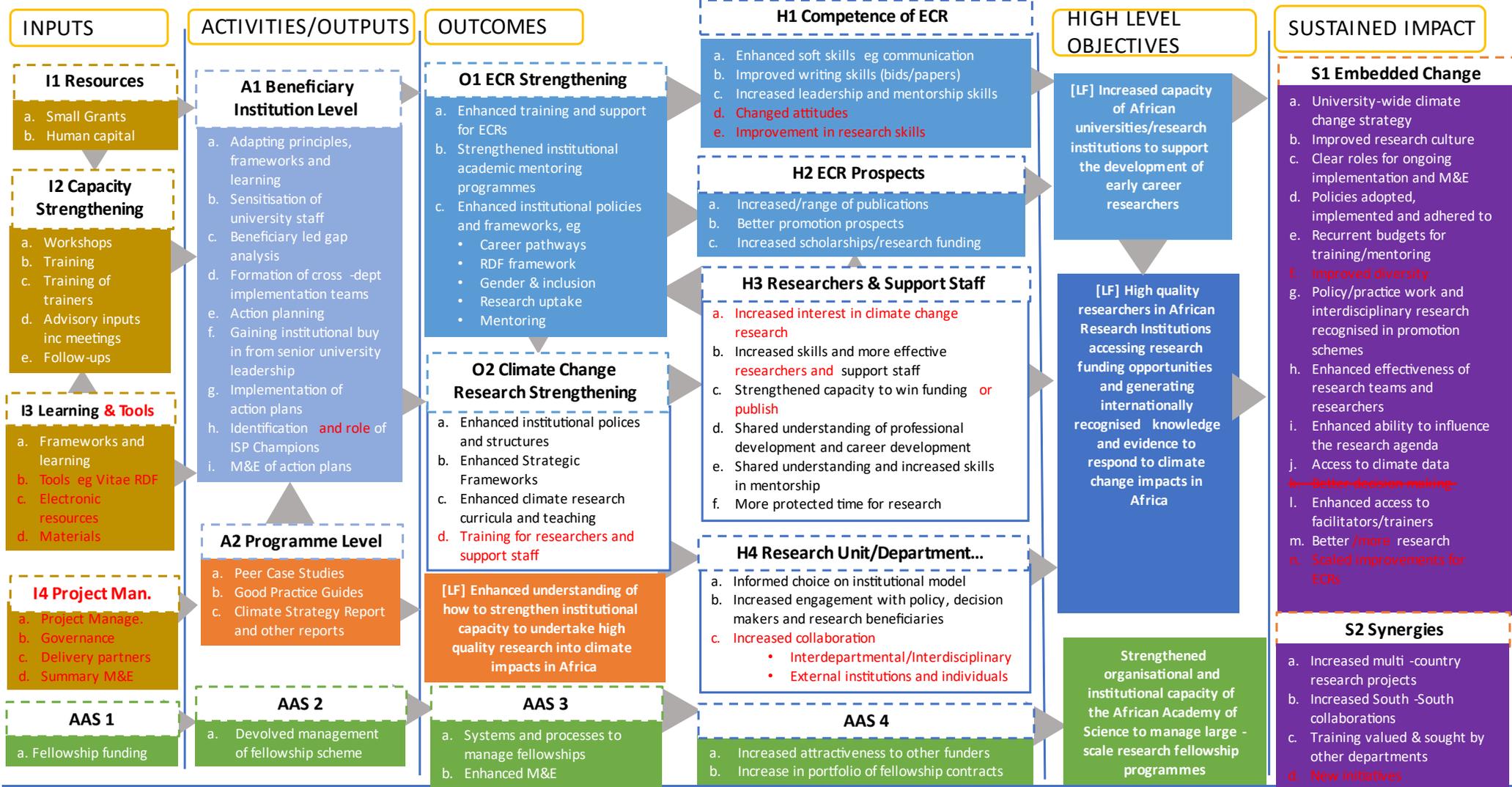
- Structures, processes and roles for embedding ECR mentoring and enhanced training need to be agreed and transferred from ISP project responsibility to institutional responsibility coupled with budget allocation, alternatively the ISP equivalent could be integrated into existing structures
- Ensure that ownership of new interventions or policy implementation is transferred to central departments and individuals

Relationship between Individual and institutional Strands

Programme level

- Continue the model of institutional and individual strands of capacity strengthening
- Aim for a critical mass of CVFs within any one institution with a minimum of four
- Incorporate leadership and institutional strengthening training into the fellowship

THEORY OF CHANGE: CIRCLE INSTITUTIONAL STRENGTHENING PROGRAMME



Assumptions and Risks

INPUTS/ACTIVITIES TO OUTCOMES

[AO] Assumptions

1. Alignment with institutional priorities
2. Staff and decision makers have shared vision of change
3. Sufficient resources (including protected time) to implement plans
4. Principles, frameworks and tools are suitable to be adapted to African context.
5. Technical assistance provided is appropriate and meets beneficiary needs
6. Enough staff within universities with sufficient time for mentoring and training
7. Conducive environment to implement plan
8. Implementation partners provide quality inputs to enable deliver of the programme
9. The programme has appropriate governance structures
10. The M&E processes are fit for purpose and adhered to

[AO] Enablers

- a. Improvement through benchmarking rather than training
- b. Clarity about what institutional strengthening is and entails
- c. Senior management support
- d. People of influence from key functions in implementation team
- e. RDF lens to ensure needs are beneficiary led

[AO] Risks

- i. Senior management staff turnover
- ii. Seen as challenge to status quo
- iii. Industrial action disrupts activities
- iv. Research not given sufficient value

OUTCOMES TO HIGHER LEVEL OUTCOMES

[OH] Assumptions

1. Sufficient quality of implementation/training
2. Policies are adhered to
3. There is an appetite for mentorship, and it is appropriate to the context
4. Implementation of the plan results in institutional change (training, mentorship, policies)

[OH] Enablers

- a. Benchmarking with African institutions
- b. Empowerment training model
- c. Utilising internal training capacity
- d. Local champions
- e. Working collaboratively within the implementation team
- f. Working collaboratively with other units looking at similar issues

[OH] Risks

- i. Obstruction or non-participation of some senior staff
- ii. Lack of a culture of continuous improvement or mentoring amongst senior staff
- iii. Slow pace of change within institutions
- iv. Lack of internal expertise
- v. Weak links between host and home supervisors

HIGHER LEVEL OUTCOMES TO SUSTAINED IMPACT

[HS] Assumptions

1. Fellows leverage their institutional and individual links from the fellowship
2. Commitment to implement plans continues after project finishes.
3. Fellows remain within their institution

[HS] Enablers

- a. Senior management champions

[HS] Risks

- i. Slow pace of change within institutions
- ii. Other parts of the system remain weak and cannot capitalise on improvements eg finance systems
- iii. Insufficient budget for recurrent activities
- iv. Discretionary rather than procedural management norms
- v. Lack of prioritisation of climate change within the institution
- vi. Gender equity efforts undermined by patriarchal institutions
- vii. Barriers to inter departmental cooperation
- viii. Lack of investment in climate change research and facilities
- ix. Burnout of key staff
- x. Lack of understanding of the cross-disciplinary nature of climate change within other university departments

Changes made to the ToC post-evaluation

- All changes are highlighted in red text
- Inputs: Moved the tools and materials from I1 Resources to I3 renamed as Learning and Tools as it suited the flow of the data/report more
- Project Management: Added a section I4 to inputs for Project Management and moved summary M&E from outputs (A2) into this section.
- Climate Change Research Strengthening: Added O2d Training for researchers and support staff
- Competence of ECR: added H1c Changed attitudes and H1d Improved research skills in response to data
- Researchers and Support Staff: Added H3a Increased interest in climate change research in response to the data.
- Research Unit/Department: Collapsed previous categories H4b,d,e, f to H4c Increased collaboration to reduce complexity
- Synergies: Deleted S2c Increased research networks and partnerships as this data had already been covered under H4c and S2a and S2b. Added a new subcategory for new initiatives in response to the data.
- Due to time constraints no changes were made to the assumptions, enablers and risks. However barriers and enablers are identified throughout the report.

ANNEX 2: EXAMPLE SURVEY FOR INSTITUTIONAL STRENGTHENING M&E

The example survey for institutional strengthening M&E has been provided as a separate PDF files but is also available to copy from the following link.

<https://forms.office.com/Pages/ShareFormPage.aspx?id=O5h3I0PH4U2AK3u56XkB6NszHoGaXbxFuApJiZNRD1UQVhKUEgySDhRVTE3WkJCWIM5VUw3NzRUTC4u&sharetoken=ILbzFmDAECrIHNO0Akmp>

It has been designed in Microsoft Forms and includes branching at various points depending on the answers to key questions. The branching can be seen by clicking on a question, clicking on the dots at the bottom right of the question and selecting Add Branching. If you now click on any question you will see the branching for that question. Press the arrow pointing left at the top of the screen to come out of the branching view.

Models, frameworks and methodologies introduced by Vitae during the champion sessions

- Concordat and HR EiR Award
- Researcher Development Framework and Lens
- Gap analyses and template
- SWOC
- CIRCLE Institutional Strengthening planning Tool
- Blooms Taxonomy
- Panel discussions
- The change curve
- Belbin
- Leadership styles
- Force Field Analysis
- The 3 C's of strategy implementation
- SMART
- CFRD
- STAR
- Unconscious bias
- Mentoring job description
- GROW
- Experiential Learning
- Designing a workshop cycle
- Honey and Mumford Learning styles
- Vitae Impact Framework
- Stakeholder Analysis
- Conversations: Directive and non-directive approaches

Toolkits provided to the fellows, champions and institutional leads during the workshop sessions:

- Fellow's Development Toolkit
- Gap Analysis and Action Planning Toolkit
- ISP and Institutional Engagement Toolkit
- Mentoring Toolkit
- Programme Development Toolkit
- RDF and RDF Planner Toolkit

For further resources: www.vitae.ac.uk

ANNEX 4: EVALUATION INDICATOR FRAMEWORK

Ref	P*	Indicator	Evaluation Focal Areas	ToC Ref	Interviews	e-survey	Logframe	Action plans/M&E	Doc Review
		P* = Perceptions of							
RELEVANCE									
R1a	P	Alignment with the needs of its beneficiaries (climate change research units/depts)	1	AO1	Yes				Yes
R1b	P	Alignment with the needs of AAS	3	AO1	Yes				
R2a		Alignment with good practices in institutional capacity strengthening	1	I1, I2, I3	Yes				Yes
R2b		Alignment with good practices in strengthening climate change research strategy	1	I1, I2, I3	Yes				Yes
R3		Alignment of inputs and activities with the ToC and purpose of the programme	1,3,4	All	Yes				Yes
R4	P	Complementarity with other similar initiatives	1	S2	Yes				
EFFECTIVENESS									
Inputs, activities and outputs									
E1	P	Utility of the capacity strengthening elements provided by the programme (workshops, trainings, training of trainers, advisory inputs including meetings, follow-up)	1	I2a-e, AO5	Yes				Yes
E2	P	Utility of the learning inputs and how they informed the programme (frameworks, learning, Nairobi process)	1	I3a-b	Yes				Yes
E3	P	Utility of the resources provided to beneficiary partners (small grants, tools, electronic resources, materials, human capital)	1	I1a-e,	Yes				Yes
E4	P	Effectiveness of the adaptation of principles, sensitisation, and gap analysis processes at beneficiary institution level.	1	A1a-c, AO4,	Yes			Yes	Yes
E5	P	Effectiveness of the formation of cross-departmental implementation teams, action planning, gaining institutional buy in from senior leadership at beneficiary institution level	1	A1d-f	Yes			Yes	Yes
E6	P	Effectiveness of identification of ISP champions, implementation of action plans, and institutional M&E of action plans	1	A1g-l, AO2,	Yes			Yes	Yes

Ref	P*	Indicator P* = Perceptions of	Evaluation Focal Areas	ToC Ref	Interviews	e- survey	Logframe	Action plans/M&E	Doc Review
				AO6, AO7					
E7	P	Effectiveness of the programme learning processes and outputs (peer case studies, practice guides, summary M&E, climate strategy report and other reports)	4	A2a-d	Yes				
E8		Clear methodology for assessing the impact of the institutional strengthening programme	4				Output 4.1		Yes
E9		Shared guidance on how to support and enhance the career progression of African researchers early in their careers	4				Output 4.2		Yes
E10		Report on the scientific outputs of the CIRCLE programme	4				Output 4.3		Yes
E11	P	Degree to which individual and institutional elements of the programme interacted during implementation	2	n/a	Yes				
E12	P	Effectiveness of delegation process for the fellowship funding to AAS	3	AAS1a	Yes				
E13	P	Effectiveness of the devolved management and support processes for the fellowship scheme at AAS	3	AAS2a	Yes				
Outcomes									
T1	P	Enhanced training and support for ECRs (enhanced training and support, strengthened academic mentoring programmes, enhanced policies, and frameworks)	1	O1a-c, OH1, OH2, OH3, OH4	Yes			Yes	
T2		Number of institutions that have strengthened their provision of academic mentoring for ECRs	1	O1b			Output 2.1	Yes	
T3		Number of institutions that have strengthened institutional policies and frameworks for career and professional development planning for research staff	1	O1c			Output 2.2	Yes	
T5		Number of institutions with strengthened training and support provision for ECRs	1	O1a			Output 2.3	Yes	
T6	P	Strengthened climate change research strategies, policies, structures, and teaching	1	O2a-c	Yes			Yes	

Ref	P*	Indicator	Evaluation Focal Areas	ToC Ref	Interviews	e-survey	Logframe	Action plans/M&E	Doc Review
		P* = Perceptions of							
T7		Number of enhanced policies, or strategic frameworks for climate change research	1	O2a-b, OH2, OH4	Yes			Yes	Yes
T8	P	Improvements to AAS systems and processes to manage fellowships and for M&E	3	AAS3a-b	Yes				Yes
EFFICIENCY									
F1	P	Role and contributions of implementation/partner organisations	1	AO8	Yes				
F2	P	Whether the initiative was sufficiently resourced including some brief comparisons with other research capacity strengthening funding approaches	1	AO3	Yes				
F2a	P	Efficiency of the small grants scheme	1	AO3	Yes				
F3	P	Fit for purpose programme governance and structures	1	AO9	Yes				
F4	P	Efficiency of the M&E processes and indicators	4	AO10	Yes				
F5		Recommendations for future MEL frameworks for similar programmes	4	n/a					
IMPACT AND HIGH-LEVEL OUTCOMES									
I1	P	Degree to which the programme has contributed to enhanced understanding of how to strengthen institutional capacity to undertake high quality research into climate impacts in Africa	4	LF	Yes	Yes			
I2	P	Degree to which the programme has contributed to enhanced competence of ECR	1	H1a-c	Yes	Yes			
I3	P	Degree to which the programme has contributed to enhanced ECR prospects	1	H1a-c	Yes	Yes			
I4	P	Degree to which the programme has contributed to a facilitative environment for climate change research (effective support staff, strengthened capacity to win funding, shared understanding of professional and career development, shared understanding and increased skills in mentorship, more protected time for research)	1	H3a-e	Yes	Yes			
I5	P	Degree to which the programme has contributed to strengthened research units/departments for climate	1	H4a-f	Yes	Yes	Outcome 2		

Ref	P*	Indicator	Evaluation Focal Areas	ToC Ref	Interviews	e-survey	Logframe	Action plans/M&E	Doc Review
		change research (informed choices on institutional model, increased interdepartmental collaboration, increased engagement with policy, decision makers and research beneficiaries, enhanced and increased links to industry, increased interdisciplinary research, increased links to external institutions and individuals)							
16		Increase in portfolio of fellowship management contracts for AAS	3	AAS4b					
17		Increased/range of publications/outputs by ECRs within institutions	1,2	H2a	Yes		Yes	Yes	
18	P	Degree to which AAS has increased attractiveness to funders in terms of fellowship management	3	AAS4a	Yes				
19	P	Degree to which the programme has contributed to the strengthened organisation and institutional capacity of AAS to manage large-scale research fellowship programmes	3	LF	Yes				
110	P	Synergies or multiplier effects of the programme (increased multi-country research projects, increased south-south collaborations, increased research networks and partnerships, training valued and sought by other departments)	1	S2a-d, HS1, HS3	Yes	Yes			
111	P	Synergies or multiplier effects in relation to the interaction of the individual and institutional elements of the programme	2		Yes				
112	P	Unforeseen positive or negative outcomes of the programme	1,2,3,4	n/a	Yes				
SUSTAINABILITY									
S1	P	Degree to which changes are embedded within the institution (see full list in ToC)	1,3	S1a-m, HS2	Yes	Yes			
S2		Number of policies which have been (a) adopted, (b) implemented and (c) adhered to	1	S1d	Yes			Yes	Yes
S3	P	Degree to which changes have reached beyond the initiating department/unit	1	S1a-m	Yes				

Ref	P*	Indicator	Evaluation Focal Areas	ToC Ref	Interviews	e-survey	Logframe	Action plans/M&E	Doc Review
		P* = Perceptions of							
S4	P	Degree to which there is evidence of increased research activity within the department/unit	1	S1a-m	Yes				
ADDITIONAL QUESTIONS									
Q1		Any other recommendations for the future – eg key lessons learned, what would you do differently if you were doing a similar programme	1,3,4	n/a	Yes	Yes			
Q2		Ranking of suggestions for improvements to future programmes	1,3,4	n/a		Yes			
Q3		Anything else	1,3,4	n/a	Yes				

TERMS OF REFERENCE

Independent review:

Institutional Capacity strengthening

Climate Impacts Research Capacity and Leadership Enhancement (CIRCLE)

1. Introduction and purpose:

The Climate Impacts Research Capacity and Leadership Enhancement (CIRCLE) programme is a capacity strengthening initiative led by the Association of Commonwealth Universities (ACU) and funded by the UK Foreign, Commonwealth & Development Office (FCDO).

Initiated in 2013, the CIRCLE programme was established to respond to the shortage of African researchers producing internationally peer-reviewed research into the impacts of climate change. The programme adopted an innovative approach to strengthening capacity at the individual and institutional levels and had three principal objectives:

1. To strengthen the capacity of African scientists to undertake research on climate change and its local impacts on development
2. To strengthen capacity in participating African universities/research institutions to support the development of their early career researchers and develop a coordinated and strategic approach to climate change research
3. To strengthen the organisational and institutional capacity of the African Academy of Science (AAS) to manage large-scale research fellowship programmes

In 2017, a mid-term independent review of the CIRCLE programme was conducted. This review noted that there was limited data available to indicate sustainable impact towards aim 2 of programme. Aim 3 was not explored in any great detail. The ACU would therefore like to recruit an independent reviewer to undertake an impact assessment of the institutional capacity strengthening objectives of the CIRCLE programme.

2. RECIPIENT:

The primary recipient of the work will be the Foreign, Commonwealth & Development Office (FCDO) and the Association of Commonwealth Universities (ACU).

Beyond the primary recipients this work will be shared with CIRCLE delivery partners and participants and will be available to others working in this space. It is hoped that findings will contribute to the field of research capacity strengthening across sub Saharan Africa.

3. SCOPE OF WORK:

An independent reviewer will be appointed to undertake an impact assessment of the progress made towards the institutional capacity strengthening objectives of the CIRCLE programme; objectives 2 and 3. The focus of the work will cover the following four areas:

1. The design, delivery and impact of the institutional strengthening strand of the programme
2. The relationship between the individual and institutional strands of the programme as a model for capacity strengthening
3. The progress towards objective 3, strengthening the capacity of AAS

4. The monitoring, evaluation, and learning (MEL) of the institutional capacity strengthening objectives of CIRCLE

The impact assessment will be conducted between January and June/July 2021.

4. KEY STAKEHOLDERS:

- Programme Management Team (ACU)
- Delivery partners (Vitae and AAS)
- Members of implementation teams in participant institutions
- Researchers in participant institutions
- FCDO as the programme funder

5. OBJECTIVES OF THE IMPACT ASSESSMENT:

The purpose of the independent review is to assess the impact of the Foreign, Commonwealth & Development Office's (FCDO) investment in institutional capacity strengthening through CIRCLE and to generate learnings to feed into the development of the FCDO's new Climate and Resilience Framework (CLARE).

Objectives of the CIRCLE impact assessment of institutional capacity strengthening:

1. A light-touch review of relevant literature on research capacity strengthening with a specific focus on institutional capacity strengthening in the sub-Saharan Africa region
2. To assess the extent to which the programme design was effective in contributing to participant institutions strengthening their capacity to support the development of their early career researchers and develop a coordinated and strategic approach to climate change research
3. To explore the relationship between the individual and institutional components of CIRCLE, how they interacted in practice, and assess the strengths and weaknesses of this model
4. To assess the extent to which the programme has contributed to AAS strengthening its capacity to deliver large-scale research fellowship programmes
5. To draw evidence-based lessons to inform future programme design in research capacity strengthening
6. To conduct a critical appraisal of metrics that have been applied within CIRCLE MEL activities and provide recommendations for this aspect of future related programmes

6. METHODOLOGY

Suppliers should propose a methodology and a tentative work schedule to meet the Terms of Reference that delivers the objectives and scope of work.

The ACU welcomes applications that include participatory approaches during both project inception and implementation.

7. DELIVERABLES

The post-holder will be required to deliver the following:

1. An inception report following project set-up
2. A comprehensive impact assessment report that puts forward the reviewer's findings, recommendations and lessons learned
3. A proposed longitudinal survey for ongoing monitoring of the outcomes and impacts of the ISP in CIRCLE institutions
4. Recommendations for approaches to MEL in future related programmes of work

8. SUBMISSIONS:

Please submit the following documents to George.Lakey@acu.ac.uk by Midnight UTC on Sunday 13th December 2020:

- Technical proposal (5 pages maximum) including proposed methodology and delivery plan including inception phase. The delivery plan must include options that account for Covid-19 travel restrictions.
- Full budget that aligns with stated delivery plan and team profile
- Organisation profile (including detail of impact assessments completed in the past) and CVs of proposed project team (max 2 pages each)
- A sample report from a previous project impact assessment

9. EVALUATION CRITERIA FOR APPLICATIONS

This assignment will require a researcher or small team of researchers, who will work in close collaboration with the ACU CIRCLE Team.

The criteria for the evaluation of applications is:

- Strength and appropriateness of proposed methodology
- Experience assessing impact of research capacity strengthening initiatives or similar
- Experience of working with universities, particularly in relation to research production, or understanding of university structures, is desirable
- Excellent skills in collecting qualitative data through facilitating focus groups and conducting interviews
- Adequate planning for risks associated with Covid-19 and demonstrated ability to deliver projects virtually when required
- Value for money

ANNEX 6: THE CONSULTANT TEAM

EMA KELLY is a consultant with 25 years' experience working in and the development context primarily in global health. In the last eight years she has focused on developing and implementing complex evaluations, strategy, toolkits, resources, research and development proposals and think pieces for a wide range of research, development and humanitarian actors. Her ability to think conceptually and use systems thinking to understand the interactions between the technical and management aspects of organisations and programmes has resulted in unique contributions to the design of robust organisational strategies and evaluations. Email: ekelly@capacity-development.com

DR VICKI DOYLE is a UK-based health development professional, with more than 25 years' experience of working in research, education, management and consultancy. She has designed, delivered and evaluated health projects and programmes for community, district, regional and national health systems in sub-Saharan Africa, Asia and Latin America working with government, UN agencies, global health partnerships, research institutions, consultancy companies and NGOs. Her research and consultancy work in health systems strengthening, quality improvement in health care, strategic planning, capacity development and evaluation has resulted in contributing to global guidance and national strategy documents, policy briefs, training manuals, book chapters and journal articles. Email: vdoyle@capacity-development.com

DR MICK KELLY is a consultant with Tanelorn Associates, based in Whakapara, Northland, New Zealand. He is also a visiting fellow with the Climatic Research Unit in the School of Environmental Sciences at the University of East Anglia, Norwich, UK. Mick Kelly was the founder of the MSc in Climate Change in the School of Environmental Sciences, he served as Director of Graduate Studies for the University of East Anglia from 2004 to 2007 before retiring to New Zealand. Author of over one hundred scientific publications, Mick Kelly was a member of the team that produced the definitive global surface air temperature record used in global warming detection studies. His primary research areas include: global warming and other causes of climatic change; climate history, particularly during the instrumental era; and climate and development, including vulnerability and adaptation studies. He was a founder of the Indochina Global Change Network, committed to raising capacity in the field of climate change across the nations of Vietnam, Cambodia and Lao PDR. Mick Kelly is co-founder and editor of *Tiempo*, a bulletin on global warming and the global south, and the related *Tiempo Climate Cyberlibrary*.