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Sida Decentralised Evaluation

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Evaluation of the Consortium for Advanced Research Training in Africa (CARTA)

Final Report

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July 2015**

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The views and interpretations expressed in this report are the authors' and do not necessarily reflect those of the Swedish International Development Cooperation Agency, Sida.

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Abbreviations and Acronyms

APHRC	African Population and Health Research Center
BoM	Board of Management'
C2	Cohort 2
C4	Cohort 4
C5	Cohort 5
CARTA	Consortium for Advanced Research Training in Africa
FAS	Faculty and Staff
IT	Information Technology
JAS	Joint Advanced Seminar
KEMRI	Kenya Medical Research Institute
M&E	Monitoring and Evaluation
RBM	Results Based Management
Sida	Swedish International Development Cooperation Agency
ToRs	Terms of Reference
Wits	University of the Witwatersrand, Johannesburg, South Africa
WHO	World Health Organization

Preface

This evaluation of the Consortium for Advanced Research Training in Africa was commissioned by the Swedish International Development Cooperation Agency and undertaken by a team from Indevelop consisting of Ian Christoplos (team leader), Anthony Zwi and Lily Salloum Lindegaard.

The evaluation was undertaken during a volatile period for the initiative, during which major decisions were being made regarding future financing. The evaluation team recognises the exceptionally open and constructive dialogue with the secretariat, doctoral fellows and other stakeholders throughout the evaluation process regarding current achievements and lessons being learned for the future

Executive Summary

The Consortium for Advanced Research Training in Africa (CARTA) aims to enhance public health and population wellbeing through stimulating and supporting research and related activities, anchored in a South-South partnership with South-North collaboration. As of May 2015, CARTA had enrolled 115 doctoral fellows through five cohorts. The publication record of the fellows is already growing rapidly. Close to 300 faculty members have received short-term training. In a relatively short period of time CARTA has established an important and discernible place in doctoral education. The programme was initiated in recognition of the limitations of African institutions in providing high quality doctoral training and producing PhDs of sufficient capacity to take senior leadership roles in higher education and policy institutes focused on public health and population. This was seen as being related to the broader weaknesses in African universities in developing capacities in research, partially due to an overwhelming emphasis on education. There is now general recognition among the CARTA stakeholders, and especially the fellows themselves, that the CARTA approach represents a significant enhancement of quality and that they will emerge with an education that is on par with international standards.

Interviews indicate that CARTA is also a 'living network' with strong relationships with several institutes. Among the individual fellows, focal points, supervisors and other trained staff in the member institutions this network is becoming very well established where there is overall university or departmental engagement. Particularly among the fellows this commitment to networking is strong.

There is a widely held perception that CARTA provides access to resources in a 'fair' manner that reflects the extent to which a given institute makes efforts to identify top quality doctoral candidates and plans for use of training opportunities and infrastructural support. As such it can be said that there is 'equity' among those who proactively engage. Fellows are very clear that they are satisfied that decisions are made based on merit, wherein all have an equal chance to access benefits from CARTA.

There are very insufficient commitments to results based management within CARTA. It is impossible to verifiably assess the relative importance of the various reasons given for this, but it is clear that a major factor has been the donor imposed and structured reporting systems and approaches which have been seen as being paternalistic. This in turn has aggravated pre-existing views that results based management is essentially a matter of imposed templates and accountability to donors rather than a tool for learning in the programme.

There is enthusiastic support for the CARTA model of supervision among the fellows and some supervisors. Establishing this model has been a massive challenge and is still not universally successful. Aspects of the supervision model that are particularly appreciated include that both supervisors and fellows know what is expected and when. Supervisors feel proud to be held to account for quality standards.

CARTA's objectives regarding influence on research culture are defined as primarily being related to critical thinking. Fellows refer to this primarily in terms of capacities to critically analyse a text or an argument by their colleagues and peers. Most fellows, even those who have a background primarily in teaching, describe these capacities as new. It is underpinned by interaction in the Joint Advanced Seminars (JAS), where new fellows are able to observe and be inspired by their more experienced peers. The lively debate observed in the JAS sessions is evidence of a strong capacity and readiness to engage in critical discussions.

Regarding the training provided to other faculty and administrative staff, available evidence indicates a generally very positive view of these experiences. This finding is reinforced by evaluations of the training, which show that trainees were largely satisfied with the relevance of the training and confident that they will be able to apply what they had learned in their work. The training reaches university staff who otherwise have extremely limited opportunities for interaction outside of their workplaces. However, the evaluation team concludes that the broad range of participants and the limited scope of this 'one-off' training implies that significant outcomes are uncertain.

The CARTA leadership stresses that, as the fellows are just beginning to complete their studies, it is too early to make judgements regarding sustainable change in the partner institutions. The view is that a 'critical mass' of new researchers and other trained staff will need to be in place in the home institutions to generate the intended changes on a significant scale. This is assumed to require at least several more years. The evaluation team judges that this is largely correct, but that some observations can already be made about the likelihood that the approaches and skills from CARTA will lead to changes in institutional policies and norms regarding doctoral supervision, multidisciplinary research, and attitudes towards research careers. The evaluation team judges that a more cautious perspective is warranted in relation to judging the plausibility of CARTA's overall theory of change. Greater attention is needed to considering what constitutes a 'critical mass' in different types of institutions, the time frame required for change, and the challenges that will be faced in using younger researchers as change agents in hierarchical institutions.

Despite these concerns, the evaluation concludes that CARTA is relevant. The gap in high quality African doctoral education and the need for African solutions that inspired the creation of CARTA are clear. Progress is being made in the programme, but the needs remain enormous. CARTA could continue making a significant contribution to filling this gap. This relevance relates to how CARTA has been designed to

focus on specific underlying problems in African systems of higher education. A number of informants were extremely positive about the sound conceptualisation of CARTA (and especially the JAS) in its design and function. Critical thinking, multi-disciplinary research capacities and more rigorous approaches to supervision are well-selected entry points to addressing the overall gap that CARTA is working to fill. As the fellows complete their studies, the importance of some of the less developed aspects of the CARTA model have become more apparent, such as the link with health systems and policy processes, the facilitation of future communities of research practice, the wider communication of research products, and stimulus for national and international debate on health and development issues. CARTA does not need to itself lead on all of these roles, but it needs to actively work to situate its efforts at the interface of research, policies and praxis.

The findings regarding how the conceptual elements have functioned, individually and as a whole, show that the CARTA model can potentially be applied more broadly. It appears to be a valuable means of introducing novel, relevant and effective approaches, along with institutional processes, into doctoral programmes that are in need of reform. There is reason to conclude that a CARTA-like approach could be appropriate in other disciplines and geographic areas. The core outstanding questions at this point are whether elements of this regional model are likely to be adopted, adapted and sustained within national systems, or, at worst, ejected when external financing declines. This evaluation has pointed to some answers to these questions, but most aspects will only become clear over time.

Sida should explore ways to make use of this evaluation and other opportunities for drawing lessons from CARTA to inform efforts in relation to replicating the model in other disciplines and regions. Sub-regional options deserve particular attention as they may be more feasible in terms of building on established relationships and also less costly. Initiatives should come from actors in the region, so it is important that Sida is attuned to voices that reflect similar demands to those that led to the initiation of CARTA. Sida should specifically draw lessons from CARTA for informing other existing support to doctoral education, particularly regarding improved doctoral supervision and opportunities for multidisciplinary research.

A major lesson from CARTA is the importance of building ownership and commitment among partners for results based management. Vicious cycles in which failures to effectively monitor results lead donors to make even more demands for upwards accountability can only be broken if CARTA assumes stronger leadership of the results agenda and determines what it needs to learn and what it expects to be held accountable for. As a unique, African owned initiative, CARTA has a responsibility to take on this leadership and to define the nature and form of effective outcomes and impacts.

CARTA should continue its efforts to define the niche it would like to play with respect to supporting and building the capacity of post doctoral fellows and their

emerging teams. This is important both for CARTA, and also more generally for building a consensus around a future model for post doctoral fellowships and young researcher capacity development that is adapted to the needs and opportunities of African universities. As part of this, CARTA should reassess its theory of change with a more critical eye to timeframes, critical mass and processes. Related to this, it is recommended that CARTA refine its strategy for training support of other university staff.

1 Introduction

1.1 BACKGROUND

The Consortium for Advanced Research Training in Africa (CARTA) aims to enhance public health and population wellbeing through stimulating and supporting research and related activities, anchored in a South-South partnership with South-North collaboration. It was established in 2008 with funding from the Wellcome Trust's 'African Institutions Initiative'. CARTA is jointly-led by the African Population and Health Research Center (APHRC) in Kenya and the University of the Witwatersrand, South Africa ('Wits' for short). The co-directors are based at APHRC and Wits respectively. CARTA reports to a Board of Management (BoM) which provides a degree of oversight and guidance on all programmatic activities. CARTA is managed as a 'project' by APHRC which therefore has formal responsibility for oversight. APHRC administers CARTA and hosts the secretariat. Some secretariat staff have shared responsibilities to CARTA and APHRC more generally.

CARTA's membership currently consists of nine African universities, four African research institutes, and five Northern academic institutes. CARTA has had seven donors and currently has three major active funders, Sida, the Wellcome Trust and the Carnegie Corporation.

As of May 2015, CARTA had enrolled 115 doctoral fellows through five cohorts and supported research has contributed to over 200 peer reviewed publications. Close to 300 faculty members had received short-term training.

CARTA's overarching goal is "to build a vibrant African academy able to lead world-class multidisciplinary research that makes a positive impact on public and population health." According to the results framework approved in January 2014,¹ CARTA's hierarchy of objectives are as follows:

¹ This results framework was prepared with support from Sida. CARTA reports that it reflects the overall structure and hierarchy of the programme as a whole and is a modest adjustment of earlier results frameworks. However, as will be described further in section 3.3 of this report, CARTA has tried to adapt its results based management to sometimes diverging donor expectations, with negative impacts on ownership among its members.

CARTA's Overarching Goal: To promote health and development of African populations through high-quality research on policy-relevant priority issues. The initiative aims to foster multidisciplinary research hubs at African universities that are vibrant and viable; create networks of locally-trained internationally recognised scholars; and enhance the capacity of African universities to lead globally competitive research and training programs.

Summary Problem Statement: Inadequate capacity and collaboration among African universities to conduct and utilize high-quality research and to produce adequate number of researchers and scholars who are sufficiently-trained and supported to apply their knowledge, understanding and skills to contribute to solving critical population and health issues in the Africa region.

Overall Objective: To improve the capacity and collaboration among African universities to increase the number of qualified doctoral students who apply their research competences and skills to lead, conduct and use research in solving critical population and health issues in the region.

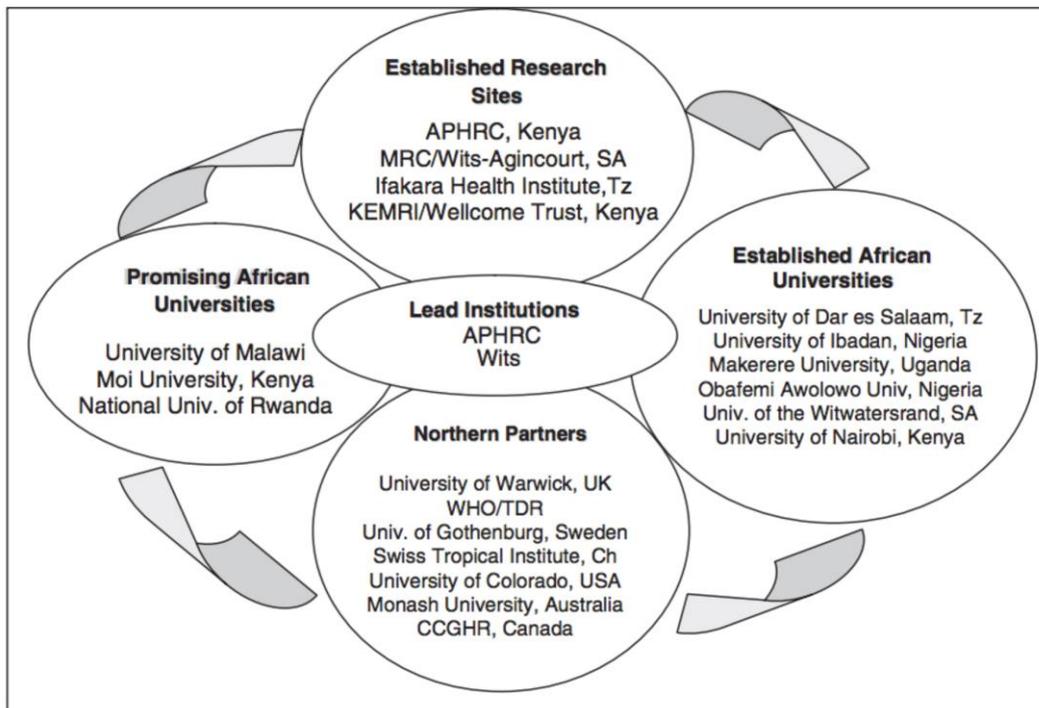
Specific Objective 1: To increase the number of *highly-competent PhD researchers* who use their acquired skills and competencies in solving population and health issues.

Specific Objective 2: To develop and implement model training programs and interventions that improve doctoral training and university systems, by building their *institutional capacity* to produce and use research for solving critical population and health issues in the region.

Specific Objective 3: To increase the use of CARTA network (consortium) by partnering institutions and stakeholders to demonstrate effective South-South and egalitarian South-North relationships to the mutual benefit of all partners.

Each of these objectives is complex, comprising a number of components, each of which deserve evaluation attention in their own right. It is noted that the 2014-15 Annual Workplan and Budget appears to break down the third objective into the following strategic objectives:

- That graduated students imbibe and propagate the CARTA training model at their home institutions and, possibly, other emerging institutions in order to contribute to rebuild the foundations for quality research and teaching in African universities
- Effective governance
- Sharing and promoting the CARTA model in Africa
- Programme monitoring and evaluation

Figure 1: CARTA Members and relationships (Ezeh et al, 2010)

Note: Tz=Tanzania; SA=South Africa; Ch=Switzerland; CCGHR=Canadian Coalition for Global Health Research

Ezeh et al (2010) set out the primary objectives of CARTA. These are seen as primarily being to strengthen research infrastructure and capacity at African universities; to support doctoral training through the creation of a collaborative training programme in population and public health and ultimately, “to build local research capacity to understand the determinants of population health and effectively intervene to improve health outcomes and health systems”.

Furthermore, the CARTA members (see Figure above [Ezeh et al, 2010]) have declared² their intention to benefit from CARTA through the following three objectives:

1. To generate a ‘critical mass’ of internationally competitive academics who are committed to ensuring that research is relevant to policy and population health improvement, and who can continue to contribute to developing sustainable research capacity in African institutions during their careers.

² Ezeh et al (2010). Building capacity for public and population health research in Africa: the consortium for advanced research training in Africa (CARTA) model. *Global Health Action* 2010, 5: 5693 - DOI: 10.3402/gha.v3i0.5693.

2. To develop a ‘culture of research’ among African academics - a vibrant, networked African research community as a pre-requisite for sustainable regional research capacity matched to local health and health research priorities.
3. To develop stronger management, administrative and physical infrastructure within research institutions. This is in order to foster a productive, attractive, efficient and effective environment for developing scholarship and conducting high level research.

The Annual Evaluation Reports from RAND Europe (commissioned by the main funder, the Wellcome Trust, and produced annually until the end of 2013) outline a detailed intervention logic, particularly in the early years of the programme. The current evaluation goes well beyond these earlier desk-based evaluations and has a somewhat different focus related to the issues raised in the terms of reference (ToRs, see annex one). In this evaluation we also apply a more in-depth approach including a visit to the field, extensive interviews, and analysis of available documentation.

Overall, in order to meet the intentions of the ToRs, the evaluation examines emerging outcomes at two levels. With regard to the original Objective 1, the evaluation looks at the skills development and research quality of the doctoral researchers and the extent to which their early career research is (or is likely in the future to be) applied to addressing important population and health issues and through these young researchers supporting the “next generation” of doctoral students. The evaluation also looks at the plausibility of future influence on practice with a major focus on the extent to which the innovative approaches (e.g., to doctoral supervision, use of new software, multidisciplinary and mixed methods, or networking among libraries) are ‘owned’ among the participating institutes. Also, the potential influence of young researchers in hierarchical institutional environments and the likelihood of achieving a needed critical mass to trigger change has been considered.

With regard to the original objectives 2 and 3, the evaluation frames its analyses within an understanding of the CARTA model (see section 2.1) both in terms of its appropriateness for the CARTA doctoral students, and also in relation to the advisability and plausibility of it being replicated in other disciplines and institutional structures (these aspects are addressed in the lessons learned in section 7 below). It will also examine the notion of effective South-South and egalitarian South-North relationships of mutual benefit to participants. These are all important for contributing to Sida’s learning process regarding whether and how a model such as CARTA’s relates to Sweden’s policy on research cooperation and the broader global and regional trends in higher education and research training. Globally, there is increasing focus on sustainable development goals including issues related to lifelong learning and quality education, along with increasing recognition of the value of secondary and tertiary level institutions in the post-2015 era.

As this evaluation was being finalised it was announced that the Wellcome Trust had rejected CARTA's application for further financing. The full implications of this decision are not yet clear, but certainly the withdrawal of this major financier raises grave and pressing questions about the future of the programme. The evaluation's conclusions and recommendations, and the discussion of sustainability, have been edited to reflect what the team judges to be realistic and actionable ways to proceed in this difficult period.

1.2 PURPOSE

The terms of reference of this assignment identify the primary objective of the evaluation as being "to provide a rigorous and independent assessment of the performance of CARTA for lesson learning purposes. The evaluation will serve as a basis for Sida in deciding on continued support to the CARTA after the end of the current agreement. It shall also provide recommendations for both Sida and CARTA on the focus and form of the possible continued support".

The scope of the evaluation primarily covers CARTA activities since 2012, i.e. the period over which Sida has contributed funding. However, it is also recognised that in order to address the evaluation questions and to facilitate learning, the evaluation should draw on and assess, in broad terms and based on available documentation, CARTA's earlier work since initiation in 2008 up until 2012.

1.3 METHODS

The evaluation started with an inception phase during which available documentation was reviewed, discussions held with Sida Stockholm and initial Skype interviews undertaken with key individuals in the Nairobi secretariat. Documentation made available was catalogued, organised and reviewed. Much of the documentation was only made available relatively late in the evaluation.

The inception phase involved gaining an overview of CARTA's overall theory of change and the extent to which existing results based management structures can contribute to the current evaluation. The inception report presented the evaluation team's initial understanding and assumptions regarding the work of CARTA and was intended to be used for reflection and dialogue before the fieldwork started so as to correct any misconceptions and further refine the focus.

Assessment of research outputs has:

- identified documented research outputs such as peer reviewed journal articles and conference presentations;
- broadly quantified and assessed the number of publications in relation to CARTA cohorts; and

- sought evidence of wider engagement of cohort members with policy and practice stakeholders.

The team conducted in-depth semi-structured interviews of CARTA fellows, facilitators, focal points and selected BoM members. Most of these interviews were undertaken during a field mission to Kenya in March. Also, while in Kenya, the team leader interviewed most secretariat staff. Skype interviews were used to supplement interviews that could not be undertaken while in Kenya.

Figure 2. Interviews by category of informant

Category of informant	Number of Interviews
Secretariat	7
Fellows	15
Facilitators	13
BoM members	5
Focal Points	5
Supervisors	9
Members' Trained Staff	4
Other	2
Total	56

Notes on Figure 2: Some interviewees fit in multiple categories. When this is the case, they are counted in all applicable categories. The total number of interviews, however, does not count interviewees multiple times. For more details in interviews conducted and the interview templates, see annexes three and five, respectively.

The field mission to Nairobi was undertaken by the team leader to coincide with the first Joint Advanced Seminar (JAS) for cohort five and the fourth JAS for cohort two, as well as the BoM meeting in March. The team leader also visited Moi University and Ifakara Health Institute in Tanzania. Moi University was selected due to very high levels of engagement with CARTA (as indicated by reporting and general information provided to the evaluation team) to assess what the stakeholders there judge to be the drivers behind this engagement, and in so doing shed light on CARTA's 'potential'. Ifakara Health Institute also has received considerable support from CARTA and was deemed to be more engaged than the research institutions. This visit was undertaken to obtain an understanding of the role of these research institutions within CARTA. These two examples thus represent an overview of an optimal level of involvement. They were not chosen as being 'representative' of the members. The variety of relationships that the members have with CARTA ruled out any opportunity to obtain a 'representative' overview. The team leader also had meetings at both APHRC and Wits.

During the visit to Kenya the team received a collection of reporting documentation and materials which has since been analysed (to the extent possible given apparent limitations) in order to assess achievements of CARTA to date, views of fellows and

others associated, and documentation of outputs, outcomes and more rarely impact where assessed. Limitations to availability and clarity of data was, however, a considerable constraint. Reporting made available from the members was generally of poor quality and the reporting from the fellows has been mixed. Monitoring plans have not been followed. These issues are discussed further in section 3.3 below.

Subsequent data collection included Skype interviews. With regard to CARTA members, the analysis (particularly interviews with fellows) placed emphasis on three additional university partners: Makerere University as an example of a very strong institution that participates also in a range of other capacity-supporting and networking programmes and consortia (and which has received other Sida support); the University of Ibadan to bring in West African perspectives and reflecting an institution that has proactively raised resources for CARTA; and the University of Malawi due to its apparent high level of engagement with CARTA. The Sahlgrenska Academy at the University of Gothenburg has been another focus university due to their high level of engagement and in order to gain a perspective on CARTA with respect to other Swedish support to African research and higher education in public health. Interviews were also conducted with supervisors at the University of Nairobi, which was an example of a member with lower levels of engagement.

In interviews with doctoral fellows and other university staff receiving training, the team applied an adapted Most Significant Change methodology³ to bring out if and how the support from CARTA has begun to contribute towards significant outcomes (including trends and obstacles that may influence future outcomes). Informants were encouraged to describe how and in what ways the programme has made a difference to their own research and / or that of their universities and institutes, as well as to creating a 'culture of research'. This included looking at changes in institutional systems, most notably those related to supervision, which emerged in interviews as being perceived as one of the most important aspects of how CARTA is expected to influence practice in its member institutes. The changes reported were considered in relation to national priorities and the intentions of CARTA itself, such as in relation to promoting gender equality. While the programme is perhaps too new to have had demonstrable long-lasting impacts on the careers of the fellows that have received support, it has nevertheless been possible to obtain an overview of the contribution of CARTA

³ Davies, R. and Dart, J. (2005) *The 'Most Significant Change' technique: A guide to its use.* <http://www.mande.co.uk/docs/MSCGuide.pdf>

and the relevance of CARTA support to both the fellows themselves and the overall capacity development processes underway in their home research environments.

Interviews were also conducted with a number of librarians, academic support staff, and facilitators from institutions in both North and South. These focused on issues related to CARTA's role in reinforcing and developing a culture of enquiry and research excellence, as well as the mechanisms through which such culture change can be supported, reinforced, and sustained.

1.4 LIMITATIONS

Given the brief period of time that CARTA has existed and in light of the other initiatives underway that influence institutional development among CARTA members, the evaluation team is very conscious that attribution of developments to CARTA needs to be treated carefully. The strong focus of this evaluation on relevance and sustainability is interpreted as implying the importance of both acknowledging and exploring what may ultimately be a limited role for a regional initiative such as this within change processes underway within individual research institutes and at national level in some cases. The evaluation may assist in identifying various forms of contribution and added value while being clear that these are not entirely the result of / attributable to CARTA itself. In this respect, a form of contributions analysis, which in broad terms identifies the issue of interest, applies a theory of change, gathers and assesses evidence, drafts the contribution story, considers alternative explanations, and forms a view of likely mechanisms and impact, informed aspects of the evaluation approach⁴.

As noted above, member reporting received is highly varied (and generally of poor quality) in terms of adherence to standardised formats and in relation to the presentation of data according to the templates proposed by CARTA. The unstandardised and therefore non-commensurate nature of this data means that these findings could not be aggregated in a structured and rigorous manner. Despite this, examples of member reporting and in much of the reporting by the fellows, such reports provide many rich examples of outcomes.

⁴ Sebastian T. Lemire, Steffen B. Nielsen, Line Dybdal. Making contribution analysis work: A practical framework for handling influencing factors and alternative explanations *Evaluation*, Vol. 18, No. 3. 2012, pp. 294-309; Thomas Delahais, Jacques Toulemonde. Applying contribution analysis: Lessons from five years of practice *Evaluation*, Vol. 18, No. 3. 2012, pp. 281-293.

Some of the evaluation questions, particularly those related to sustainability, required somewhat speculative responses regarding the likelihood of different future funding trajectories. The evaluation team has responded to these questions drawing on the overall findings regarding ownership and commitments to CARTA, but the extent to which these findings can be empirically verified is limited.

2 Findings: Relevance

EVALUATION QUESTIONS FROM INCEPTION REPORT

- What is CARTA's emerging role in a changing context of higher education in Sub-Saharan Africa? Is the programme consistent with the needs and priorities of universities in low and middle income countries?
- How are CARTA and its services perceived by different categories of African universities and research institutes? What is the relevance of the doctoral training offered by CARTA institutes in relation to the market for PhD training and development needs and national priorities?
- What are the fundamental problem areas on a systemic level within the CARTA programme, including tensions within the network; finding performance synergies; identifying and supporting innovation, and ensuring fair/equitable access to programme benefits? How do CARTA members perceive fairness and equity?
- How is CARTA addressing gender equality in practice in terms of integration of gender equality into the programme (through Fellows, supervisors, and type of research being promoted); generating a gender aware dialogue among members; and increasing awareness and acceptance of its own gender position among members and other relevant stakeholders?
- What is seen to be CARTA's unique added value in relation to other doctoral programmes and training initiatives? Does CARTA have a unique niche in providing higher education, or are there other organisations/networks/ consortia fulfilling similar functions? What is the particular value of a regional research structure over and above national institutional strengthening, and is this benefit being realised?
- Does CARTA have synergistic relations with other initiatives supported by Sida, including the bilateral research capacity strengthening programmes or regional programmes such as INDEPTH?

2.1 CARTA'S ROLE IN DOCTORAL EDUCATION IN SUB-SAHARAN AFRICA

In a relatively short period of time and given its position within its 'sector', CARTA has established an important and discernible place in doctoral education. The programme was initiated in recognition of the limitations of African institutions in producing PhDs of sufficient capacity to take senior leadership roles in higher education and policy institutes focused on public health and population. This was seen as being related to the broader weaknesses in African universities in developing capacities in research, partially due to an overwhelming emphasis on education.

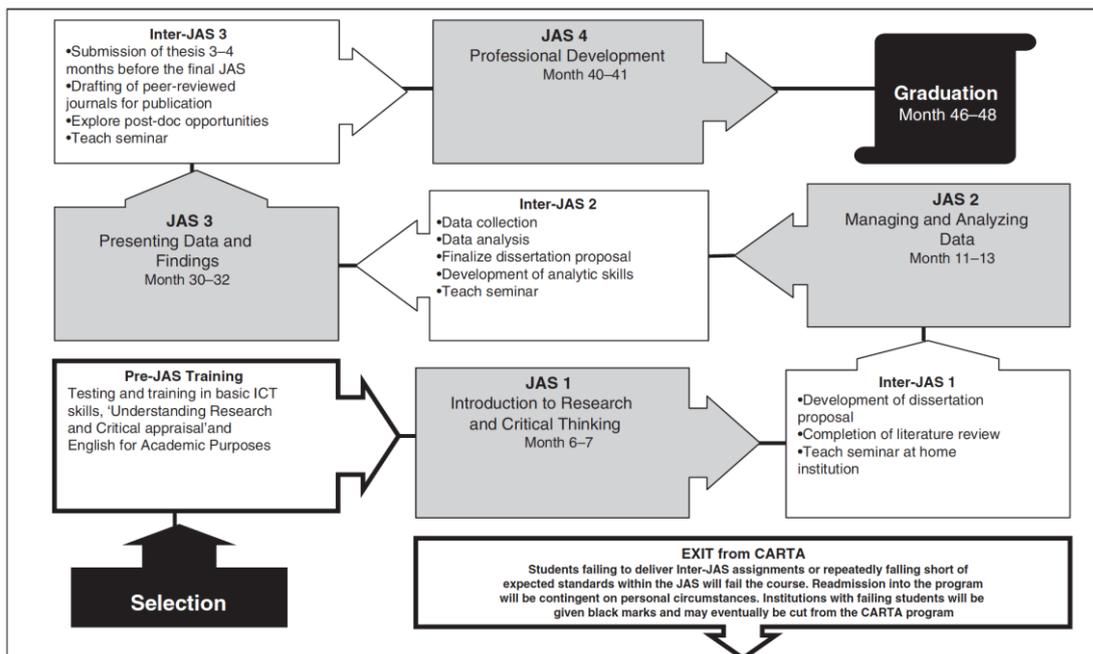
There is now broad recognition among the CARTA stakeholders (not least among the CARTA fellows themselves) that the CARTA approach represents a significant enhancement of quality and that they will emerge with an education that is on par with international standards. The CARTA model seeks to simultaneously support succes-

sive cohorts of PhD scholars along with building collaborative capacity to support higher degree training and research within and across institutions. It seeks to do so by “strengthening university research capacity, infrastructure and research agendas” through a carefully conceptualised and implemented regional training research programme (Ezeh et al, 2010).

It is important to note that the CARTA fellows are all required to be staff members of their respective institutes and are primarily employed to teach within their universities. As such, supporting and training them is simultaneously focused on both the individual and strengthening his/her research skills as well as enhancing their conditions to work effectively and to include a far stronger research focus within their day-to-day work. This applies during their engagement with CARTA and is postulated to be sustained within their home institution on completion of their doctoral studies. Working with teaching faculty members differentiates CARTA from a number of other research capacity-strengthening initiatives in Africa.

The CARTA intervention logic and theory of change postulates that investing in institutions, promising researchers and supervisors, and supporting them through training, access to resources, mentoring and networks will lead to the key outputs envisaged. These outputs include increased numbers and quality of PhD graduates, the development of a model PhD programme as well as producing stronger research capability, mentoring and networking capacity, enhanced institutional and regional capabilities and skills through Faculty and Staff (FAS) training, improved infrastructure for promoting and supporting research, and improved relationships with funders, policy makers, and other academics. A key element of the activities is focused around a series of carefully crafted, sequenced and structured Joint Advanced Seminars (JAS). Each fellow participates in one of these per year, with increasing depth of skills and fine-tuning against stage of research and PhD write-up occurring (see Figure 3 from Ezeh et al, 2010 below). Those in year 1 (JAS1) and those in their final year (JAS4) participate together; this allows opportunities to orient the new fellows, for exchange of information and insights, as well as introduction to research networks and opportunities for future collaborations.

Figure 3: JAS model (Ezeh et al, 2010)



The intervention logic goes on to suggest that the impact of these synergistic inputs, processes and outputs will be seen in terms of (a) increased retention of African researchers and supervisors, (b) increased quality of African researchers, (c) more widespread adoption (or adaption of aspects) of the CARTA model with institutional support and infrastructure, and (d) increased visibility and capabilities of graduates of the CARTA programme. Together these will lead to an enhanced culture of research, enhanced capacity of African institutions to lead globally competitive research, and ultimately enhanced contributions to population health (and presumably services and policy) in Africa.

The timeline to achieving the outcomes and impact of interest is not clearly specified. It is apparent, however, that the first stages of this model, in terms of inputs and processes, and the initial outputs (strongly focused on PhD graduates) are beginning to be seen. In addition, uptake of new practices such as supervisor-student contracts and the establishment of a network by library staff resulting spontaneously from the FAS training, are indicators of relevance and effective functioning. It has been mentioned in interviews that there have been requests for JAS and FAS training by individuals and institutes not directly affiliated with CARTA. A number of other outputs, as well as longer term outcomes and impact, cannot be assessed at this point in time and require careful follow-up and measurement of achievements.

There are a number of discernible differences between the CARTA model and other efforts to support doctoral research in Africa. One is the scale of the investment

which operates over multiple years and at multiple levels involving multiple institutions and the networks within and between them. Furthermore, the focus is not only on the PhD researchers themselves, but also recognition of the opportunities to pursue a career path focused on (or at least including) research (rather than teaching alone). Complementary emphasis is placed on enhancing the capacities and commitments of supervisors and institutional systems and capacity for supervision, effective research support systems (including financial management and library support). The model emphasises the development of skills and appreciation for the multidisciplinary and multi-method approaches that are key to addressing major population and public health issues. All activities are driven by extensive networking and interactions among and between institutes, fellows, supervisors and other institution-based personnel.

2.2 CARTA'S RELATIONS WITH PARTNER AND NON-PARTNER INSTITUTES

Despite some initial tensions, the structure of CARTA and the emphasis on merit-based decisions have resulted in a model that is recognised by fellows and other stakeholders interviewed as fair and equitable (see section 3.2 below). This primarily relates to the selection of fellows, where all those interviewed felt that those institutions that had been proactive in encouraging high quality applicants had received more places. The high level of engagement from smaller institutions such as Moi University and the University of Malawi was cited frequently as evidence of this. The perception of equity has meant that relationships between member institutions, and indeed between fellows themselves, are relatively friction free.

Challenges exist where commitment to the programme is weak (for various reasons discussed further in section 2.2 below). The CARTA model assumes a significant level of engagement from its partners if they are to maximise their benefits from the programme. However, in cases where this is limited, our interviews and the relatively low number of high quality applicants from some institutional members indicate that CARTA is sometimes seen less as a unique source of innovation and more in terms of 'just another scholarship'. In these cases it may be up to an individual faculty member who sees a poster about CARTA fellowships to themselves investigate the website (which is of poor quality, as noted in section 5.4 below) and seek out fellows from earlier cohorts to access information. Ownership of CARTA has been seen as being demonstrated by the following types of initiatives:

- Proactive efforts to identify high quality fellowship applicants
- Quality and quantity of reporting
- Focal points who are active in informing about CARTA and convening relevant departments
- Take-up of innovations promoted by CARTA (e.g., regarding supervision)
- Existence of active CARTA committees

- Vice Chancellor engagement
- Active participation in the BoM

Caution is warranted when generalising about categories regarding the different levels of commitment from the partners as in some cases there is a strong sense of ownership from an individual department even if overall levels of engagement from the university is weak. However, it can be noted that commitment tends to be stronger from smaller universities with fewer alternative donors as compared to larger universities with more alternative sources of support. In some institutions, however, there appears to be growing ability to identify the particular merits of different programmes of support to African research institutions, and to engage with them effectively to achieve related but different objectives. This includes working with programs such as the Pan African University which is not only health-related, is focused on strengths within particular institutions, and operates at Masters rather than PhD level. A senior research academic from one member institution drew attention to other resources available to fellows and to their supervisors but emphasised that these were very different in concept from the more integrated and comprehensive CARTA model of support.

Despite significant efforts, the capacity of the secretariat to ultimately overcome weak engagement is inevitably limited. Visits are undertaken by secretariat staff and contacts are made with Vice Chancellors, but these efforts have not always led to intended outcomes. The Vice Chancellors Forum was intended to be a major vehicle for addressing these issues, but it has met only once in November 2012 and the secretariat reports that it has been difficult to generate engagement at that level, with the very notable exception of some individuals who recognise CARTA's unique value. Changes in how CARTA is seen by different member institutions may change over time as the programme matures and graduates and other initiatives gain greater visibility.

2.3 CARTA AS A VEHICLE TO PROMOTE GENDER EQUALITY

Gender may be considered at a number of levels. These include the extent to which CARTA fellows and researchers consider gendered issues within their own research and practice, whether gender is reflected in the training and mentoring programmes, and whether the CARTA programme itself promoted gender equality in terms of how it operates and is implemented.

The multidisciplinary JAS approach and wide-ranging content is proving to be a highly relevant approach to ensuring that doctoral fellows (and to some extent other trained university staff) are aware of, and reflect on, how their research should and could include gendered analyses. Feedback from the fellows clearly indicates that the

content of the lectures pushes the boundaries of their attitudes and thinking. Furthermore, the support provided to pregnant and nursing fellows when attending the JAS is perceived by the fellows and other stakeholders as outstanding. It not only creates greater opportunities for women to benefit from CARTA, but is also a symbol of what a genuine commitment to gender equality means in practice.

Female fellows also report that the overall CARTA model, where they do not need to leave their families for extended periods of time, is far more appropriate for their needs than fellowships in the North, and that they might not have been able to pursue a doctorate in the North for these reasons. While one female fellow has had to drop out of CARTA due to childcare responsibilities and inability to attend JASs, CARTA has made significant steps towards designing a programme that is accessible to both men and women. One respondent noted that CARTA practices ‘make room for participation of both’ genders. One female fellow said that without the support from CARTA’s policies, she “would probably have dropped out”, and a cohort 2 fellow summed up the outcomes of these policies noting that for cohort 2, “No woman has lagged behind”. Even in the application requirements, CARTA attempts to increase the window of opportunity for female applicants by having a higher age cut-off than for males.

The overall gender balance among CARTA fellows, however, is not evenly reflected in the gendered breakdown of fellows by institution (see Figure 4). Some stand out as examples of high levels of women fellows, whereas others less so. It has been beyond the scope of this evaluation to determine the reasons for these differences.

Figure 4: Gender breakdown of fellows by institution

Institutions		Female	Male	Total in 5 Cohorts (% female)
1	APHRC	0	3	3 (0)
2	Ifakara Health Institute	3	3	6 (50)
3	Makerere University	5	9	14 (36)
4	Moi University	12	3	15 (80)
5	The Univ. of Rwanda	2	5	7 (29)
6	Obafemi Awolowo University	5	5	10 (50)
7	University of Dar es Salaam	2	3	5 (40)
8	University of Ibadan	6	10	16 (38)
9	University of Malawi	3	14	17 (18)
10	University of Nairobi	9	2	11 (82)
11	University of the Witwatersrand	8	4	12 (67)
Total		55	61	116 (47)

Source: Program Implementation Overview powerpoint. CARTA Partners’ Forum Meeting. September 17-18, 2014.

When the institutions are aggregated, the five cohorts of CARTA have a gender balance of 47% to 53%, female to male. It is clear that a gender-balanced approach is not uniform across members with quite varied results by institution. While this may well be due to gender disparities among qualified applicants and underlying systemic issues, it reinforces the finding that promoting a gender balance remains an ongoing challenge.

Mainstreaming of gender analysis in actual research is mixed, with some fellows reporting that they have benefited from their greater capacities for mixed-methods research to find ways to better mainstream gender in their analyses, i.e., by having a greater palette of methods to choose from when looking for ways to bring out gender issues.

Some fellows with relatively technical natural science research topics reported that they appreciated this awareness raising, but that gendered analyses could not be applied or were not relevant in their specific topics. Kenyan respondents noted that gender awareness was already mainstreamed in their national policies and institutions (including the new Constitution). Therefore they found the gender-related training was useful but not fundamentally different from their current practice. This is an example where the contribution from CARTA will need to build on contemporaneous changes taking place in African institutions, bringing added depth and analysis so as to reinforce key values and rigorous approaches. It is worth noting that among the 150 or more publications with which CARTA fellows were associated, the issue of gender appeared in only a handful of titles of such papers, indicating this was not a major focus of the reported research.

It is indeed unfortunate that the CARTA M&E system has not been developed in such a way as to highlight gender dimensions of CARTA's performance. Reporting has focused only on numbers of fellows and staff due to the fact that CARTA was erroneously informed that Swedish gender policies were focused entirely on this narrow perspective on gender. Earlier reporting (focused on the demands of Wellcome Trust) was largely gender-blind.

2.4 ADDED VALUE AND SYNERGIES

CARTA has found an appropriate niche in relation to national doctoral training and university reform efforts. Examples include:

- Promoting more effective supervision and standards for supervision
- Enhancing (albeit not fully) access to peer-reviewed literature through local institutional libraries and the JAS processes
- Developing skills and processes that appear likely to contribute to multidisciplinary perspectives and collaboration – within and between institutions

- Establishing an African alternative to mostly bilateral linkages and doctoral programmes in Northern institutes
- Creating greater awareness of new trends (for example, in multidisciplinary research) and technologies, especially IT (particularly among smaller universities with limited international contacts)
- Supporting more interactive learning environments employing hands-on learning techniques and critical approaches to scholarship
- Facilitating knowledge exchange across and between institutions, not only amongst fellows but also faculty, library staff and others

Several fellows reported that a major added value of the CARTA model in relation to more common bilateral doctoral fellowships with degrees in Northern countries is that CARTA reinforces (whereas Northern programmes may actually degrade) integration into African research environments. Many fellows (especially women) described how they appreciated being able to pursue their studies together with colleagues at home and that this avoided the risk of being socialised into a Northern institution in which many African researchers choose to remain. The evaluation team could not verify whether ‘brain-drain’ has to any extent been reduced (one would require much more extensive data both from CARTA and other initiatives), but the fellows presented plausible arguments suggesting that this was certainly a likely outcome.

As highlighted earlier, there are a number of initiatives focused on supporting higher degree research training in Africa. The evaluation team has, however, not identified any other that has been as comprehensively conceptualised with a focus not only on the fellows, but also their supervisors, not only on South-North collaboration but focused on South-South, and not only on the research itself but the research-supportive institutional environment which facilitates research productivity and a culture of valuing research among institutional staff – both academic and administrative. Some staff from Northern institutions were particularly positive about benefits they themselves accrued through participating in the JAS sessions and learning from other experienced presenters, many of them from African institutions. Feedback clearly indicated that the relationships between Northern and Southern institutions, where the African institutions were unequivocally leading the programme, were different from that of many North-South ‘partnerships’ and that this was greatly appreciated by the Northern partners as well.

CARTA is also relatively unique in that it is anchored in a comprehensive, multidisciplinary curriculum (in the JAS) that has been developed and tailored to the specific needs of the programme. One informant at one of the better endowed universities in the network said she could not “use enough superlatives to describe what CARTA is achieving” in support of higher degree training in Africa.

The evaluation team found little evidence of synergies with other Sida financed programmes. Such linkages and synergies may nonetheless exist, as the evaluation could only judge those areas in which interviewees were already aware of initiatives that may have been Sida financed. Some initiatives have been taken by the secretariat to engage with Swedish embassies to explore how they might identify and promote such potential synergies, but they have had difficulties stimulating interest.

3 Findings: Effectiveness

EVALUATION QUESTIONS FROM INCEPTION REPORT

- Does CARTA have a transparent and effective relationship with its partners that contributes to achieving intended outputs?
- What are the different levels and expressions of ownership for the work of CARTA among its members and different categories of stakeholders? How is power divided among different members of CARTA, and how is this reflected in the structure of activities (e.g., location of the JAS and representation of students enrolled)? What proportion of programme funding goes to the CARTA member institutes?
- How does CARTA work with RBM in relation to members? Does the monitoring and evaluation approach provide an appropriate basis for RBM in the future? What progress has been made towards a single RBM structure given the demands of different donors; and has Sida played a constructive role in this regard?
- What is the quantity and quality of production of relevant scientific results by CARTA fellows in relation to international standards?
- What are the equity implications of current arrangements to support the fellows?
- Has CARTA found viable models for South-South and North-South doctoral supervision?

3.1 NETWORKING AND OWNERSHIP

Interviews indicate that CARTA is a ‘living network’ with strong relationships with several institutes. At the same time it should be recognised that networking at CARTA occurs among the highly motivated fellows themselves and among their own institutes. Among the individual fellows, focal points, supervisors and other trained staff in the member institutions this network is becoming very well established where there is strong engagement. Particularly among the fellows this commitment to networking is strong, whereas among other actors this is more variable; among Northern facilitators and those with whom they were partnering in African institutions, this sense of networking and support was noted to be high.

It is difficult in this evaluation to clearly assess how much of the network that has been created is among institutions versus individuals, and also how much of it represents networking that is anchored in the ‘CARTA family’ and how much it will evolve into relationships that will continue to develop as memories of CARTA itself inevitably fade over the years among former fellows. It is worth noting, however, that institutional relationships are based around and built upon personal relationships and networks. Institutional links will not be taken forward in the absence of strong commitment by researchers in each of the networked institutions. The extent to which the relations among individuals eventually develop into relations among institutions will be determined by to number of staff trained, the extent to which they remain at their current institutes, and the time period that the institutes remain engaged in CARTA activities.

CARTA is not just working to generate networking across the region, but also among researchers within the partner universities, where exchange and joint learning are also challenging to initiate. As will be discussed further below, an obstacle to the diffusion of innovations promoted by CARTA within internal networks in the participating institutes is the fact that CARTA may sometimes be seen as an initiative that is ‘owned’ by the focal point at a given institute. Some interviewees (both focal points and fellows) mentioned that their colleagues may not be interested in replicating or even learning from an initiative (such as reformed supervision) that has been introduced by ‘somebody else’s project’. Extending ownership to embed it institutionally remains a significant challenge.

An example of the importance of intra-institutional exchange relates to the case of access to library and information resources, crucial for undertaking research and PhD study. It should be noted, first, that access may be extremely limited; the College of Medicine in Malawi was reported to have had to cancel a range of journal and database subscriptions in the last year due to budget constraints. That said, and given limited resources, in some institutions access to international literature is possible through other initiatives, such as through the WHO-promoted [HINARI Programme](#). This enables libraries in low and middle income countries to access over 10,000 journals and online sources of material, but is tightly controlled at an institutional level (at the behest of the private sector publishers that participate), via the issuing of an institutional access number and password. In some cases, those who manage this process at institutional level have been unwilling to share this information with researchers at their own institutions, because, as reported by one of our informants “knowledge and information is power”. Institutional commitments would, however, address such power plays and instead relegate them to ‘glitches’ in the system which need to immediately be sorted out and facilitated. Assessing the institution-wide knowledge of, and access to, HINARI and other mechanisms to access international peer-reviewed literature may be an important indicator to track over time.

On the other hand, the emergence of strong CARTA committees (most notably at Moi University) primarily consisting of supervisors shows the potential for obtaining broad involvement within an institution. The strength at the committee at Moi University, despite the focal point moving to Nairobi, shows the importance of having a strong intra-institutional network in place.

Ownership among the fellows is, with some variations, expressed vociferously. Even when fellows express dissatisfaction with a particular aspect of CARTA, they express this in terms of how to improve ‘their programme’. The JAS structure provides a basis for bonding, especially within, but even between the different cohorts.

Fellows rely on the exceptionally strong network this forms both professionally and personally, with some viewing CARTA as a ‘family’ and one fellow even referring to his counterparts as ‘siblings’. The support structure these bonds offer should not be

underestimated in the success of the CARTA model; fellows assist each other by sharing information on conferences and grants, accessing and sending articles that some may not have access to and assisting each other with data analysis, among other things. The close-knit relationships among fellows is undoubtedly a key component of their sense of ownership in ‘the CARTA family’, as one fellow put it.

One facilitator echoed the importance of this sense of mutual support and engagement. He argued that heterogeneity in the institutional systems and in pre-JAS support to fellows meant that at JAS-1 candidates came in with very different levels of understanding of the programme, different levels of skill and competence including in relation to computing, researching and writing skills. Within a short time, the JAS and the networking among fellows established important bonds of support and the cohort rapidly recognised the value of each other’s experience and expertise, and overcame many of the limitations of prior learning disadvantage.

Fellows’ ownership of CARTA is important to provide a basis for a future emerging network among alumni across the continent. Even if it is too early to accurately judge how well this network will be sustained in the future, the prospects are good judging from statements from the fellows who obviously see their links outside of their home institutes as of great value. The evaluation team judges that there is potential for the secretariat to support this more through a revival of the use of social media (where CARTA has some presence, but which has been largely dormant until very recently) including carefully developed platforms through which ongoing exchange and support could be reinforced. This would be in accord with the latter stages of the Theory of Change proposed in which post-doctoral graduates maintain contact, play a greater role in teaching and mentoring new entries to PhD research programmes, and build on their networks to reinforce African research capability.

One informant indicated that if post-PhD networks were to be reinforced and fellows nurtured to play greater leadership roles, then additional funds would be required to help those completing PhDs to establish research teams, build on their earlier work, and secure additional grant funding.

Engagement among the focal points has been mixed, with some being exceptionally proactive and others doing little more than putting up posters about CARTA. If CARTA is to become more than ‘just another fellowship programme’ in a given university this will be dependent on a high level of institutional ownership, which is in turn reliant on a strong focal point as the lynchpin in this process.

The secretariat and other stakeholders are aware of this challenge and are proactive in addressing poor performance by focal points (e.g. by engaging with vice chancellors and suggesting that non-performers be replaced), but there are apparent limits to their ability to deal with non-performing focal points. The CARTA Management Guidelines state that “A partner-institution may be also be suspended from the consortium on grounds of dormancy, non-performance, misconduct and or non-compliance with CARTA resolutions and guidelines”, but there are no cases of this occurring.

CARTA is highly dependent on ownership among the facilitators, especially given that their inputs are largely *pro bono*. The continuous and strong dedication of the facilitators is obvious in the views they express and also evidenced by the time they invest both during JASs and in later communications and collaborations with fellows. A number of facilitators who worked on the JAS1 indicated that they spent a great deal of time out of hours supporting fellows, arguing that this was one of the few opportunities the fellows got to contextualise and plan their research.

3.2 MANAGING FOR EQUITY

There is a widely held perception that CARTA provides access to resources in a ‘fair’ manner that reflects the extent to which a given institute makes efforts to identify top quality doctoral candidates and plans for use of training opportunities and infrastructural support. As such it can be said that there is ‘equity’ among those who proactively engage.

Fellows are very clear that they are satisfied that decisions are made based on merit, wherein all have an equal chance to access benefits from CARTA. One fellow noted for instance that selection is based on “the individual, not where they come from” or “on the ability to sell your proposal, on individuals not on institutions”. Another fellow commented more generally that “there is no favouring of institutions”.

This is also seen to be the case in access to resources after selection. CARTA is perceived to be “very open about what is offered and what is not. When a request is genuine it is handled”. One facilitator highlighted that while fellows might come into CARTA with very different prior levels of knowledge and training, the JAS system was very effective at engaging all of them, updating and upgrading skills, and facilitating the establishment of a personal base upon which further research and writing skills would develop effectively.

These sentiments are also generally shared among other groups in the CARTA model. Focal points from either side of the resource spectrum, i.e. receiving more or less resources from CARTA, have expressed these views. A focal point from a member on the lower end of the spectrum stated “there is no bias, if it is, it is because we haven’t been proactive enough”. From the higher end of the spectrum, one focal point brought out the responsibilities of the institutes to be proactive querying: “why are they not benefiting and proposing fellows?” Regarding selection of fellows specifically, one supervisor commented that “people appreciate the ranking and online process. The system is so fair. Merit alone. If they have affirmative action it is there in the criteria. It is so clear”.

As noted above, clear and strong efforts are made to ensure that women have equal access to the benefits from CARTA through the provisions made for maternity care during the JAS, higher cut-off age for fellows and a generally welcoming approach.

Investments in infrastructure are, however, highly skewed toward APHRC, Wits and Ibadan, as apparent from Figure 5 below. However, the investments in infrastructure at Ibadan and Wits have been used to accommodate fellows and the CARTA secretariat is housed at APHRC.

Figure 5. Infrastructure Support to Partners to June 2014

Institution	Committed Funds*	Paid	Accounted for	Unaccounted for	Balance due
Agincourt	15.000	15.000	15.000	-	-
APHRC	277.789	277.789	277.789	-	-
Ifakara Health Institute	43.500	34.000	23.667	10.333	9.500
KEMRI	-	-	-	-	-
Makerere University	79.280	79.280	78.658	622	-
Moi University	77.645	68.145	69.665	-1.520	9.500
National University of Rwanda	77.645	34.072	23.559	10.513	43.573
Obafemi Awolowo University	31.000	10.750	6.698	4.052	20.250
University of Dar es Salaam	49.244	39.744	43.517	-3.773	9.500
University of Ibadan	277.789	250.789	126.396	124.393	27.000
University of Malawi	49.280	49.280	39.780	9.500	-
University of Nairobi	49.145	39.645	38.771	874	9.500
University of the Witwatersrand	277.789	277.789	268.289	9.500	-
Total (US\$)	1.305.106	1.176.283	1.011.789	164.494	128.823

Notes on Figure 5:

- Ibadan has accounted for the 1st instalment of funds and 2nd tranche has been transferred.
- National University of Rwanda requested APHRC to procure the pending items on their behalf because of the complex procurement procedures in Rwanda.
- Nairobi and Dar es Salaam Universities have accounted fully for phase 1 funds and the final instalment is due.
- Universities of Malawi, Makerere and Wits have received the final instalment of US\$9,500.
- Ifakara and Obafemi Awolowo University have not fully accounted for phase 1 funds.

- Moi has accounted for all the funds but is yet to submit all the support documents.
- Makerere has fully accounted for the funds received.

Source: CARTA Financial Report July 2013-June 2014. Presented at CARTA Partners' Meeting, September 18-19, 2014.

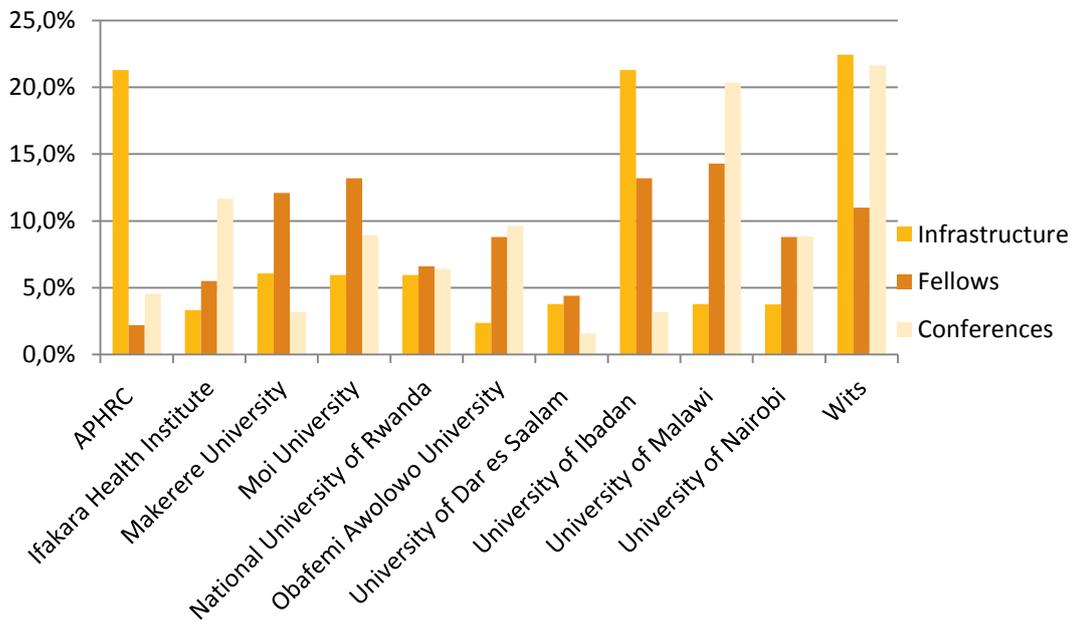
Support received for conference attendance also varies considerably among the different members. It could be speculated that this related to the different levels of initiatives taken by the fellows themselves, but this cannot be confirmed.

Figure 6. Support for Conferences by Institution

Institution	No. of Fellows (Cohorts 1-4)	Conference Support (Cohorts 1-4)	% of Total	US\$ Support per Fellow
APHRC	2	4283	2,1%	2142
Ifakara Health Institute	5	10979	4,6%	2196
Makerere University	11	3000	11,7%	273
Moi University	12	8420	3,2%	702
National University of Rwanda	6	6031	9,0%	1005
Obafemi Awolowo University	8	9057	6,4%	1132
University of Dar es Salaam	4	1500	9,6%	375
University of Ibadan	12	3000	1,6%	250
University of Malawi	13	19126	3,2%	1471
University of Nairobi	8	8312	20,3%	1039
University of the Witwatersrand	10	20361	8,8%	1843
Total	91	94068	-	Avg. 1034

Sources: 'Fellows conferences – Revised' excel spreadsheet and 'CARTA Partners' word document. It should be noted that the spreadsheet is not dated, although there is funding for one conference being held in 2015, and currency is not specified (though it seems likely that it is in USD). Numbers for conference support to Agincourt have been included under Wits in this figure as number of fellows for Agincourt are not listed separately in 'CARTA Partners'.

The following figure demonstrates that there is no correlation between the support received for infrastructure and that received for conference attendance, which could be interpreted as suggesting that there is no bias in access to resources.

Figure 7. Breakdown of Support by Institution through 2014

3.3 MANAGING FOR RESULTS

There is insufficient commitment to results based management within CARTA as evidenced by the extremely poor reporting from most members and statements made in interviews. It is impossible to verifiably assess the relative importance of the various reasons given for this lack of commitment, but it is clear that a major factor has been the donor-driven nature of reporting demands. Despite efforts by CARTA (and Sida and Carnegie) to avoid unnecessary multiple and differing reporting demands, narrative reporting has been a source of friction since CARTA's inception. Negative attitudes initially emerged due to a structure and annual monitoring process that was imposed on CARTA at the beginning of the programme by the Wellcome Trust. CARTA was then basically tasked with feeding data to a monitoring process managed at a distance from RAND Europe (which prepared reports without any field visits). Negative attitudes were then reinforced by a Sida-financed initiative to develop a logframe and train secretariat staff and focal points in results based management. The way that this initiative was managed, through a workshop where secretariat staff and focal points were again instructed about what data to collect, was seen as being paternalistic and aggravated pre-existing views that results based management was essentially a matter of imposed templates and accountability to donors.

Much of the Sida-supported plans for monitoring, including extensive surveys of the stakeholders, have not been implemented due to what appears to be a lack of capacities and commitments. The evaluation team can find no evidence that the monitoring tasks referred to in the logframe have been undertaken by secretariat, and given the

prevailing attitudes and the lack of commitment to reporting from most of the members it is judged highly doubtful that the surveys would have yielded an acceptable level of response if they had been distributed.

Reporting from fellows is of varying standards in terms of frequency and quality, although both have improved over time. Reporting from the first cohort consisted of a total of 32 reports over four years for the 20 cohort members and content was, with some exceptions, mediocre. One interview respondent suggested that even when fellows did not submit reports, nothing was done because CARTA “didn’t want to lose the numbers”. However, an increasing emphasis on quality and regularity of reporting over time is evident. New reporting templates were introduced by 2013 and again in 2014, likely with the implementation of Sida’s results based management support, and documentation indicates that the CARTA secretariat initiated reviews of fellows’ reporting from 2013, with fellows being expected to revise and resubmit where relevant. In terms of quantity, however, annual submission of what were intended to be semi-annual reports seems to have been the norm.

Reporting from the focal points is weak – with some exceptions – and capacity to synthesise these data and use it is lacking. Most of the reporting from the members provided to the evaluation team only consists of powerpoints presented at the annual Partners Forum. The evaluation team was informed that a significant number of narrative reports were produced. But the secretariat was only able to locate a total of ten narrative reports from partners, which can be interpreted as indicating that they are not being used systematically for results based management.

While members’ reporting has improved markedly since 2011, it peaked in 2013 and has decreased since. Even at its peak, only two out of the 11 members produced two semi-annual reports and one still apparently produced no reporting. The evaluation team was informed that considerably more reports have been produced but that these have apparently been lost due to poor archiving. The evaluation team has noted this but interprets the lack of available reporting as a major concern.

It is disappointing too that those members receiving higher levels of infrastructure funding were themselves unable to produce reports on activities and performance on the agreed regular basis although it is acknowledged that such infrastructure support is not only administrative but also in relation to accommodating fellows from other institutions.

Interviews revealed that accountability is so strongly oriented ‘upwards’ that there is currently little demand for ‘downward’ accountability to the participating institutes and African stakeholders. Despite pride in CARTA being a genuine African initiative, paradoxically this does not lead to strong demands on the secretariat to report on its results to the members (or vice versa). The evaluation team judges that this can be largely attributed to the somewhat dysfunctional donor-driven efforts to improve results based management referred to above. CARTA does not have a formal structure

to report to its own stakeholders apart from presentations made at BoM meetings and the annual Partners Forum.

This is partly justified by CARTA being, in principle, a ‘project’ under APHRC and therefore not requiring a separate annual report. While the evaluation team recognises a certain logic in this argument, the autonomous nature of CARTA within APHRC, and the ambitions of seeing CARTA as a model to be expanded and replicated in the future in Africa, suggest that discrete reports directed at the information needs of African stakeholders are essential. This would also allow some of the more innovative dimensions of the programme, as well as those requiring attention, to be more explicitly identified and built upon or addressed as part of a learning process.

The evaluation team judges that capacities within the secretariat and the focal points are insufficient for bringing the quality of reporting up to a required level, but training alone is unlikely to yield the desired outcomes. Given that a ‘wrong approach’ to capacity development for results based management is a major part of the problem, i.e., top-down and apparently patronising pressures to focus on reporting to donors, the prospects for a ‘supply-driven’ capacity development effort without a new approach to building ownership for the concept are judged to be poor. Other issues, such as repeated changes of programme manager (who has responsibility for supervision of the M&E process) have also contributed to deficiencies.

3.4 QUALITY AND QUANTITY OF OUTPUTS

Publications produced with the involvement of CARTA fellows numbered 240 as of the end of May 2015. In many cases these publications are written by large teams with some participation by CARTA fellows. In at least 67 papers (data incomplete) the lead author was the CARTA fellow, with some fellows demonstrating very impressive performance in terms of publications and producing three or more papers, many first authored, during their candidature.

Figure 8. Publications by cohort and year of publication

Year of publication	Cohort year					
	i. (2010/1)	ii. (2011/2)	iii. (2012/3)	iv. (2013/4)	v. (2014/5)	vi. Total
2011	20	1				21
2012	14	16				30
2013	31	19	5	1		56
2014	55	27	13	16		111
2015*	3	8	7	3	1	22
Total	123	71	25	29	1	240

*incomplete ; data provided by Daniel Adero (personal communication)

By February 2015, six CARTA fellows had graduated and, according to CARTA's recent application to Wellcome Trust, the remaining fellows were 'making sustained progress towards graduation'.

3.5 SUPERVISION

There is enthusiastic support for the CARTA model of supervision among the fellows and some supervisors. Interviews with fellows and the discussions of these issues in the BoM minutes and the RAND reports indicate that establishing this model has been a massive challenge and is still not universally successful. Where it works, the fellows are extremely satisfied. Where it does not, they are frustrated. By their own admission this is largely due to the fact that CARTA has raised their expectations regarding quality supervision. Aspects of the supervision model that are particularly appreciated include:

- Both supervisors and fellows know what is expected and when.
- Fellows know that they are going to be reminded and pressured to meet defined targets and defined points in time.
- Supervisors feel proud to be held to account for quality standards, as opposed to the rather vaguely defined standards and sloppy approaches that prevail otherwise.
- Fellows come from different institutions and disciplinary backgrounds; the JAS allow them to learn from each other (including those in earlier cohorts), and share experiences including what they might expect from supervision at their home institutions.

The perceived value of CARTA's supervision model stems from the structure it provides as well as the networking it facilitates. In terms of structure, having a contract (itself an innovation for most participating universities) with a timeline and clarity around expected outputs is seen as beneficial to many fellows. One noted the fact that "CARTA is monitoring and insisting on signing reports, etc., which is better than 'the usual'. The old system at home was different." Another fellow also compared the CARTA model to that of another programme, where a friend "didn't have the same push, direction, defined check points. You are not left on your own with CARTA." This supervision model offers substantial support to fellows when it is successful. One fellow, who had temporarily stopped working with one supervisor noted that "I felt like an orphan when he wasn't involved." The general sentiment among fellows seems to be that because of this system "CARTA...has kept us on track".

In addition, the cross-institutional supervision has offered an important networking tool for fellows, supervisors and institutions. For fellows, this is partly due to the somewhat unique relationships CARTA fosters between them and supervisors, characterised as "a more collegial relation" in which "students get to complain about supervision due to the contract." Supervisors also benefit from their relationships with fellows, describing it as "fantastic" and "two-way" and lauding "the networking aspect where you meet students from various universities and you advise them. This is a

valuable opportunity that you don't have otherwise." This has also been observed by focal points, one of whom described CARTA's cross-institutional supervision as a "unique experience of networking and support".

As noted above, however, such arrangements do not always come to fruition. Several fellows mention never hearing back when contacting external supervisors and having to do with internal supervisors as a second choice. Yet overall, CARTA has managed to build a generally successful model for supervision despite initial challenges.

Although this enthusiasm gives cause for optimism, the replicability and sustainability of this central aspect of CARTA-led supervisory reforms are difficult to verify at this point. The approaches are valued, but it is recognised that they will need to be adjusted to local needs and conditions to be more widely applied. It appears plausible that these reforms will be adapted by the supportive current supervisors and future supervisors (former fellows), but this will be influenced by their ability to adapt the norms to their different countries and universities.

A number of obstacles to sustainable change were noted:

- Discomfort regarding the potential connotations of what is referred to as a 'contract', which is sometimes interpreted as a formal, legalistic and therefore threatening document (even though it is actually an agreement adapted to the circumstances of a specific supervision arrangement).
- Limits to diffusion as some supervisors do not see CARTA as 'their project' and therefore do not see it as important to invest extra attention to a model that comes from 'somebody else's project'.
- Uncertainties regarding whether supervisors are allowed to adopt new methods; particularly how the CARTA model can be integrated into other ongoing reforms of supervision systems in the individual universities and country systems.

There are some indications of outcomes already regarding new modes and structures including general commitments to greater mutual accountability between supervisors and fellows and greater attention to rigour in the supervision process. Here, Moi University seems outstanding in its readiness to learn; its CARTA Committee has taken clear steps to learn from CARTA and adapt procedures to its own norms alongside Kenyan government policies.

Supervision and curricula are major areas in which Moi has adopted CARTA practices. In terms of supervision, Moi has adapted the CARTA contract and applied it to non-CARTA students, also incorporating a motivational essay – a practice gleaned from Wits. In some instances a 'logbook' model or 'completion timeline', which shares some of the structure of the contract system, has been introduced. This suggests a shift in norms. Moi has taken the importance of supervisor training to heart, with one staff member noting that, "the normal practice is that you get a PhD and then can supervise. We now see that there is a need for this [supervisor] training".

They plan to provide training based on the CARTA model as a continuous process. Joint supervision has also gained momentum as it is seen to contribute to multi-disciplinary approaches to PhD research as well as contributing to collaboration beyond the University boundaries. Moi staff anticipate that it “will continue and outlive the CARTA Project”.

CARTA has also had a notable impact on Moi curricula. Themes and materials from the JASs have been especially influential, and Moi has integrated instruction on critical thinking, data analysis, writing skills and post-degree skills into existing courses for both Master and PhD students. A new course on research methodology for post-graduate students in the School of Arts and Social Sciences, taught by CARTA Committee members, has also been implemented. Other practices which have been integrated include gender equity policies, a whistle-blowing policy and an online evaluation system for students to evaluate instructors and courses.

4 Findings : Outcomes/impact

EVALUATION QUESTIONS FROM INCEPTION REPORT

- What are the intended and unintended, positive and negative outcomes and impacts of the programme, and how well is this reflected in the CARTA theory of change? What are the main drivers (enablers and barriers) behind positive/negative results?
- Has CARTA generated changes in the members' and fellows' "research culture" including inherent academic practices such as critical thinking; critical exchange in, e.g., research seminars; research-based career paths; research-based teaching; and international scientific collaboration? To what extent have CARTA fellows internalised commitments to gender-aware approaches to research and to focusing on research of relevance to gender in health and development?
- To what extent has CARTA been significant to the development of universities in sub-Saharan Africa? To what extent has CARTA contributed to the leadership/ supervision of PhD students and research management at the participating universities?

4.1 A NEW RESEARCH CULTURE WITHIN AND AMONG CARTA PARTNERS

CARTA's objectives regarding influence on research culture are defined as primarily being related to critical thinking. The Theory of Change model presented by Ezeh et al (2010) and in the first RAND Evaluation Report, frames this as promoting a broader "culture of research".

Fellows refer to research culture primarily in relation to capacities to critically analyse a text or an argument by their colleagues and peers. Most fellows, even those who have a background primarily in teaching, describe these capacities as new. It is underpinned by interaction across the JAS cohorts, where new fellows are able to observe and be inspired by their more experienced peers. The lively debate observed in the JAS sessions is evidence of a strong capacity and readiness to engage in critical discussions.

Outcomes regarding the research culture differ somewhat according to the starting point and the scope for change in each institution. Most fellows report significant changes in their culture of research, whereas some felt that these more progressive norms were already well established. For example, the fellows coming from Ifakara, as a research institute, appear to have had more exposure to these norms before they began their doctoral studies, whereas those who had only been involved in teaching found this very new. One facilitator reported on accompanying fellows to a presentation by the APHRC and how inspiring this was for fellows in seeing the different roles they could play, the depth of skills, and the ability to drive forward and inde-

pendently fund an ambitious programme of research. The APHRC personnel also exchanged emails and contact details with fellows and offered to provide access to datasets for secondary analysis demonstrating the value of sharing resources.

A major aspect of attitudes towards research that could be seen as part of the research culture promoted by CARTA is the recognition, respect, appreciation and (where relevant) capacities to undertake multidisciplinary and mixed methods research. The JAS system clearly promotes this given the range of disciplinary bases reflected in each cohort. Some saw significant scope for applying their new approaches to research, whereas others felt that these broader perspectives were mostly valuable for putting their research into perspective, but these were not something that they could directly apply within their own fields of study. These differences often related to their views on the applicability of qualitative and mixed-methods approaches.

Some gaps in opportunities to influence research culture were also noted. One facilitator commented that skills available in Africa and indeed in locations where the JAS training has been held were not necessarily drawn upon within the teaching and training programmes: "It kind of felt that the organisers were very happy for us [Northern facilitators] to take charge of the week". A facilitator argued that available African expertise, that was more familiar with context and nuances of research conduct in relevant settings, could have undertaken to lead more of the training.

4.2 OTHER INFLUENCE ON THE MODUS OPERANDI OF PARTICIPATING INSTITUTES

The evaluation team was able to collect relatively limited data regarding the training provided to other faculty and administrative staff. Available evidence indicates a generally very positive view of these experiences. This finding is reinforced by evaluations of the training, which show that trainees were largely satisfied with the relevance of the training and confident that they will be able to apply what they had learned in their work. The training reaches university staff who otherwise have extremely limited opportunities for interaction outside of their workplaces. There is considerable benefit derived from this as reported by a number of our informants who valued the opportunity to learn from other institutions in Africa and further afield.

However, the evaluation team concludes that the broad range of participants and the limited scope of this 'one-off' training implies that significant outcomes are uncertain. Administrative and IT staff are appreciative of the training as a way of increasing their awareness and understanding of research funding processes and for the opportunity for networking with colleagues and exchange of institutional insights from other universities. It was difficult, however, to identify clear associated outcomes.

There are notable exceptions, however, one being the network of support that has developed among the librarians at a range of institutions. These have deepened rela-

tionships and skills, and also acted as a stimulus for the librarians to establish their own networking and mutual support system. Librarians and others concerned with information science, have apparently benefited more than others as they see concrete ways that they can develop their skills through ongoing networking after the training. There are also very concrete mechanisms through which access to resources can be promoted or facilitated, whether through HINARI, open access journals, or sites focused on making available research-related reports. Although evidence is anecdotal, it also appears that staff with specific responsibilities related to the CARTA focus (e.g., gender focal points, staff of units responsible for internal university communications, research support and knowledge management) are likely to benefit more than others in those cases where they are struggling, often in relative isolation, with similar challenges.

The CARTA emphasis on facilitating networks and placing peers in touch with one another seems to be valued, in some cases extremely highly, by most stakeholders, regardless of their specific roles. One senior institutional research leader noted that very few other funders of higher degree research support recognised the administrative and academic scaffolding necessary to offer a high quality programme, but that CARTA did this extremely well and comprehensively.

5 Findings: Efficiency and sustainability

EVALUATION QUESTIONS FROM INCEPTION REPORT

- What results have been achieved in the development of an enhanced institutional environment for research - academic and administrative reform; application of gender policies; and creating an environment for international research collaboration?
- Do CARTA members perceive that the benefits they receive from engaging with CARTA outweigh the transaction costs associated with networking across the continent and maintaining a secretariat?
- What elements of CARTA's approach have been adopted or are likely to be adopted in the near future by partner institutes? To what extent have member institutes adopted the CARTA quality standards?
- Do CARTA's organisational structures and management approaches provide sufficient capacity to respond to risks and change in the external environment?
- Is the CARTA secretariat a workplace that can attract and maintain quality staff over time?
- Does CARTA have an appropriate scale and scope of membership in relation to organisational efficiency and ultimate sustainability?
- What types of new relationships might contribute to a more efficient and sustainable CARTA in the future (e.g., membership fees, wealthy universities paying for their own students to be enrolled in the CARTA programme, etc.), and what does this suggest regarding changes in CARTA's relationship with its present members? In relation to the JAS, could other hosting arrangements (or even online and virtual mechanisms) reduce costs and increase effectiveness and efficiency? What could be improved in order to attain better effectiveness and sustainability and ownership of the JAS events?
- Given current national and international organisations/donors financing CARTA, including their current financial contributions, what is the added value of the Sida funding? What is Sida's role within the CARTA donor group? How could a more appropriate balance be achieved in donor support, and ultimately how could this lead to greater sustainability?
- What would happen with the different parts of the programme in the case of termination of Sida support? What are plausible exit strategies from the current very high level of dependence on international donor support?

5.1 SUSTAINABLE CHANGE IN PARTNER INSTITUTES

In interviews the CARTA leadership stresses that, as the fellows are just beginning to complete their studies, it is too early and would be speculative to make judgements regarding sustainable change in the partner institutions. The view is that a 'critical mass' of new researchers and other trained staff will need to be in place in the home institutions to generate the intended changes on a significant scale. This is assumed to require at least several more years.

The evaluation team judges that this is largely correct, but that some observations can already be made about the likelihood that the approaches and skills from CARTA will lead to changes in institutional policies and norms regarding doctoral supervision, multidisciplinary research, and attitudes towards research careers, amongst others. The comments here are admittedly somewhat speculative, but reflect concerns raised in interviews that the evaluation team judges as important for a more critical assessment in relation to the plausibility of CARTA's overall theory of change.

There are significant obstacles for younger staff to initiate change in hierarchical academic environments dominated by older senior staff. In many institutions (particularly the larger ones) a generational change will be essential, and that may take many years, by which time the CARTA fellows may have fallen back into acceptance of prevailing norms. The timescale and internal institutional dynamics that will underpin expected institutional change therefore may be underestimated in the current theory of change; one facilitator suggested this may be at least 10 years if not longer. However, generalisations should be treated with caution, and the hierarchical structures and systems obviously vary in the different institutes, as they would anywhere in the world.

Furthermore, the network of alumni may help to keep the 'CARTA spirit' alive across the continent over time, but only if this network leads to joint research programmes which provide a vehicle through which former fellows are able to continue to develop their research, as well as skills and approaches. Post doctoral support could build on the existing JAS training related to planning, accessing support for and implementing research projects, managing research teams, developing a programme of research, and related issues. The evaluation team judges that the networking aspects show considerable promise regarding future engagements in joint research initiatives.

As noted above, the extent to which the very modest one-off training of other university staff can contribute to change is limited and may be costly. Against this is a view from some CARTA leaders that these opportunities are more about creating awareness, interest and a climate of mutual engagement in research projects, rather than representing solid training and skills development. The evaluation team suggests, however, that without greater focus and a more realistic and concrete strategy to achieve more depth and breadth, in a strategic way, that the prospects for sustainable change at this level are limited.

Of particular importance is the issue of generating sustainable reform of supervision policies, procedures and commitments. The prospects for sustainable impact in this regard are deemed to be good where CARTA is contributing to broader efforts that are underway in the universities and their national higher education policies. At Moi University, for example, interviewees explained how approaches from CARTA provided them with concrete ideas about how to more effectively work towards national goals. Where these efforts essentially involve a modest training input for existing supervisors and the awareness and skills developed among individual former fellows

the prospects for broader, sustained institutional reforms are more uncertain. However, some changes have already materialised, particularly in the use of the supervision ‘contract’ approach which CARTA has introduced. Some departments of both Dar es Salaam and Makerere Universities have institutionalised this practice.

CARTA envisages partly addressing these challenges by maintaining collaboration with former fellows through post-doctoral fellowships, of which a few have already been arranged. It is too early to assess the appropriateness of post-doctoral fellowships as a vehicle for sustained influence, but it has been noted that the role of these positions in the career path of young researchers in Africa is not as well defined as in Europe and that without providing career opportunities many such graduates may even migrate to seek employment. It seems that this may open a range of new questions and challenges for CARTA to address, which could in turn demand additional reinforcement of training and support programmes, research funding and secretariat capacities.

5.2 ISSUES OF SCALE AND TRANSACTION COSTS/BENEFITS

An important question regarding the appropriateness of the CARTA structure is whether the scale, with nine institutes, is optimal for generating a ‘critical mass’ and a continental focus. Most of those interviewed felt (and the evaluation team concurs) that the scale is indeed appropriate. A question is whether it should be taken for granted that the current nine institutes are appropriate given the very uneven levels of ownership and commitment. Some of the nine institutes are very passive and at this stage in the programme it would appear that CARTA is not among their priorities. As such, assumptions in the theory of change about the eventual contributions of these institutions with weak engagement to a critical mass across the continent do not seem justified.

Interviews with fellows, focal points and facilitators universally indicate that they do not feel that CARTA carries with it additional transaction costs, thanks to what is reported to be increasingly efficient and effective management by the secretariat. It should be noted that the fact that the secretariat absorbs these transaction costs is positive, but that these costs still exist and that investment in a strong secretariat is thus a precondition for success. The evaluation team judges that a ‘looser’ (and less expensive) approach to managing a regional programme such as this would not be viable.

5.3 CARTA’S CAPACITIES TO MANAGE IN A CHANGING ENVIRONMENT

Interviewees were overwhelmingly positive regarding capacity and willingness of the

secretariat to adapt to emerging needs and priorities. For example, the fellows mentioned, with apparent surprise, how the secretariat had adapted the selection of software packages to their individual needs. Interviews with the secretariat indicate that the leadership has also clearly tried to find ways to manage issues such as the uneven levels of ownership and differential commitments to reporting from the different universities, and also the differing and changing donor expectations.

At a programmatic level, the Partners' Forums and the networking that goes on among various CARTA stakeholders as part of the JAS process have been noted by interviewees as important and effective opportunities for informal learning and exchange. Feedback from the JAS and supervisor training has been incorporated into subsequent work. The evaluation team has been impressed by the openness of the leadership and the engaged focal points to critically reflect on the challenges they have encountered and to take appropriate action.

The capacities to manage these changes in a structured and transparent manner are however constrained by an M&E system that is designed to serve donor needs rather than to provide information to inform internal management needs. Due to the accountability focus around reporting it does not seem that monitoring for internal learning has received significant attention, much less information for learning and for adaptation to new and emerging challenges and approaches. Limited opportunities for visits to universities where problems exist and lack of an appropriate M&E methods to steer the nature of such contacts stand in the way of systematic course corrections in response to changing circumstances.

5.4 SUSTAINABILITY AND EFFICIENCY OF MANAGEMENT AND GOVERNANCE

Assessment of the sustainability and efficiency of management and governance needs to reflect CARTA's formal status as a project within (but distinct from) APHRC. As such, management and governance functions are in many respects 'shared'. However, its autonomous nature within APHRC, its dual secretariat under the University of Witwaterstrand and APHRC, and its ambitions to become a model for broader replication in Africa suggest that it should be seen as something more than 'just a project', managed through existing APHRC structures. This has implications for management and governance, both of which represent somewhat of a 'hybrid' between a project and a 'hosted organisation'. The evaluation team recognises that there are very valid and pragmatic reasons for CARTA to remain as a 'hosted organisation' and that APHRC will therefore remain formally accountable for CARTA, but there do seem to be aspects of governance that warrant reconsideration.

As stressed earlier in the report, there are problems in relation to CARTA's undue focus on upwards accountability to donors. This has knock-on effects regarding governance in relation to members and with this accountability to the broader university

and public health communities in Africa. The BoM minutes indicate that most of the members take their responsibilities seriously, but the weaknesses of the overall system, with no formal reporting to African actors does not provide a sufficient basis for the organisation to demonstrate that it is truly governed by African stakeholders. The evaluation team noted general satisfaction among BoM members and others regarding the current reporting arrangements. But the evaluation team judges that this reflects a degree of acquiescence that CARTA is (at least financially) ‘owned’ by the donors and is therefore inappropriate.

Regarding management, the evaluation team has noted that among some of the ‘shared’ staff there is a discomfort with the lack of clear delineations of responsibilities and accountabilities to APHRC and CARTA respectively. Regarding communications, the weak performance of the communications officer in the past (as evidenced by the poor quality website and failure to effectively use social media) could be attributed to lack of clear structures through which to draw on APHRC’s far stronger communications structures. Flexibility may also at times provide opportunities for synergies. For example, the executive director is obviously able to take advantage of his dual role to discuss both CARTA and APHRC in far more international fora than would otherwise be possible.

5.5 PROSPECTS FOR FUTURE SUSTAINABILITY AND SIDA’S ROLE

As noted in section 1.1 above, when this evaluation was being finalised the Wellcome Trust announced that they would discontinue further financing. This has profound implications for CARTA’s future sustainability and Sida’s (unintended) role as the largest remaining financier. At the start of this evaluation the team was informed that, even though Sida increased its funding by financing the 5th cohort to fill the funding gap until Wellcome Trust decided about future support, Sida did not intend to shoulder a role as the primary donor to CARTA and, if such a situation arose they would not be able to continue support to CARTA.

The evaluation team has been informed that CARTA is putting concerted efforts into finding resources to replace the Wellcome Trust donation. It would be too speculative at this point to judge the prospects for this but, the evaluation team’s conclusions and recommendations need to take into account Sida’s justified grave concerns and present the team’s judgements about the best way to deal with the present unfortunate situation and eventualities for the future. The team also recognises that, in this situation, Sida will inevitably have to plan for a phase out of support if no other major donor decides to make up for a major share of the projected shortfall.

Sida’s role now needs to be considered in relation to two scenarios. If major additional funding from another donor is not found, then Sida needs to ensure that the exit

strategy reflects the importance of both learning and applying lessons from the many successful aspects of CARTA. In the second scenario, Sida should, to the extent possible, retain a contingency plan for returning to current levels of funding if CARTA is able to arrange matching funds.

6 Conclusions

6.1 RELEVANCE

CARTA is relevant. The gap in high quality African doctoral education and the need for African solutions that inspired the creation of CARTA are clear. Despite the progress being made in the programme, the needs remain enormous. If resources can be found to continue its work, CARTA is well placed to continue making a significant contribution to filling this gap as long as it remains ready to learn and adapt to challenges and opportunities in the future.

This relevance relates to how CARTA has been designed to focus on specific underlying problems in African systems of higher education. A number of informants were extremely positive about the sound conceptualisation of CARTA in its design and function. Critical thinking, multidisciplinary research capacities and more rigorous approaches to supervision are well selected entry points to addressing the overall gap that CARTA is working to fill. As the fellows complete their studies, the need is apparent that the current model could be complemented by some of the less developed aspects of the CARTA model such as the link with health systems and policy processes, the facilitation of future communities of research practice, the wider communication of research products, and stimulus for national and international debate on health and development issues.

6.2 TRAJECTORIES AND RISKS

If CARTA finds ways to continue its work in the coming years it can provide an alternative model to traditional bilateral approaches to supporting early career researchers and PhD students. The evaluation team judges that the current theory of change does not pay sufficient attention to the differing dynamics between engaging with institutes to promote change and that of engaging with individual fellows; the latter receives substantially more attention than the former, although there are some demonstrable achievements in relation to the former. The evaluation team judges that even though the CARTA leadership is actively supporting the partner institutions to promote organisational change, greater attention to the internal dynamics and mechanics of these processes is warranted.

CARTA has recognised the added benefit of involving the former fellows in post-doctoral positions as a way for them, when returning to their institutes, to embark on a research oriented career rather than returning to just teaching. This is in many respects a logical and potentially useful way of continuing the processes started by

CARTA. It does, however, also open up a large set of additional questions and challenges given the lack of clarity regarding the role of these post-docs in most African universities. Currently many (presumably most) African universities have very few fulltime researchers due to their overwhelming emphasis on teaching. CARTA's vision involves redressing this balance and post-docs are a logical means to build on current outcomes with further steps towards a stronger research focused career path. Even if it is unlikely that these efforts could be led by CARTA, the need is clearly there, especially if effort is made to develop a post-doctoral pathway that is more attuned to institutional needs in Africa and somewhat different from the Northern research-only focus. If post doctoral opportunities do not emerge in a significant scale, the momentum of CARTA and the potential to generate a 'critical mass' is likely to be significantly limited. Even if CARTA does not continue, the lessons emerging from the experience of the programme could be applied in other programmes devoted to developing the career path of young researchers.

A major risk in the CARTA model is that of some members clearly lagging behind. CARTA has good examples of 'good practice', but also has experience of dealing with poorer practice. Due to the weak M&E system, the capacities to learn from both success stories and failures are neither in place nor being adequately facilitated and transparently documented. The insufficient reporting from most members also suggests that CARTA may be proceeding based more on tacit and experiential understanding of the change processes it is promoting, rather than structured and empirical analysis.

6.3 PLAUSIBLE PATHS OF INFLUENCE FROM CARTA IN MEMBER INSTITUTES

The points above suggest that CARTA's capacity to influence reforms within its member institutes (and indeed broader diffusion) is not at the level implied in overall plans. The evaluation team judges that CARTA is 'doing a good job' in achieving its outputs, but has been somewhat over-optimistic in estimating how those outputs will then translate into the expected outcomes in terms of changes in policies and praxis in university systems and in public health and population efforts in Africa. A medium term time-horizon, cited as being 10-20 years by a number of informants, is required if expected outcomes and impact are to occur. This leads to an inevitable question of whether it is realistic to plan based on such a long period with a programme given the strong reliance on (regrettably unpredictable) international donor financing.

7 Lessons learned: the ‘proof of concept’

The findings regarding how the conceptual elements have functioned, individually and as a whole, show that the CARTA model can work. It appears to be a valuable means of introducing novel, relevant and effective approaches, along with institutional processes, into doctoral programmes that are in need of reform. There is reason to conclude that a CARTA-like approach could be appropriate in other disciplines and geographic areas. Furthermore, it could suggest a basis for a more modest direct replication of CARTA in the future, for example in a single sub-region, where it might be more manageable and less costly. The core outstanding questions at this point are whether elements of this regional model are likely to be adopted, adapted and sustained within national systems, or, at worst, ejected when external financing declines. This evaluation has pointed to some answers to these questions, but most aspects will only become clear over time.

Consideration of replication requires a critical assessment of costs in relation to institutional viability. It has been beyond the scope of this evaluation to undertake an empirically rigorous comparison of costs due to the large range of more or less ‘hidden’ costs and unmeasurable benefits in the different models. Nonetheless, the evaluators were informed and largely concur that CARTA is a model that is significantly more expensive than support to national doctoral programmes, but also significantly cheaper than bilateral programmes in which fellows often spend considerable time in Northern institutes. As such, it seems a relatively inexpensive way of obtaining a doctoral degree of international standing along with the strengthening of institutions and systems as well. However, the dearth of local funding for CARTA could imply that leaders in African universities balk at investing their own resources in a system that involves far higher investments than they are currently making in the form of fellowships to their own institutions. Other issues inherent in the consortium model, for instance reluctance to invest in a broader programme which benefits other institutions, and where there may be envy over (essential but considerable) resource flows to a secretariat, may also contribute to this.

It is important to recognise that CARTA’s institutional viability is dependent on a considerable amount of ‘in-kind’ investments (which is one of the reasons that cost comparisons can be misleading). CARTA benefits from an extraordinary level of *pro bono* commitments from a wide range of stakeholders (JAS facilitators, focal points, CARTA committees, supervisors). Fostering these commitments is not just something that derives from ‘the model’, but also from the trust and excitement that has emerged among the individuals involved with CARTA. Many of the relationships upon which CARTA is structured existed before CARTA began, and have since been strength-

ened. This highlights the importance of both looking closely at the relationships and trust that are needed to underpin the success of a model such as this as well as how to replicate and adapt the model.

As universities in both North and South are pressured towards greater ‘rationalisation’ the space for *pro bono* efforts is in many cases diminishing. The relatively high age of many of the JAS facilitators can be interpreted as being related to the fact that very senior faculty members who are approaching or have past retirement age have more flexibility in this regard than their colleagues. Without degrading the huge value of the inputs of these senior researchers (praised very highly by numerous interviewees), this does create some uncertainties regarding maintaining momentum and sustainability. Any effort to replicate the CARTA model that does not pay due attention to the underlying drivers behind ownership and commitment would be a very risky proposition.

Perhaps counterintuitively, commitments from Northern partners to CARTA have been strengthened by the fact that this is a strongly African-led initiative. These partners do not perceive themselves as ‘service providers’, contracted by a donor to deliver PhD training to a set number of fellows. Instead they see themselves as contributing to African institutions capacities to make such traditional North-South service provision relationships superfluous. The engagement that is generated by this role reversal is a key aspect of the success of CARTA, and efforts are warranted to replicate this elsewhere.

Finally, another lesson from CARTA that could be applied elsewhere is the importance of a mix of larger, prestigious universities with considerable experience and human resources, alongside smaller institutes that have younger, ‘hungrier’ faculty members and perhaps more flexible systems. In CARTA the latter have actually proven themselves more capable of taking advantage of the opportunities provided, whereas the former may be too busy with other initiatives to give a regional initiative like this their full attention. This suggests the importance of ‘taking a chance’ to engage more with younger institutions while also finding ways to help them draw on the capacities (and reputations) of the larger, stronger institutes in their countries and regions.

8 Recommendations

8.1 RECOMMENDATIONS TO SIDA

These recommendations to Sida reflect the strong likelihood that Sida is about to undertake a phasing out of support to CARTA. These recommendations therefore emphasise opportunities for a ‘good exit’ that maximise opportunities to learn from what the evaluation team judges to be an excellent model.

1. Sida should draw lessons from the CARTA experience and reassess its demands and approach towards promoting results based management in network programmes such as CARTA so as to reflect unwavering commitments to ownership of these systems at both secretariat levels and among partners.
2. To take full advantage of the momentum built by CARTA and to solidify the gains that have been made, Sida should consider a modest, separate follow-up programme to CARTA that focuses on post doctoral fellowships, think tank-like initiatives and other aspects to maintain and develop the networks created in the current programme.
3. As part of this, or even through other programming, Sida should explore ways to support initiatives targeting former CARTA fellows and mobilised faculty members through direct support to their home institutions or efforts to encourage Swedish embassies to make greater use of the extremely relevant capacities and structures for more evidence-based public health and population initiatives (e.g. among CSOs, ministries of health, local media).
4. Sida should explore ways to make use of this evaluation and other opportunities for drawing lessons from CARTA to inform other efforts in relation to replicating the model in other disciplines and regions. Sub-regional options deserve particular attention as they may be more feasible in terms of building on established relationships and also less costly. Initiatives should come from actors in the region, so it is important that Sida is attuned to voices that reflect similar demands to those that led to the initiation of CARTA.
5. Sida should also draw lessons from CARTA for informing other existing support to doctoral education, particularly regarding improved doctoral supervision, opportunities for multidisciplinary research, and related areas (e.g. improving access to bibliographic databases).
6. An additional area where Sida should look for ways to apply lessons from CARTA is in exploring ways to encourage Northern institutions to be brought into partnerships that are unequivocally led by Southern partners. This should be done in cognisance of how a precondition for defining a more appropriate role for Northern-led institutions in Southern-led partnerships is strong and vi-

sionary Southern institutions (led by a strong secretariat if a network is involved).

7. If additional matching funding is arranged in the relatively near future, Sida should reconsider its phase out and continue financing CARTA at least at current levels for five or more years.

8.2 RECOMMENDATIONS TO CARTA

The following recommendations are made in recognition of the grave situation facing the network. They are therefore intended as lessons for either improvements that could be made to a continued programme or as advice regarding lessons that could be applied in efforts to replicate aspects of CARTA in future programmes. It should be particularly stressed that the recommendations regarding results based management are partially presented in a spirit of advice for how CARTA can better demonstrate its value to potential donors. CARTA has an important and powerful story to tell about how to enhance doctoral education in Africa, and it has a responsibility to tell that story in a credible and evidence based manner.

1. Despite mistakes made in the past, CARTA shares responsibility for building ownership for results based management. Cynicism should be replaced with critical reflection regarding what CARTA needs to learn from its results and what CARTA feels it should be accountable for. Vicious cycles in which failures to effectively monitor results lead donors to make even more demands for upwards accountability can only be broken if CARTA assumes stronger leadership of the results agenda. As a unique, African owned initiative, CARTA has a responsibility to take on this leadership and to define the nature and form of effective outcomes and impacts.
2. CARTA should make significant investments in enhancing its capacities for results based management. The nature of these investments should reflect the agenda that CARTA decides upon and the consensus among CARTA stakeholders on priorities.
3. CARTA should develop agreed protocols for continued support to weakly performing institutes. Clear feedback and assistance should be provided along with indications that ongoing support may cease if performance does not improve. Subsequent failure to provide even minimal reporting and failure of focal points to perform their duties should lead to consequences in terms of access to CARTA resources and ultimately to membership.
4. CARTA should continue its efforts to define the niche it would like to play with respect to supporting and building the capacity of post doctoral fellows and their emerging teams. This is important both for CARTA, and also more generally for building a consensus around a future model for post doctoral fel-

lowships and young researcher capacity development that is adapted to the needs and opportunities of African universities.

5. CARTA should reassess its theory of change with a more critical eye to timeframes, critical mass and processes. Current thinking does not sufficiently take into account the time required for young researchers to gain seniority, power and influence in their institutes. Also greater attention is needed to analysing the situation of supervisors and the processes through which the small input from CARTA is likely to influence much broader processes of reform in supervision systems.
6. Related to the preceding recommendation, it is recommended that CARTA refine its strategy in relation to training support of other university staff. The current approach with very modest support to a broad range of staff provides a modicum of benefits related to greater awareness of how to support and manage research projects, but is unlikely to generate significant institutional change. This evaluation tentatively recommends focusing additional support on supervisors and library/knowledge management staff, while looking for ways to better focus training of other university staff on key individuals who are not only expected to become more aware of the nature of managing research projects but who can also establish more effective and efficient research administration procedures and institutional norms.
7. CARTA should think more about its niche in connecting researchers with policy-makers, while recognising that this will primarily be a national concern. APHRC has significant capacities that could be used for helping CARTA as a whole to better reflect on how to build on its comprehensive, but at the same time realistic, notion of its role in influencing policy.
8. CARTA has an important story to tell, and as such should devote more effort and attention to communicating with other audiences – policy makers, a wider range of institutions, other African researchers, the media, potential donors and more. This would help facilitate awareness of the broader lessons from this initiative and the usefulness of research outputs.

Annex one: Terms of reference

1. Background

Information about Sida

The Swedish International Development Cooperation Agency (Sida) is an agency working on behalf of the Swedish parliament and government. The overarching objective of the Swedish development cooperation is to help create conditions that enable poor people to improve their lives. Through its work Sida contributes to implementing *Sweden's Policy for Global Development*. Sida's work is guided by a number of strategies and policies. For further information, please visit Sida's website, www.sida.se.

Sida is responsible for the implementation of the *Policy for research in Swedish development cooperation 2010-2014* and the *Strategy for Sida's support for research cooperation 2010-2014*. Accordingly, the overall objective of the Swedish research support is to strengthen and develop scientific research of relevance in the fight against poverty in developing countries. To achieve this goal, Sweden is to focus its efforts on three specific areas (1) Research capacity building in developing countries; (2) Research of relevance to developing countries; and (3) Swedish research of relevance to developing countries.

Information about the Consortium for Advanced Research Training in Africa (CARTA)

The Consortium for Advanced Research Training in Africa (CARTA) is a South-South partnership with South-North collaboration established in 2008 with funding from the Wellcome Trust's 'African Institutions Initiative' programme" to put it in context of wider funding to support research capacity strengthening in Africa. CARTA is jointly-led by the African Population and Health Research Center (APHRC) and, the University of Witwatersrand (Wits) in South-Africa. The Director and Deputy Director of CARTA are, respectively, based at APHRC and Wits. CARTA reports to a Board of Managers which provides oversight and guidance on all programmatic activities, whereas APHRC administers the funding to CARTA. To this end, APHRC has entered into sub-contracts that cover funding for the Consortium's member comprising of: nine African universities, four African research institutes, and eight Northern Academic Institutions, referred to as Northern Partners (for the non-African members, see Appendix A) who provide know-how and senior mentorship. APHRC is responsible for the execution of CARTA. CARTA has had seven donor and currently has three active funders.

CARTA has two primary objectives: 1) to strengthen research infrastructure and management capacity at African universities, and 2) to support doctoral training through a model collaborative PhD program in population and public health. These objectives are designed to realize CARTA's ultimate goal of building local research

capacity to understand the determinants of health in Africa and develop effective interventions to improve health systems and outcomes.

The host organization of CARTA, APHRC, is an international, non-profit, research institute established in 1995 as a program of the Population Council, and has its headquarters in Nairobi. The Centre became autonomous in 2001 and is governed by an international Board of Directors. APHRC has three programmatic divisions (research, research capacity strengthening and policy engagement and communication).

APHRC's mission is to be a global centre of excellence for policy and action on population, health and education in Africa. It has a wide network of partnerships with universities and research institutes globally and collaborates with these institutions in conducting its research and training activities. The Centre (APHRC) currently receives funding from 16 donors and is investing resources to ensure further financial sustainability. During the last decade, APHRC has grown dramatically and built an establishment of more than 120 staff from over ten countries and more than 30 ongoing projects operating on an annual budget of over US\$ 10 million in 2011.

The Sida support to CARTA and APHRC

The objective of the Sida support has been to contribute to strengthening research capacity in sub-Saharan Africa, and to contribute to international research of relevance for developing countries.

Sida support to APRHC during the current phase 2012-2015 is 48, 2 MSEK. Sida provides core (unrestricted) support to APRHC for implementation of programmatic activities of CARTA (41, 2 MSEK) and for general activities (7 MSEK). The total budget for the entire CARTA program including overhead costs over the first eight years (2008-2016) is approximately 189 MSEK.

Sida has also facilitated and funded a results-based management (RBM) workshop in September 2013. Consequently, CARTA has developed a RBM logical framework that is now being used for reporting of activities and monitoring of the accomplishments.

In the present agreement between Sida and CARTA it is stated that Sida will conduct an independent program evaluation and a review of the internal control system mid-way through the agreement period. The review on the internal control system has already been carried out by Ernst and Young and concluded in May 2014. Sida has not yet conducted an independent external evaluation of the program. During the period 2010-2013, one of CARTA's mayor funders, The Wellcome Trust, relied on the services of Rand to conduct annual evaluations of CARTA. The report of the present program evaluation and of the review of internal control system will inform the program assessment next year when CARTA will submit its funding proposal for continued Sida support.

2. Purpose and Scope of the Evaluation

The primary objective of the evaluation is to provide a rigorous and independent assessment of CARTA's performance for lessons learning purposes. The evaluation will serve as a basis for Sida in deciding on continued support to the CARTA after

the end of the current agreement. It shall also provide recommendations for both Sida and CARTA on the focus and form of the possible continued support.

The scope of the evaluation covers CARTA activities since the inception of Sida's funding, from 2012 to the present. However, in order to have a broader view and also for lessons learning purposes, the evaluators shall assess – to the extent it is possible and if it gives extra value –, the earlier years (2008-2012). The primary focus shall not be on the output level, instead the evaluation will assess the results at the outcome and, when and to the extent possible, the impact level. The evaluation will assess the relevance, efficiency, effectiveness, sustainability and impact of the program in relation to its objectives, taking into consideration CARTA's RBM framework and the objectives identified in it:

- **Objective 1:** To increase the number of highly-competent PhD-researchers who deploy their skills in solving population and health issues and also support the production and mentorship of the next generation of doctoral students by 2015
- **Objective 2:** To develop and implement model training programs and interventions that improve doctoral training and university systems, by building their institutional capacity to produce and use research for solving critical population and health issues in the region by 2015
- **Objective 3:** To increase the use of CARTA network (consortium) by partnering institutions and stakeholders to demonstrate effective South-South and egalitarian South-North relationships to mutual benefit of all partners by 2015

The analysis shall be put into a larger context in relation to Sida's policy on research cooperation, CARTA's strategic direction, as well as the broader context of global and regional trends in higher education and research training.

3. Evaluation Questions

The evaluation will focus on the capacity building aspects of the CARTA program and their results (output, outcome and impact). In order to have a fact-based background for analysis, discussion and decision-making regarding the scope and orientation of the cooperation, the evaluators might focus on the following:

Sustainability of the CARTA program including institutional capacity and management:

- Assess the results in the development of institutional capacity for research - academic and administrative reform, , application of gender policies, international research collaboration, efficiency, transparency, and quality.
- What elements of CARTA have been adopted or consider to be adopted by partner institutions. To which extent have member institutions adopted the CARTA quality standards and have the institutional-strengthening activities improved postgraduate training and management of research. Explore the CARTA "research culture" including inherent academic values such as critical thinking, research-driven staff, colloquial research seminars, research based career path; research-based teaching and international scientific collaboration and extent to which CARTA constituents' comply with the CARTA Gender position.

- CARTA's organisational management and capacity to respond to risks and change in relevant external environment. Does CARTA have an appropriate scale and scope of members in relation to organisational efficiency and ultimate sustainability?

CARTA and its member institutions:

- How does CARTA define itself in relation to its partners? What are the levels and expressions of ownership for the work of CARTA among its members? How is the power distribution among different members of CARTA consortium and how is this reflected in the distribution of activities (e.g. JAS and representation of students enrolled)? Provide information on how much generated funding goes to the CARTA member institutions.
- What types of new feasible relationships can be proposed for CARTA membership (e.g. membership fees, wealthy universities paying for their own students to be enrolled in the CARTA program, etc.), and what does this suggest regarding changes in CARTA's relationship with its present members? In relation to the Joint Annual Seminars (JAS): could other hosting arrangements reduce costs and increase effectiveness and efficiency? What could be improved in order to attain better effectiveness and sustainability and ownership of the JAS events?
- Analyse the fundamental problem areas on a systemic level within the CARTA program, including performance, access and equity. In relation to gender equality in practice: to what extent has CARTA acted to a) integrate gender equality into the program, b) engage in a gender aware dialogue, c) make visible its gender position.
- How does CARTA work with the RBM in relation to partner institutions? Does the monitoring and evaluation approach provide an appropriate basis for RBM in the future? How does CARTA and its member-institutions work with RBM?

Quality and relevance of the CARTA program:

- To analyse the emerging role of CARTA in a changing context of higher education in Sub-Saharan Africa and the role is playing in building institutional research capacity.
- Is the program consistent with the needs and priorities of universities in low and middle income countries? How are CARTA and its services perceived by these universities? Analyse the relevance of the doctoral training offered by CARTA institutions in relation to market and development needs and government national priorities.
- Assess the production and relevance of scientific results by CARTA fellows in relation to international standards..

Effectiveness of the CARTA program:

Effectiveness shall be seen primarily as a basis for understanding the comparative advantage of CARTA in the broader context to other alternatives for higher education in sub-Saharan Africa.

- To what extent has the CARTA program been significant to the development of universities in sub-Saharan Africa? Furthermore, to what extent has CARTA contributed to the leadership/ supervision of PhD students and research management at the participating universities?
- What are the outcomes and impacts of the program, including intended and unintended, positive and negative outcomes and impacts, results framework and non-results framework elements? Why and how did positive/negative results happen?

Cost efficiency and donor relationships:

- List current national and international organisations/donors financing CARTA, including their current financial contribution. What is the added value of the Sida funding? What is Sida's role within the CARTA donor group? How a more appropriate balance could be achieved in donor support, and ultimately how could this lead to greater sustainability? What would happen with the different parts of the program in the case of termination of Sida support? Describe exit strategies.
- Can the cost of the CARTA program be justified by the results? Does CARTA have a unique niche in providing higher education in this form as they do, or are there other organisations/networks/consortia fulfilling similar functions? What is seen to be CARTA's unique added value in relation to other PhD programs? What is unique about CARTA in relation to other doctoral training initiatives, its unique features,
- How effective the CARTA model of partially funding students is, versus fully funding students.
- Lessons and implications providing insights on how CARTA may enhance impacts and, if deemed necessary, boost value for money.
- What relationship has CARTA program with other initiatives supported by Sida including the bilateral research capacity strengthening programs or regional programs such INDEPTH?

4. Approach and Methodology

The evaluators shall provide Sida with an inception report outlining the methodology and giving detailed time schedule. However, a brief section on suggested methods shall be already part of the consultant's response to the call. The methods employed for this evaluation shall facilitate the collection and analysis of data, be relevant to the questions outlined above and make optimal use of existing data. Also, the evalu-

ation process is expected to be a learning opportunity for CARTA and therefore the proposed approach should serve this purpose as well.

Sida suggests a design that takes a mixed methods approach and systematically triangulates the evidence. Interviews shall be made with the management and staff at CARTA, with selected members of the Administrative Board/relevant Committees/Working Groups/Reference Group of CARTA, and heads of CARTA member institutions including Northern Partners of CARTA. It is expected that the consultants visit CARTA in Nairobi. Due to the fact that the CARTA is a global consortium a large proportion of the interviews will be conducted from distance.

Relevant documents will be provided to the consultants by Sida and CARTA, or will be available on Openaid (www.openaid.se). However, the consultants are also expected – when it is deemed necessary – to independently look for documents for example on trends in higher education, or documents from universities and their regional associations.

5. Time Schedule and Reporting

The assignment shall commence 16-12-2014 and be completed no later than 15-05-2015. An Inception Report outlining the methodology and a detailed time schedule shall be presented to Sida within three weeks after acceptance of the assignment. A meeting with Sida will take place to further discuss in detail the objective and methods of the evaluation. It is preferred that the field visit to Nairobi takes place during the last half of March. A draft of the final report shall be shared with CARTA for their comments and submitted to Sida no later than 24-04-2015 followed by a revised and final version two weeks upon receiving Sida's comments. The final report shall be consistent with Sida's Evaluation Guidelines and OECD/DAC standards for evaluation. The reports shall be written in English, not exceeding 30 pages (without appendixes). The final report should be presented in a way that enables publication without further editing.

Resources

The budget cannot exceed SEK.

6. Evaluation Team Qualification

Sida envisages a team of two consultants that might be complemented with one support/project management function. Qualifications of the evaluation team:

- All team members shall have expert knowledge of and experience in conducting evaluations.
- At least one team member shall have PhD degree and shall have experience in research capacity building and in institutional capacity development in an African (or other lower-to-middle-income) environments.

- At least one team member shall have significant experience and knowledge of support to higher education and working with higher education institutions as well as broader understanding of institution building and strengthening within higher education.
- Knowledge of and/or experience from working within or with international membership associations.
- Knowledge of different practises of research management and doctoral training and supervision.
- Knowledge of best practices in research capacity building.
- Strong analysis, report writing and communication skills in English.

7. References

- The Sida memo for support 2012-2015
- CARTA operational plan 2014-15
- The Ernst & young evaluation commissioned by Sida on Intern Control System
- The RAND evaluation commissioned by Wellcome Trust, one of the mayor funders.
- CARTA fellows profiles
- Student progression
- Progress report to Sida on activities 2013
- Minutes CARTA funder´s meeting 2014
- CARTA governance arrangement
- CARTA partner institutions
- CARTA fact sheet 2014

Annex two: Inception report

1. Assessment of Scope of the Evaluation

1.1. THE ASSIGNMENT

The terms of reference (ToRs) of this assignment identify the primary objective of the evaluation as being “to provide a rigorous and independent assessment of the performance of the Consortium for Advanced Research Training in Africa (CARTA) for lessons learning purposes. The evaluation will serve as a basis for Sida in deciding on continued support to the CARTA after the end of the current agreement. It shall also provide recommendations for both Sida and CARTA on the focus and form of the possible continued support”.

The scope of the evaluation primarily covers CARTA activities since 2012 i.e. the period over which Sida has contributed funding. However, it is also recognised that in order to address the evaluation questions and to facilitate learning, the evaluation will need to look at CARTA’s earlier work from its initiation in 2008 to 2012.

The ToRs also state that the “primary focus shall not be on the output level, instead the evaluation will assess the results at the outcome and to the extent it is possible, the impact level”. This inception report describes how the evaluation will assess these outcomes, as well as the relevance, efficiency and sustainability of the programme. In discussions with Sida, a strong interest was expressed in learning from CARTA’s performance as an example of a model and structure for regional support to doctoral education more generally, and as a potential approach that could be replicated in other geographic areas and disciplines.

CARTA is a programme in public health and population studies anchored in a South-South partnership with South-North collaboration. It was established in 2008 with funding from the Wellcome Trust’s ‘African Institutions Initiative’. CARTA is jointly-led by the African Population and Health Research Center (APHRC) and the University of Witwatersrand in South Africa. The Director and Deputy Director of CARTA are, respectively, based at APHRC and Wits. CARTA reports to a Board of Management (BoM) which provides oversight and guidance on all programmatic activities. APHRC administers CARTA and hosts the secretariat. CARTA’s membership currently consists of nine African universities, four African research institutes, and five Northern academic institutes. CARTA has had seven donors and currently has three active funders.

As of August 2014, CARTA had enrolled 91 doctoral fellows and supported research had led to 152 peer reviewed publications. Close to 300 faculty members had been trained.

CARTA’s overarching goal is “to build a vibrant African academy able to lead world-class multidisciplinary research that makes a positive impact on public and population health.” According to the logframe approved in January 2014, CARTA’s hierarchy of objectives are as follows:

CARTA’s Development Goal: To increase use of cross-institutional collaboration to build research capacity of doctoral students and strengthen university systems to lead and conduct research on critical areas around population and health in the region.

Summary Problem Statement: Inadequate capacity and collaboration among African universities to conduct and utilize high-quality research and to produce adequate number of researchers and scholars who are sufficiently-trained and supported to apply their knowledge, understanding and skills to contribute to solving critical population and health issues in the Africa region.

Overall Objective: To improve the capacity and collaboration among African universities to increase the number of qualified doctoral students who apply their research competences and skills to lead, conduct and use research in solving critical population and health issues in the region.

Specific Objective 1: To increase the number of *highly-competent PhD researchers* who use their acquired skills and competencies in solving population and health issues.

Specific Objective 2: To develop and implement model training programs and interventions that improve doctoral training and university systems, by building their *institutional capacity* to produce and use research for solving critical population and health issues in the region.

Specific Objective 3: To increase the use of CARTA network (consortium) by partnering institutions and stakeholders to demonstrate effective South-South and egalitarian South-North relationships to the mutual benefit of all partners.

Each of these objectives is complex, comprising a number of components, each of which deserve evaluation attention in their own right. It is noted that the 2014-15 Annual Work plan and Budget appears to break down the third objective into the following strategic objectives:

- That graduated students imbibe and propagate the CARTA training model at their home institutions and, possibly, other emerging institutions in order to contribute to rebuild the foundations for quality research and teaching in African universities
- Effective governance programme
- Sharing and promoting the CARTA model in Africa
- Programme monitoring and evaluation

Furthermore, the CARTA members have declared⁵ their intention to benefit from CARTA through the following three objectives:

4. To generate a ‘critical mass’ of internationally competitive academics who are committed to the translation of research into policy, and who can continue to contribute to developing sustainable research capacity in African institutions during their careers.
5. To develop a ‘culture of research’ among African academics - a vibrant, networked African research community as a pre-requisite for sustainable regional research capacity matched to local health and health research priorities.
6. To develop stronger management, administrative and physical infrastructure within research institutions. This is in order to foster a productive, attractive, efficient and effective environment for developing scholarship and conducting high level research.

The Annual Evaluation Reports from RAND Europe (commissioned by the main funder, the Wellcome Trust and produced annually until the end of 2013) outline a detailed intervention logic, particularly in the early years of the programme. The current evaluation will update and develop further on the findings of these evaluations, but with a somewhat different focus related to the issues raised in the ToRs. Overall, in order to meet the intentions of the ToRs, the evaluation will examine emerging outcomes at two levels.

With regard to the original Objective 1, the evaluation will look at the skills development and research quality of the doctoral researchers and the extent to which their early career research is (or is likely in the future to be) applied to addressing important population and health issues and through these young researchers supporting the “next generation” of doctoral students.

With regard to the original objectives 2 and 3, the evaluation will frame its analyses within an understanding of the CARTA model both in terms of its appropriateness for the CARTA doctoral students, and also in relation to the advisability and plausibility of it being replicated in other disciplines and institutional structures. It will also examine the notion of effective South-South and egalitarian South-North relationships

⁵ Ezeh et al (2010). Building capacity for public and population health research in Africa: the consortium for advanced research training in Africa (CARTA) model. *Global Health Action* 2010, 5: 5693 - DOI: 10.3402/gha.v3i0.5693.

of mutual benefit to participants. These are all important for contributing to Sida's learning process regarding whether and how a model such as CARTA's relates to Sweden's policy on research cooperation and the broader global and regional trends in higher education and research training.

The evaluation is being undertaken at a time where there are some indications of uncertainty regarding CARTA's future finances. Sida has explicitly requested that issues related to the sustainability and relevance of models such as this will be a core component of the evaluation. This will be analysed in the context of the changing roles of donors and the commitments of state duty bearers in ensuring that African led institutes are indeed led and therefore ultimately financed from African resources.

Finally, the questions in the ToRs for this evaluation are very specific, and in most respects CARTA has been evaluated already in the annual evaluations undertaken by RAND Europe. This evaluation will strive to complement the other analyses already completed. An important intention of this inception report is to propose and agree with Sida and CARTA on a clear structure with evaluation questions focused on the areas of primary concern to both Sida and CARTA. The proposed revised evaluation questions (see 3.7 below) summarise the evaluation team's recommendation of how to best emphasise these issues.

2. Relevance and Evaluability of Evaluation Questions

2.1. OVERVIEW OF THE EVALUATION QUESTIONS

The evaluation questions emphasise issues of sustainability of the programme and its outcomes, the quality and relevance of its outputs and emerging outcomes, its effectiveness in achieving intended aims, and the efficiency of the CARTA model and its governance/management.

The following are the evaluation team's reflections regarding the evaluability of the questions that were proposed in the ToRs (quoted in the bullet points at the start of each of the following sections) and suggestions for modest restructuring and rephrasing (section 3.7). As the ToRs for the evaluation were only partially structured on the OECD/DAC criteria for development evaluations, we present some ideas as to how these could be further streamlined. We offer suggestions at the end of this section and in the evaluation matrix below.

2.2. SUSTAINABILITY OF THE CARTA PROGRAM INCLUDING INSTITUTIONAL CAPACITY AND MANAGEMENT

- Assess the results in the development of *institutional capacity*⁶ for research - academic and administrative reform, application of gender policies, international research collaboration, efficiency, transparency, and quality.
- What elements of CARTA have been *adopted or consider to be adopted* by partner institutes. To what extent have member institutes adopted the CARTA quality standards and have the institutional-strengthening activities improved postgraduate training and management of research? The evaluation will explore the CARTA "*research culture*" including the promotion of inherent academic values such as *critical thinking, the availability of research-driven staff, colloquial research seminars, research based career path; research-based teaching and international scientific collaboration* and extent to which CARTA constituents' comply with the CARTA Gender position.
- What is CARTA's organisational management and *capacity to respond to risks and change* in relevant external environment? Does CARTA have an appropriate *scale and scope of members* in relation to organisational efficiency and ultimate sustainability?

Reflections and recommendations from the evaluation team:

There are two levels of institutional sustainability that will need to be analysed. Among the partner universities and research institutes in Africa, it is expected that the returning fellows will underpin capacity for both future PhD supervision and stronger research management more generally. With respect to CARTA's own institutional sustainability, current intentions are less explicit. However, at an overarching level, key documents imply that the creation of a strong, respected and African-owned network will be necessary to provide the basis for CARTA's future. The evaluation team judges that there is less clarity regarding the theory of change through which CARTA will move towards this given the lack of African financial commitments and the potential divergence in interests between CARTA as a whole and the interests and ambitions of the individual institutes. Annual evaluation reports note tensions in this re-

⁶ Italics added by the evaluation team.

gard. These factors and measures to manage these different interests will be explored in this evaluation.

CARTA provides training for junior faculty and university administrators related to institutional research strategies, research governance and proposal writing. Networking among administrators is also encouraged. A core question for the evaluation team is to understand the extent to which this investment in human resources is sufficient to create the critical mass and networks required to generate the needed organisational and institutional changes required to improve university governance. In relation to capacity development in international experience, it has at times been found that sustainability has been undermined when efforts have focused too much on middle management, and when high level management and more 'frontline staff' (in this case the faculty/supervisors themselves) have not been engaged in these reforms.⁷ The evaluation will therefore look at if and how CARTA has addressed this challenge. Assessment of the role of the CARTA Vice Chancellors' Forum will be given particular attention in this regard.

It is apparent from reports reviewed that the extent to which institutional and organisational reform outcomes will prove sustainable is limited by staff turnover. This is a central issue among the trainees in member university management, administration and ICT structures. It is also a serious problem within the CARTA secretariat. Annual Evaluation Reports repeatedly raise staff retention as a critical problem at both member and secretariat levels. The evaluation will look at the factors behind this turnover and the measures being taken to reduce it.

Furthermore, attention will be given to the underlying factors that may limit CARTA's capacity to influence incentives for staff retention. It is recognised that CARTA is unlikely to have significant influence over most factors within the member institutes (apart from providing the modest incentive of training and networking opportunities), but it will be important to gain an understanding of the ways that CARTA has analysed and taken into consideration such turnover in its own plans and its theory of change. With regard to capacities to adapt to risks, the foremost risk currently faced is that of possible discontinuation of financial support from the Wellcome Trust. This question is therefore analysed together with the relations to donors.

The issue of whether CARTA's scale and scope of membership is suited to promoting

⁷ Christoplos et al 2014

institutional sustainability is related to the following set of questions and will therefore be discussed below.

2.3. CARTA AND ITS MEMBER INSTITUTES

- How does CARTA *define itself in relation to its partners*? What are the levels and expressions of *ownership* for the work of CARTA among its members? How is *power distributed* among different members of the CARTA consortium and how is this reflected in the distribution of activities (e.g. JAS and representation of students enrolled)? Provide information on *how much generated funding goes to the CARTA member institutions*.
- What alternative types of relationships can be proposed for CARTA membership (e.g. membership fees, wealthy universities paying for their own students to be enrolled in the CARTA program), and what does this suggest regarding changes in CARTA's relationship with its present members? In relation to the Joint Annual Seminars (JAS): could other hosting arrangements reduce costs and increase effectiveness and efficiency? What could be improved in order to attain better effectiveness and sustainability and ownership of the JAS events?
- Analyse the *fundamental problem areas on a systemic level* within the CARTA program, including *performance, access and equity*. In relation to gender equality in practice: to what extent has CARTA acted to a) promote gender equality b) integrate gender equality into the program, c) engage in a gender aware dialogue, d) make visible its gender position.
- How does CARTA work with the *RBM in relation to partner institutions*? Does the monitoring and evaluation approach provide an appropriate basis for RBM in the future? How does CARTA and its member- institutions work with RBM?

Reflections and recommendations from the evaluation team:

The annual evaluation reports note challenges regarding the regional approach. This is particularly true with respect to equity given the difficulties in accommodating fellows with varying skills levels, differing living costs, variations in scholastic demands among the members, and variations in compensation and incentives for supervision. Ultimately, these issues may raise questions regarding the 'proof of concept', central of which is that of whether or not the advantages and synergies of a regional approach outweigh the transaction costs of harmonising systems and managing differences in capacities, priorities and needs? Amongst the issues to be examined are the inevitable

dysfunctions that arise in a regional programme that needs to work around many national institutional structures that must be taken as ‘given’.

CARTA is highly ambitious in the sense of bringing together well-established institutions with weaker ones. Difficulties are exemplified by the trade-off between expediency in having the strongest partners host activities and equity by holding JAS at a variety of locations. Some members presumably depend on CARTA more than others. Some members need to stretch the financial resources provided per doctoral fellow more than others. This would seem to rule out a ‘one-size-fits-all’ approach to partnership. It will be important for the evaluation team to assess where the diverse membership has generated synergies and where it has created tensions and particularly high transaction costs. The theory of change behind CARTA describes well the intended synergies, but the reporting thus far received is uneven in following up on this or analysing unintended negative consequences.

From the member reporting reviewed, the evaluation team has an impression of varying levels of ownership and engagement. Some see CARTA as an important part of their institutional development, whereas others seem to mostly appreciate CARTA as a source of physical infrastructure investments and training. In the evaluation methods it will be important to ensure that the full spectrum of forms, scope and depth of engagement can be reflected.

The evaluation will be conscious of the fact that ‘the tail cannot wag the dog’ in inducing overall institutional change at national level through a modest regional programme. At the same time it will be important to be alert to the areas where achievements are possible and essential. The annual evaluation reports make frequent reference to institutional inertia and special interest groups as obstacles. These challenges can be seen to be common in academic milieu, so the evaluation will assess CARTA’s sphere of influence while recognising inevitable limitations. The discussions and outcomes of the CARTA Vice Chancellors’ Forum may provide valuable information on this.

The CARTA Annual Evaluation Reports indicate that a fundamental aspect of the relations between CARTA and the member institutes is that of ensuring appropriate and high-quality doctoral supervision. Significant challenges exist with regard to supervision, and part of this is the extent to which this regional network can align with, promote improvements in, and ultimately encourage supervisor accountability for providing quality supervision to PhD students within partner institutes. The evaluation will explore this and the extent to which the input provided by CARTA from more senior supervisors from the regional and Northern partners is leading to better national norms and systems for supervision in the future (as discussed above under sustainability).

While CARTA has a gender policy, the reporting received is for the most part notably silent on the gender aspects of the programme and how the policy is impacting on practice. The evaluation team has thus far not encountered evidence which indicates whether gender equality has been integrated or mainstreamed within the overall theory of change, though it is noted that there would be potential to do so within the overall focus of the research supported. This is interpreted to be important at three levels: a) the gender balance among the fellows and the associated supervisory teams; b) the ways that CARTA is run for both fellows and staff (human resource management and actions to ensure gender equality in research opportunities, e.g., access to day care, paternity/maternity leave, etc.); and c) the relevance of the curricula, research topics and plausible eventual impact of CARTA research on Sexual Reproductive Health and Rights and other issues impinging on gender equality in Africa. In this respect the evaluation will assess what CARTA does and how it does it.

One significant (de facto) indicator of member ownership is likely to be the steps taken towards accreditation of JAS courses at the individual universities. The evaluation will look at this process, both in terms of its practical impact on the viability of the CARTA model, and also as a proxy indicator for ownership and the ability of individual member institutes to adapt their institutional requirements to a regional programme such as this. The evaluation team will also collect data regarding other innovations to which CARTA has contributed, particularly related to supervisory relationships.

It appears important for CARTA to be able to ‘network the networks’, i.e., take advantage of the networks and other consortia that exist among its member institutes. The third year Annual Evaluation Report noted limited progress in this regard, while pointing out that “All consortia remain largely ad hoc and, to some extent, driven by personal relationships across consortium leadership” (p. 20). The reporting in the fourth year has been more positive. CARTA is financed by the Wellcome Trust as part of the African Institutions Initiative that is funding six other related consortia, which could be assumed to provide encouragement for finding such synergies. It is noted that decisions have been made in 2013 to strengthen cooperation with the International Network for the Demographic Evaluation of Populations and their Health (INDEPTH). The evaluation will analyse the extent to which this has materialised and also collect data regarding other efforts to draw benefits from networking.

The strength of relations with other consortia and networks which the CARTA members are also engaged in may be viewed as a proxy indicator for the extent to which these members see CARTA as a key hub in their own work, versus seeing CARTA as a competitor that is accepted primarily because it provides additional resources for doctoral training. This is likely to have implications for the extent to which CARTA is able to achieve its aim to “export” its training model to partner institutes. The evaluation team will assess the intentions, results and achievements of this aspect of part-

nership. Due to the complexity and diversity of these multiple networks, the evaluation will not attempt to map these relationships, but will draw conclusions based on examples raised by interviewees.

In initial discussions with Sida it was stressed that the evaluation should provide additional and complementary analysis and not replicate the analysis of CARTA’s existing M&E system. Most notably, the evaluation team has received four analytical annual reports which have been prepared by RAND Europe as part of the ‘Evaluation and Learning Project’ looking at all of the institutes supported by Wellcome Trust as part of its African Institutions Initiative. CARTA has a logframe, but it is relatively new, from 2014. The 2013 Annual Progress Report for Sida states that the “CARTA Partners Forum meeting in Nairobi in September 2013 agreed and adopted RBM (results based management) as a strategic framework. The reporting templates for fellows and Focal persons were reworked and fine-tuned in line with RBM framework. The new reporting framework underpins the principle of results based reporting.” It appears, however, that the logframe used in that report was tailored to Sida requirements and included elements that are not referred to elsewhere (e.g., reference is made to the “Sida gender equality policy”, which is apparently a misnomer, but such indicators are not mentioned in the evaluation and learning project reports).

In the first year of the programme, the evaluation and learning project suggested a set of indicators to be applied in CARTA’s M&E system. The team for this evaluation has not received any internal monitoring and evaluation (M&E) reporting explicitly based on these indicators, and as such it is unclear whether these have been accepted or used, or if other indicators have been developed. Overall it is unclear what the division of responsibilities has been between CARTA’s own M&E system and that of the Evaluation and Learning Project, which is intended to serve both CARTA and the Wellcome Trust, but is essentially oriented towards the overall learning process of the Wellcome Trust’s African Institutions Initiative.

An example of an apparent divergence between this M&E effort and the current logframe is the relative lack of emphasis on gender in the Evaluation and Learning Reporting compared to the current logframe. CARTA has explained that the inclusion of more explicit gender criteria is recent, and that the selection of fellows has always been gender sensitive. The evaluation team sees it as very important to assess the extent to which CARTA now has ownership of a more profound gender perspective (as opposed to mere balance in selection of fellows) and how the programme interprets Sida’s requirements as being relevant within the programme.

Regarding RBM among the partners, the CARTA annual evaluation report for year four calls for less aggregation of data in the M&E system. The argumentation behind this suggestion needs to be analysed, as it could provide insights into the trade-offs between RBM within the overall network versus individual members.

The reporting thus far received from the members is mixed in quality and scope. Some reports give good examples of outcomes whereas others list activities and inputs received. Is it difficult to assess whether this reflects different interpretations of the reporting requirements or different levels of engagement by the members. The evaluation team has been informed that CARTA produces individual reports for the respective donors and does not undertake aggregate reporting apart from the reports that were submitted to RAND Europe. This is notably at odds with Swedish commitments to harmonised donor reporting requirements and the evaluation team will explore how the M&E system has been affected by these difficulties.

2.4. QUALITY AND RELEVANCE OF THE CARTA PROGRAMME

- To analyse the emerging role of CARTA in a changing context of higher education and research training in Sub-Saharan Africa and the role it is playing in building institutional research capacity.
- Is the program consistent with the needs and priorities of universities in low and middle income countries? How are CARTA and its services perceived by these universities? Analyse the relevance of the doctoral training offered by CARTA institutions in relation to market and development needs and government national priorities.
- Assess the production and relevance of scientific results by CARTA fellows in relation to international standards.

Reflections and recommendations from the evaluation team:

Assessing the quality and relevance of the program depends in part on defining precisely how CARTA assesses ‘quality’ and then relating this to the broader literature on assessing the quality of higher education and research training. Of great interest is not simply what is being achieved through the CARTA Program with its additional resources in the form of funds and personnel, but whether the institutes involved identify gains in their own research capacity and whether they attribute this, at least in part, to their participation with CARTA.

To assess if the program is consistent with the needs of African universities, we will elicit the views of participating universities regarding whether CARTA helps address their priorities. A key issue for the evaluation will be to identify national research priorities against which institutional research activities will be assessed. Have the partners involved with CARTA, or has CARTA as a whole, identified a set of re-

search priorities against which it is working? Is it clear what set of priorities CARTA seeks to address?

If this is not the case, the evaluation will try to uncover one or more relevant statements that the partners themselves at national level have identified as the key priorities and research needs; and then will determine whether the CARTA program is “in tune” with such statements. Inviting the research organisations being assessed to identify relevant national documentation against which they could be assessed would allow them to self-identify one or more national statements of research priority upon which the evaluation might draw. These national statements would have to have appeared in a public source published by relevant national bodies. If such public statements are not available, the evaluation may consider whether the partners have been involved in relevant activities which would help identify national priorities for research.

In terms of assessing outputs and the products of CARTA activities, we will examine both the forms and quality of outputs. Assessing them against “international standards” will require the identification and application of such standards; once again something that may have been explicitly stated by CARTA (one reference point) as well as other literature which provides standards against which CARTA products can be determined will be required. The latter process has begun by the evaluation team.

2.5. EFFECTIVENESS OF THE CARTA PROGRAMME

Effectiveness shall be seen primarily as a basis for understanding the *comparative advantage* of CARTA in the broader context to other alternatives for higher education in sub-Saharan Africa.

- To what extent has the CARTA program been significant to the development of universities in sub-Saharan Africa? Furthermore, to what extent has CARTA contributed to the *leadership/ supervision* of PhD students and *research management* at the participating universities?
- What are the outcomes and impacts of the program, including intended and unintended, positive and negative outcomes and impacts, results framework and non-results framework elements? Why and how did positive/negative results happen?

Reflections and recommendations from the evaluation team:

The reporting reviewed thus far focuses on training inputs. Even if the evaluation may not be able to measure specific outcomes, the extent to which CARTA can effectively engage in the inevitably local processes leading to eventual outcomes will be re-

viewed.

It will be important to frame the analysis pertaining to supervision within a comparison with the counterfactual of what PhD education from these institutes looks like without CARTA. How does supervision differ? One CARTA Evaluation Report notes “The challenge of accommodating fellows with diverse levels of skills and experience within the context of a single programme”⁸, which begs the question of whether this is best addressed through a large multicountry initiative or locally through direct support to African institutes. Perhaps the added value of CARTA in this regard is actually more long-term as the Fellows return and provide this tailored support after their education.

Supervision has been a particular challenge and CARTA’s ability to improve supervision may not be only about the human resource capacities but also about organisational structures/incentives and institutional commitments to provide better supervision. Although it is relatively clear what CARTA can contribute in terms of human resource capacities, it is less clear what CARTA can do to create sustainable incentives for supervision within the partner institutes. Indeed, different partners will have different approaches and there is unlikely to be a single desirable approach. However, the evaluation will seek to assess evidence of added value to the supervisory process, both how partner universities and institutes have changed their approaches and the extent to which new practices are shared among the partners. A question will be whether CARTA partners have promoted innovations, and if so is the CARTA network able to identify and share such experiences?

From the reporting it has not been possible to gain a clear overview of the impact of CARTA on the “research culture”. The evaluation will need to explore this at various levels. The most important is of course the extent to which critical thinking has been fostered among the fellows. The evaluation will also look at the extent to which this is reflecting in the supervision, curricula and teaching methods (in the JAS). Participant views will be assessed along with documentation of sharing of good practice, innovations and critique. To what extent have partners established mechanisms through which research students can share their own concerns and can elicit feedback on their research? Have they benefited from sharing insights? Have their partners established mechanisms such as regular student meetings and conferences through

⁸ CARTA Evaluation Report Year 4

which students in training can share concerns, address skills gaps, and critique constructively the work of others?

Other entry points for influencing the research culture, such as the Vice Chancellors' Forum and links to dynamic regional initiatives will be assessed. The evaluation team recognises that research culture primarily exists within the individual members and indeed the fellows themselves, and therefore it is important to reflect on the extent to which CARTA can influence this as part of the 'proof of concept'. The evaluation team will assess how the fellows perceive CARTA's contributions to enhancing their commitments to research, publishing and scientific inquiry more generally. Naturally this will be affected by the incentives for a culture of research at their home institutions, and it is hoped that they will be able to describe the extent to which CARTA may have influenced this as well.

2.6. COST EFFICIENCY AND DONOR RELATIONSHIPS

- List current national and international organisations/donors financing CARTA, including their current financial contribution. What is the added value of the Sida funding? What is Sida's role within the CARTA donor group? How could a more appropriate balance be achieved in donor support, and ultimately how could this lead to greater sustainability? What would happen with the different parts of the program in the case of termination of Sida support? Describe exit strategies.
- Can the cost of the CARTA program be justified by the results? Does CARTA have a unique niche in providing higher education in this form as they do, or are there other organisations/networks/consortia fulfilling similar functions? What is seen to be CARTA's unique added value in relation to other PhD programs? What is unique about CARTA in relation to other doctoral training initiatives, its unique features,
- How effective the CARTA model of partially funding students is, versus fully funding students.
- Lessons and implications providing insights on how CARTA may enhance impacts and, if deemed necessary, boost value for money.
- What relationship has CARTA program with other initiatives supported by Sida including the bilateral research capacity strengthening programs or regional programs such INDEPTH?

Reflections and recommendations from the evaluation team:

The changes that have occurred as CARTA has moved from being a programme that was overwhelmingly financed by the Wellcome Trust to one with a range of stakeholders involved, and the implications of this change, will need to be analysed. CARTA is clearly an African owned consortium, but the influence of its donors shall be recognised nonetheless.

It is noted that there are two levels of financial sustainability, those being the sustainability of CARTA itself and the capacities of the PhD fellows to raise resources and enhance the sustainability of their own institutes and research programmes.

In the reporting it is clear that CARTA has been able to leverage considerable complementary funding for both. A total of USD 16 million has been raised beyond original grants. Reporting implies that this impressive level of support may be *due to* the reputation of solidity created by reliable core funding, but may not be an eventual *replacement for* this core support. Indeed, the need for a strong and well-resourced secretariat to maintain a complex regional programme such as this is clear. For example, reporting suggests that multiple reporting requirements of other smaller donors may be generating excessive demands on existing secretariat resources. As such, issues of sustainability may be intertwined with the extent to which the CARTA structure provides a basis for efficient management.

The most obvious strategy for mitigating this risk is to diversify (core) funding. The evaluation will analyse strategies to do so, but may not be able to judge the viability of these strategies as this has much to do with uncertainties regarding future donor intentions and priorities. From the documents reviewed, the evaluation has not noted the existence of strategies to increase the share of funding from African sources and the members. The evaluation will explore further the intentions in this regard. The evaluation team will also seek to assess whether those supporting CARTA have identified specific components for funding, and if so, why; or whether they are backing the broader concept and framework. What is the add-on sought with each additional tranche of funding by additional donors?

2.7. PROPOSED REVISED EVALUATION QUESTIONS ADAPTED TO OECD/DAC CRITERIA

The evaluation team proposes that the evaluation questions above are revised and reordered to better reflect the OECD/DAC evaluation criteria and to provide a more appropriate structure for the final report. These proposals are presented below. Some questions have been edited to increase their evaluability.

2.7.1 Relevance

- What is CARTA’s emerging role in a changing context of higher education in Sub-Saharan Africa? Is the programme consistent with the needs and priorities of universities in low and middle income countries?
- How are CARTA and its services perceived by different categories of African universities and research institutes? What is the relevance of the doctoral training offered by CARTA institutes in relation to the market for PhD training and development needs and national priorities?
- What are the fundamental problem areas on a systemic level within the CARTA programme, including tensions within the network; finding performance synergies; identifying and supporting innovation, and ensuring fair/equitable access to programme benefits? How do CARTA members perceive fairness and equity?
- How is CARTA addressing gender equality in practice in terms of integration of gender equality into the programme (through Fellows, supervisors, and type of research being promoted); generating a gender aware dialogue among members; and increasing awareness and acceptance of its own gender position among members and other relevant stakeholders?
- What is seen to be CARTA’s unique added value in relation to other doctoral programmes and training initiatives? Does CARTA have a unique niche in providing higher education, or are there other organisations/networks/ consortia fulfilling similar functions? What is the particular value of a regional research structure over and above national institutional strengthening, and is this benefit being realised?
- Does CARTA have synergistic relations with other initiatives supported by Sida, including the bilateral research capacity strengthening programmes or regional programmes such as INDEPTH?

2.7.2 Effectiveness

- Does CARTA have a transparent and effective relationship with its partners that contributes to achieving intended outputs?
- What are the different levels and expressions of ownership for the work of CARTA among its members and different categories of stakeholders? How is power divided among different members of CARTA, and how is this reflected

in the structure of activities (e.g., location of the JAS and representation of students enrolled)? What proportion of programme funding goes to the CARTA member institutes?

- How does CARTA work with RBM in relation to members? Does the monitoring and evaluation approach provide an appropriate basis for RBM in the future? What progress has been made towards a single RBM structure given the demands of different donors; and has Sida played a constructive role in this regard?
- What is the quantity and quality of production of relevant scientific results by CARTA fellows in relation to international standards?
- What are the equity implications of current arrangements to support the fellows?
- Has CARTA found viable models for South-South and North-South doctoral supervision?

2.7.3 Impact (outcomes)

- What are the intended and unintended, positive and negative outcomes and impacts of the programme, and how well is this reflected in the CARTA theory of change? What are the main drivers (enablers and barriers) behind positive/negative results?
- Has CARTA generated changes in the members' and fellows' "research culture" including inherent academic practices such as critical thinking; critical exchange in, e.g., research seminars; research-based career paths; research-based teaching; and international scientific collaboration? To what extent have CARTA fellows internalised commitments to gender-aware approaches to research and to focusing on research of relevance to gender in health and development?
- To what extent has CARTA been significant to the development of universities in sub-Saharan Africa? To what extent has CARTA contributed to the leadership/ supervision of PhD students and research management at the participating universities?

2.7.4 Efficiency and sustainability (combined to reflect evaluation focus)

- What results have been achieved in the development of an enhanced institutional environment for research - academic and administrative reform; application of gender policies; and creating an environment for international research collaboration?
- Do CARTA members perceive that the benefits they receive from engaging with CARTA outweigh the transaction costs associated with networking across the continent and maintaining a secretariat?
- What elements of CARTA's approach have been adopted or are likely to be adopted in the near future by partner institutes? To what extent have member institutes adopted the CARTA quality standards?
- Do CARTA's organisational structures and management approaches provide sufficient capacity to respond to risks and change in the external environment?
- Is the CARTA secretariat a workplace that can attract and maintain quality staff over time?
- Does CARTA have an appropriate scale and scope of membership in relation to organisational efficiency and ultimate sustainability?
- What types of new relationships might contribute to a more efficient and sustainable CARTA in the future (e.g., membership fees, wealthy universities paying for their own students to be enrolled in the CARTA programme, etc.), and what does this suggest regarding changes in CARTA's relationship with its present members? In relation to the JAS, could other hosting arrangements (or even online and virtual mechanisms) reduce costs and increase effectiveness and efficiency? What could be improved in order to attain better effectiveness and sustainability and ownership of the JAS events?
- Given current national and international organisations/donors financing CARTA, including their current financial contributions, what is the added value of the Sida funding? What is Sida's role within the CARTA donor group? How could a more appropriate balance be achieved in donor support, and ultimately how could this lead to greater sustainability?
- What would happen with the different parts of the programme in the case of termination of Sida support? What are plausible exit strategies from the current very high level of dependence on international donor support?

3. Proposed Approach and Methodology

3.1 INCEPTION PHASE

The evaluation has started with an inception phase during which the available documentation has been reviewed, discussions have been held with Sida Stockholm and initial Skype interviews made with key individuals in the Nairobi secretariat. Documentation that has been made available has begun to be reviewed. The inception phase has involved gaining an overview of CARTA's overall theory of change and the extent to which existing results based management structures can contribute to the current evaluation. The inception report has been designed with an emphasis on core Sida concerns and a commitment to complementing the evaluation efforts commissioned by the Wellcome Trust. This report contains the evaluation team's initial understanding and assumptions regarding the work of CARTA and it is intended that this report can be used for reflection and dialogue before the fieldwork to correct any misconceptions and refine the focus further.

3.2 MAIN EVALUATION PHASE

After the inception phase the evaluation team will review additional documentation (a list of additional needed documents will be sent to the CARTA secretariat). Assessment will be undertaken of the research outputs:

- identification of all research outputs (peer reviewed journal articles; peer-reviewed conference presentations; acceptance of posters at conferences; other outputs)
- assessment in terms of number of publications, number of authors, institutional identity of authors, bibliometric analyses of journals, other evidence of materials being used and disseminated more widely
- examination of journals, rankings of journals, numbers of citations, numbers of references in social media

The team will make in-depth semi-structured interviews of selected CARTA members, including all focal points and selected MoB members. As much as possible these interviews will be made during a field mission to Kenya in March. Also, while in Kenya, the team leader will interview all secretariat staff and staff from Witwatersrand who are engaged in the programme. Skype interviews will be used for those who are not met while in Kenya. Interview protocols are being developed by the team.

The field mission will be undertaken by the team leader to Nairobi to coincide with the Joint Advanced Seminar and other meetings in March. The team leader proposes to visit Moi University and Ifakara Health Institute in Tanzania. Moi University has been selected due to what appears to be very high levels of engagement with CARTA

to assess the drivers behind this engagement, and in so doing this visit can therefore shed light on CARTA's 'potential'. Ifakara Health Institute also has received considerable support from CARTA, and if time allows, a short visit will be made to the University of Dar es Salaam. The team would welcome feedback from Sida and CARTA regarding these two options.

Subsequent data collection will include Skype interviews and further document reviews for in-depth analysis of a limited sample of institutes. With regard to CARTA members, the analysis will focus on three additional university partners. It is proposed that Makerere University be selected as an example of a very strong institution with a range of other similar programmes and consortia (and which has received other Sida support). The University of Ibadan will be analysed to bring in West African perspectives and as an institution that has proactively raised resources for CARTA. The University of Malawi is proposed as a third university partner due to its apparent high level of engagement with CARTA. Two Northern partners will be analysed. The University of Warwick has been selected due to their engagement in discussions on the role of the Northern partners. The Sahlgrenska Academy at the University of Gothenburg will be another focus university due to their high level of engagement and in order to gain a perspective on CARTA with respect to other Swedish support to research and higher education in public health.

In interviews with doctoral fellows and other university staff receiving training, the team will apply a Most Significant Change methodology. This will be used to bring out if and how the support from CARTA has led to significant outcomes (including trends and obstacles that may influence future outcomes) regarding the management and organisational performance of the institutes receiving support from CARTA. Participants will be asked to describe how and in what ways the programme has made a difference to their own research and / or that of their universities and institutes, as well as to creating a 'culture of critique', necessary for an effective research programme. The changes reported will be analysed in relation to national priorities and the intentions of CARTA itself, e.g., in relation to gender equality. The programme is perhaps too new to have had significant impacts on the careers of the PhD fellows that have received support, but it is hoped that in exploring the changes underway in their careers, it will be possible to obtain a clear picture of the contribution of CARTA and the relevance of CARTA support in relation to the overall capacity development processes underway in their research institutes.

Before leaving Kenya the team leader will present initial findings at a verification seminar. Additional Skype interviews will be undertaken after the field mission to address unresolved issues. A draft evaluation report will be submitted on May 5.

3.3 LIMITATIONS

Given the brief period of time that CARTA has existed and in light of the other initiatives underway that influence institutional development among CARTA members, the evaluation team is very conscious that attribution of developments to CARTA will need to be treated carefully. The strong focus of this evaluation on relevance and sustainability is interpreted as implying that it will be important to both acknowledge and explore what may ultimately be a limited role for a regional initiative such as this within change processes underway within individual research institutes. The evaluation may assist in identifying various forms of contribution and added value while being clear that these are not entirely the result of / attributable to CARTA itself.

The high level of turnover of staff within the participating member institutes and in the CARTA secretariat is likely to create limitations where institutional memory is lacking. The team will actively seek out former staff for interviews, but it is recognised that this may be difficult.

Member reporting thus far received is highly varied in terms of formats and even in the interpretation of the formats used. The non-commensurate nature of this data means that these findings probably cannot be aggregated in a structured and rigorous manner. They do, however, provide many rich examples of outcomes. Even where these reports are drafted with a more rudimentary activity focus, this may be indicative of CARTA's actual role (as a provider of inputs, rather than as a partner in achieving outcomes). The interviews will be used to analyse if this initial impression can be confirmed.

Some of the evaluation questions, particularly those related to sustainability, may require somewhat speculative responses regarding the likelihood of different future funding trajectories. The evaluation team will respond to these questions drawing on the overall findings regarding ownership and commitments to CARTA, but the extent to which these findings can be empirically verified may be limited.

3.4 ROLES OF THE EVALUATION TEAM

The evaluation team will divide responsibilities in the following manner:

The team leader, Dr. Ian Christoplos, will ensure that the structure and approach of the evaluation reflects Swedish policies for development research and norms for capacity development outcomes. He will undertake the field mission and analyse the organisational and efficiency aspects of CARTA and will obtain an overview of the effectiveness of the structure and functions and donor coordination.

The public health specialist, Professor Anthony Zwi, will undertake Skype interviews with senior researchers and PhD students to assess the quality of the support received and their assessment of relevance and quality of outputs. He will independently undertake an assessment of the research outputs (quality of publications and journals in which they have appeared; available bibliometric data re citations relative to other contributions to same journals; identification of materials being taken up through social media and other mechanisms to stimulate debate), and will follow up the review of the CARTA supported outputs with interviews of the fellows to determine the quality of their work and above all the outcomes of the support received in developing their careers as young researchers.

A junior consultant, Ms Lily Salloum Lidegaard (currently a PhD student at Copenhagen University), will assist with the organization of interviews and collation of data.

3.5 INTENDED INTERVIEWEES

PhD fellows

Supervisors

Other staff who have received training

Focal points at each institution

Northern supervisors/mentors

JAS facilitation team members

Board of Management

Vice Chancellors Forum

Secretariat staff (including former staff)

Leadership of APHRC

Northern Partners Coordinator (formerly Warwick, now Gothenburg)

Leader of Consortium of CARTA Librarians at College of Medicine, Ibadan

Person responsible for ICT Help Desk at Moi University

Representatives of related and collaborating institutes (e.g., THRiVE)

RAND Europe Learning and Evaluation team

Wellcome Trust

Other current and potential donors

EVALUATION MATRIX

Questions raised in ToRs	Indicators to be used in Evaluation	Methods	Sources	Availability and Reliability of Data /comments
Relevance				
<p>What is CARTA's emerging role in a changing context of higher education in Sub-Saharan Africa?</p> <p>Is the programme consistent with the needs and priorities of universities in low and middle income countries?</p>	<p>-Comparison of CARTA goals/focus with needs and priorities as described in relevant Swedish policies</p> <p>-Assessment of CARTA areas of focus and outputs against national and regional statements of research priorities</p>	<p>Document review</p>	<p>-CARTA results framework</p> <p>-Swedish policies</p> <p>-Reviews of higher education and public health situation in Sub-Saharan Africa</p> <p>- African national and regional statements of research priorities</p>	<p>-Identifying African statements of priority will be done through inviting CARTA to identify relevant national documents against which they might be assessed; the evaluation team may also identify national statements (to be checked against, for example, COHRED, ESSENCE, Global Forum for Health Research, and Alliance for Health Policy and Systems Research)</p>
<p>How are CARTA and its services perceived by different categories of African universities and research institutes? What is the relevance of the doctoral training offered by CARTA institutes in relation to the market for PhD training and development needs and national priorities?</p>	<p>-Perceived alignment between CARTA goals and services and member/fellow needs</p> <p>-Career progress of CARTA fellows</p>	<p>-In-depth interviews focused on Most Significant Change</p> <p>-Review of minutes of relevant meetings</p> <p>-Review of CARTA career tracking</p>	<p>-Fellows</p> <p>-Other staff receiving training</p> <p>-Focal points</p> <p>-MoB members</p> <p>-Minutes of relevant meetings</p> <p>-CARTA career tracking data</p>	<p>-It is expected that there will be significant variations between different types of member institutes and data will be disaggregated accordingly</p> <p>-Given the short time that CARTA has existed the evidence from career tracking is likely to only be indicative</p>

		<ul style="list-style-type: none"> data -M&E reporting 	<ul style="list-style-type: none"> -CARTA M&E reporting -RAND evaluation reports 	
<p>What are the fundamental problem areas on a systemic level within the CARTA programme, including tensions within the network; finding performance synergies; identifying and supporting innovation, and ensuring fair/equitable access to programme benefits? How do CARTA members perceive fairness and equity?</p>	<ul style="list-style-type: none"> -Examples of synergetic/dysfunctional relations and perceived contributing factors -Distribution of resources among CARTA members 	<ul style="list-style-type: none"> -In-depth interviews -Review of financial reporting -Examples drawn from M&E reporting-RR -Review of routine reports submitted by fellows 	<ul style="list-style-type: none"> -Fellows -Supervisors -Other staff receiving training -Focal points -MoB members CARTA secretariat staff -CARTA M&E reporting -RAND evaluation reports 	<ul style="list-style-type: none"> -Data may be anecdotal, so generalisations will be treated with caution -Individual stories of achievement (or frustration at lack of achievement) will be identified and cited as appropriate
<p>How is CARTA addressing gender equality in practice in terms of integration of gender equality into the programme (through Fellows, supervisors, and type of research being promoted); generating a gender aware dialogue among members; and increasing awareness and acceptance of its own gender position among members and other relevant stakeholders?</p>	<ul style="list-style-type: none"> -Gender balance among doctoral fellows and others receiving training -Examples of dialogue efforts -Perceived relevance of CARTA gender efforts among fellows and university leadership 	<ul style="list-style-type: none"> -Document review -In-depth interviews focused on Most Significant Change 	<ul style="list-style-type: none"> -Minutes and meeting reports -Fellows and other key stakeholders -CARTA secretariat staff 	<ul style="list-style-type: none"> -Special attention will be given to assessing outcomes (i.e., not just numbers of trainees); but data on outcomes may be anecdotal, so generalisations will be treated with caution

	-Prevalence of gender issues within research foci of fellows and institutions			
What is seen to be CARTA's unique added value in relation to other doctoral programmes and training initiatives? Does CARTA have a unique niche in providing higher education, or are there other organisations/networks/consortia fulfilling similar functions? What is the particular value of a regional research structure over and above national institutional strengthening, and is this benefit being realised?	-Examples of added value – where has CARTA made a difference to existing institutional activities and initiatives -Perceptions of CARTA's role in relation to other initiatives	-In-depth interviews -Modest mapping of other initiatives based on 'snowball method' (examples noted by interviewees) -RAND evaluation reports	-Fellows and other key stakeholders -Internet-based mapping -RAND evaluation reports	-The mapping of other initiatives will have a modest scope and will therefore be indicative rather than comprehensive
Does CARTA have synergetic relations with other initiatives supported by Sida, including the bilateral research capacity strengthening programmes or regional programmes such as INDEPTH?	-Examples provided by fellows and Swedish partners	-In-depth interviews -Interviews with supervisors	-Fellows -Swedish partners -CARTA secretariat staff	-Some researchers may not be aware of Sida support to the programmes that they collaborate with and therefore data may miss some examples; therefore Sida will be asked to provide examples of initiatives to explore
Impact				
What are the intended and unintended, positive and negative outcomes	-Comparison of examples of outcomes with	-Document review -In-depth inter-	-CARTA M&E reporting -RAND evaluation reports	-It is expected that there will be significant variations between different

and impacts of the programme, and how well is this reflected in the CARTA theory of change? What are the main drivers (enablers and barriers) behind positive/negative results	the theory of change (as described in the logframe and other relevant documents) -Perceptions of drivers by fellows and other key stakeholders	views focused on Most Significant Change -Review of CARTA M&E reporting -Review of RAND evaluation reports - Regular reports submitted by fellows	-Fellows and other key stakeholders Focal points -CARTA M&E reporting -RAND evaluation reports	types of member institutes and data will be disaggregated accordingly -Given the short time that CARTA has existed the evidence regarding outcomes and impacts is likely to only be indicative
Has CARTA generated changes in the members' and fellows' "research culture" including inherent academic practices such as critical thinking; critical exchange in, e.g., research seminars; research-based career paths; research-based teaching; and international scientific collaboration? To what extent have CARTA fellows internalised commitments to gender aware approaches to research and to focusing on research of relevance to gender in health and development?	-Examples of changes in the "research culture" -Examples of changes in curricula and teaching methods in member institutes (diffusion of innovations from the JAS) -Number of publications applying an explicit gender perspective	-Review of curricula -Review of publications -In-depth interviews focused on Most Significant Change -Review of meeting and seminar reports	-JAS and member curricula -Publications -Fellows -Meeting and seminar documentation -CARTA M&E reporting -RAND evaluation reports	-Given the short time that CARTA has existed the evidence regarding these types of outcomes is likely to only be indicative -Assessment of journal materials is somewhat subjective but best available rankings of journals will be used along with citation counts and evidence of discussion through social and other media
To what extent has CARTA been significant to the development of	-Statements from Vice Chancellors and other	-In-depth interviews focused on	-MoB and vice chancellors	-In answering this question the evaluation team will focus on plausible

<p>universities in sub-Saharan Africa? To what extent has CARTA contributed to the leadership/ supervision of PhD students and research management at the participating universities?</p>	<p>African university leaders recognising CARTA's role -Examples from fellows</p>	<p>Most Significant Change -Review of meeting minutes -Review of CARTA M&E reporting -Regular reports submitted by Fellows -Review of RAND evaluation reports</p>	<p>-Fellows -Focal points -Meeting and seminar documentation -CARTA M&E reporting -RAND evaluation reports</p>	<p>contribution rather than actual attribution</p>
<p>Effectiveness</p>				
<p>Does CARTA have a transparent and effective relationship with its partners that contributes to achieving intended outputs?</p>	<p>-Example of effective/dysfunctional information flows -Perceived quality of relations by focal points and fellows</p>	<p>-In-depth interviews -Review of MoB meeting minutes</p>	<p>-Focal points -Fellows -CARTA secretariat staff -Meeting minutes -Survey data</p>	<p>-Identifying attribution is difficult; some assessment of contribution may however be possible</p>
<p>What are the different levels and expressions of ownership for the work of CARTA among its members and different categories of stakeholders? How is power divided among different members of CARTA, and how is this reflected in the structure of activities (e.g., location</p>	<p>-Diffusion and adoption of CARTA methods and curricula among members -Perceptions of power relation -Distribution of resources</p>	<p>-In-depth interviews focused on Most Significant Change -Review of financial reporting Review of MoB meeting minutes</p>	<p>-Fellows -Focal points -CARTA secretariat staff -MoB meeting minutes</p>	<p>-It is expected here that the data will reveal different categories of adopters which can be attributed to differing types and levels of ownership</p>

<p>of the JAS and representation of students enrolled)? What proportion of programme funding goes to the CARTA member institutes?</p>				
<p>How does CARTA work with RBM in relation to members? Does the monitoring and evaluation approach provide an appropriate basis for RBM in the future? What progress has been made towards a single RBM structure given the demands of different donors; and has Sida played a constructive role in this regard?</p>	<ul style="list-style-type: none"> -Quality and consistency of M&E reporting -Extent to which CARTA has developed an M&E system that meets its own learning needs -Extent of donor harmonisation of reporting demands -Extent to which members perceive that the M&E system contributes to their own learning needs 	<ul style="list-style-type: none"> -Document review -Comparison of expectations regarding RBM from different stakeholders 	<ul style="list-style-type: none"> -M&E reporting -Logical frameworks and other results frameworks 	
<p>What is the quantity and quality of production of relevant scientific results by CARTA fellows in relation to international standards?</p>	<ul style="list-style-type: none"> -Documentation of publications, presentations, and public contributions made by research fellows- number of publications 	<ul style="list-style-type: none"> -Document reviews -Counts and analyses of articles published and related media and social media de- 	<ul style="list-style-type: none"> -Fellows -Supervisors -Institutes 	<ul style="list-style-type: none"> -Assessments of quality of published output may be disputable given different measures of quality -Assessing influence and examining citation counts is very difficult in early stage post-publication; influ-

	<p>and site of publication – as assessed through bibliometric and other citation analyses -identification by each Fellow of most significant publication and why; what contribution has been made, what role has Fellow played, who else contributed, etc.</p>	<p>bates -Reporting by Fellows and institutes Most significant change</p>		<p>ence will be revealed some time later</p>
<p>What are the equity implications of current arrangements to support the fellows?</p>	<p>-Perceptions by fellows of advantages and disadvantages of current system -Perceptions by focal points of advantages and disadvantages of current system -Perceptions by university leadership of advantages and disadvantages of current system</p>	<p>-In-depth interviews focused on Most Significant Change -Interviews with university leaders</p>	<p>-Fellows -Focal points -University leaders</p>	
<p>Has CARTA found viable models</p>	<p>-Comparison of CAR-</p>	<p>-Document reviews</p>	<p>-Fellows</p>	<p>-Collaboration on papers does not</p>

<p>for South-South and North-South doctoral supervision?</p>	<p>TA model with other possible models as identified through the literature against other literature on PhD program support systems -Extent of collaboration between institutions</p>	<p>e.g. assessment of authorship of published papers to identify south-south and south-north collaboration -Reports of fellows -Institutional reports -Most significant change</p>	<p>-Focal points -University leadership -Supervisors</p>	<p>automatically reflect good practice and equitable relationships; may reflect unequal power relations. However, along with commentary from Fellows regarding these matters a more accurate assessment can be made</p>
<p>Sustainability and efficiency</p>				
<p>What results have been achieved in the development of an enhanced institutional environment for research - academic and administrative reform; application of gender policies; and creating an environment for international research collaboration?</p>	<p>-Extent to which CARTA approaches and models have been adopted/adapted to member institution institutional structures -Extent to which gender equality norms are reflected in member institutional structures</p>	<p>-In-depth interviews focused on Most Significant Change</p>	<p>-Fellows -Focal points</p>	<p>-Given the short time that CARTA has existed the evidence regarding these types of outcomes is likely to only be indicative</p>
<p>Do CARTA members perceive that the benefits they receive from engaging with CARTA outweigh the transaction costs associated with</p>	<p>-Perceptions by focal points of manageability of transaction costs in the CARTA struc-</p>	<p>-In-depth interviews</p>	<p>-Focal points -University leadership -Secretariat</p>	

<p>networking across the continent and maintaining a secretariat?</p>	<p>ture -Perceptions by university leadership of manageability of transaction costs in the CARTA structure -Perceptions by CARTA secretariat of manageability of transaction costs in the CARTA structure</p>			
<p>What elements of CARTA’s approach have been adopted or are likely to be adopted in the near future by partner institutes? To what extent have member institutes adopted the CARTA quality standards?</p>	<p>- Examples/ categories of CARTA approaches and models that have been adopted/adapted to member institution institutional structures</p>			
<p>Do CARTA’s organisational structure and management approaches provide sufficient capacity to respond to risks and change in the external environment?</p>	<p>-Examples of CARTA secretariat responses to perceived risks and changes</p>	<p>-Interviews with secretariat staff</p>	<p>-Secretariat staff</p>	
<p>Is the CARTA secretariat a workplace that can attract and maintain</p>	<p>-Turnover and length of time that key staff</p>	<p>-Review of CARTA record</p>	<p>-Employment records -Current and past staff</p>	<p>-Some of the incentives for staff retention are related to the broader</p>

quality staff overtime?	have been retained -Perceptions of staff regarding the advantages and disadvantages of working at CARTA	-Interviews with current and past secretariat staff		employment market in Kenya and indeed for Africa (for senior posts) and it is beyond the scope of this evaluation to assess this
Does CARTA have an appropriate scale and scope of members in relation to organisational efficiency and ultimate sustainability?	-Ability of secretariat to manage tasks -MoB and secretariat perceptions of the advantages and disadvantages of scaling up	-Interviews with secretariat staff -Interviews with MoB	-Secretariat staff -MoB	-It will not be possible to make a fully objective assessment of this issue and findings may be somewhat speculative -This question will likely be addressed in the conclusions, drawing on a synthesis of overall findings
What types of new relationships might contribute to a more efficient and sustainable CARTA in the future (e.g., membership fees, wealthy universities paying for their own students to be enrolled in the CARTA programme, etc.), and what does this suggest regarding changes in CARTA's relationship with its present members? In relation to the JAS, could other hosting arrangements reduce costs and increase effectiveness and efficiency? What could be improved in order to attain better	-Perceived obstacles, opportunities and risks in current system as compared to other modalities	-Interviews regarding comparisons with how similar functions have been managed elsewhere in African regional programmes	-Various stakeholders	-It will not be possible to make a fully objective assessment of this issue and findings may be somewhat speculative -The validity of benchmarks for comparisons may be difficult to confirm -This question will likely be addressed in the conclusions and recommendations, drawing on a synthesis of overall findings

effectiveness and sustainability and ownership of the JAS events?				
Given current national and international organisations/donors financing CARTA, including their current financial contributions, what is the added value of the Sida funding? What is Sida’s role within the CARTA donor group? How could a more appropriate balance be achieved in donor support, and ultimately how could this lead to greater sustainability?	<ul style="list-style-type: none"> -Current and future projections of income and expenditure -Trends in CARTA financing compared to other regional doctoral programmes -in Africa 	<ul style="list-style-type: none"> -Budgetary analysis -Interviews on views of current and prospective donors and MoB 	<ul style="list-style-type: none"> -Financial reporting -Donors -MoB 	<ul style="list-style-type: none"> -The future trends in both aid and domestic financing of programmes such as this are difficult to predict, and findings may be somewhat speculative -This question will likely be addressed in the conclusions and recommendations, drawing on a synthesis of overall findings
What would happen with the different parts of the programme in the case of termination of Sida support? What are plausible exit strategies from the current very high level of dependence on international donor support?	<ul style="list-style-type: none"> -Quality and realism of CARTA risk management and exit strategies -Expressions of readiness to assume funding responsibilities by African partners 	<ul style="list-style-type: none"> -Document review -Interviews with MoB and university leaders 	<ul style="list-style-type: none"> -Documentation describing exit and risk management strategies -MoB -University leaders 	<ul style="list-style-type: none"> -The future trends in both aid and domestic financing of programmes such as this are difficult to predict, and findings may be somewhat speculative -This question will likely be addressed in the conclusions and recommendations, drawing on a synthesis of overall findings

Annex three: Persons interviewed

Name	Institutional Affiliation
Secretariat	
1. Alex Ezeh	APHRC
2. Joseph Muchiru	APHRC
3. Chima Izugbara	APHRC
4. Thomas Yebei	APHRC
5. Peter Ngure	APHRC
6. Daniel Adero	APHRC
7. Mercy Ndana Machiya (former)	APHRC
Fellows	
8. C2 Adebajajo Adewumi Adeyemo	University of Ibadan
9. C2 Austin Mthetiwa	University of Malawi
10. C2 Linda Nyondo	University of Malawi
11. C2 Stephen Wandera	Makerere University
12. C2 Scovia Mbalinda	Makerere University
13. C2 Oluwatoba Olufunke	University of Ibadan
14. C4 Irene Moshi	Ifakara Health Institute
15. C5 Falusho Balugon	University of Ibadan
16. C5 Maria Chipkalipo	University of Malawi
17. C5 Taiwo Obembe	University of Ibadan
18. C5 Oyewali Morakinyo	University of Ibadan
19. C5 Gift Khanyamwa	University of Malawi
20. C5 Jepchirchir Kiplagat	TBD
21. C5 Emmanuel Kaindoa	Ifakara Health Institute
22. Moi Fellows	Moi University
Facilitators	
23. Anne Katahoire	Makerere University
24. Catherine Kyobutungi	APHRC
25. Charles Opolot-Okurut	Makerere University
26. Diana Mawindo Chitembe	University of Malawi
27. Donald Cole	University of Toronto
28. Göran Bondjers	Sahlgrenska
29. James Carey	UC Davis

30. John Eyers	Formerly London School of Hygiene and Tropical Medicine (Librarian) now consultant/advisor
31. Klas-Göran Sahlen	Umeå Univ
32. Prof. Bev Kramer	Wits
33. Prof. Rob Drennan	Wits
34. Dr Agnieszka M Ignatowicz	Warwick Medical School
35. Prof Oladapo Olayemi	University of Ibadan
BoM members	
36. Anne Nangulu	Moi University
37. Alex Mumbo	
38. Adamson Muula	University of Malawi
39. Sharon Fonn	Wits
Focal Point	
40. Anne Nangulu	Moi University
41. Adamson Muula	Makerere University
42. Dr. Rose Nathan	Ifakara Health Institute
43. Dr. Kafuruki Shubis	Ifakara Health Institute
44. Moi CARTA Committee	Moi University
Supervisors	
45. Walter Mwanda	University of Nairobi
46. Olugah Onour	University of Nairobi
47. Ndeti Ndati	University of Nairobi
48. Donald Cole	University of Toronto
49. Dr. Mwifadhi Mrisho	Ifakara Health Institute
50. Dr. Samson Kiware	Ifakara Health Institute
51. Dr. Zacharia Mtema	Ifakara Health Institute
52. Dr Fredros	Ifakara Health Institute
53. Moi Supervisor	Moi University
Members' Trained Staff	
54. Catherine Ringo (finance)	Ifakara Health Institute
55. Emmanuel Mwakajinga (IT)	Ifakara Health Institute
56. Priscila Mlay (Admin)	Ifakara Health Institute
57. Moi staff (admin and others)	Moi University
Other	
58. Andrea Johnson	Carnegie Corporation
59. James Kiplimo	APHRC

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Annex five: Interview templates

Interview guide for Board of Management, Vice Chancellors Forum, other university leaders

Name:

Institution:

Date:

Location:

How are CARTA and its services generally perceived by other institutions in Africa?

Do you feel that CARTA research is relevant to priorities of governments and the African public health research community?

Does CARTA have unique added values in this regard?

Do you perceive there to be tensions on a systemic level within CARTA, e.g., between different regions, between stronger/wealthier and weaker/poorer institutions, between institutions with a range of donors and those largely dependent on CARTA?

Does CARTA operate in a manner that is fair and equitable in relation to its members?

Has CARTA been influential in enhancing the quality of PhD supervision in Africa? If so, how?

Do you feel that CARTA has found viable models for North-South and South-South doctoral supervision?

Do you feel that the benefits from the CARTA model outweigh the transaction costs of a regional approach given the differences in members, costs of maintaining a secretariat, etc.?

Does CARTA have an appropriate scope and scale of membership in terms of organizational efficiency and ultimate sustainability?

What do you see as CARTA's strategy for sustainability, particularly with regard to obtaining financing commitments from middle-income African countries?

To what extent has CARTA had significant influence on the overall structure and quality of public health research in Africa? Can you give examples?

Interview guide for Secretariat staff (including former staff)

Name:

Institution:

Date:

Location:

Please describe your history with CARTA and how it fits with your own career and aspirations.

Please explain a little about the relations between CARTA and APHRC

Please explain a little about the division of roles between APHRC and Wits

What are the CARTA outcomes that you find most important?

Has CARTA achieved outcomes that were not expected at the outset?

What aspects of working with CARTA do you find most rewarding?

What aspects of working at CARTA do you find most frustrating?

If you are a former staff member, why did you leave?

Do you feel that there are ways to develop your career at CARTA through new skills, engagements, etc.?

What tensions exist among the CARTA members in working as a network? What can you do to manage such tensions?

Have there been any tensions regarding the location of the JAS or the distribution of benefits regionally or between wealthier and poorer countries/institutions?

Are you able to find and promote synergies among the members when they are interacting with one another?

How do you work to ensure transparency and equity among the CARTA members in their interactions with the secretariat?

Do you feel that the current number of members is appropriate for optimally efficient and effective management by the secretariat? Would it be better with more or fewer members?

Do you actively encourage a stronger perspective on gender equality within CARTA? If so how, and are your efforts effective? What are the main indicators of success in this regard?

Have you been involved in linking CARTA to any other Swedish supported initiatives?

How do you perceive the ownership among the CARTA members regarding the innovations that are introduced regarding a research culture, supervision, gender equality, etc.?

Sida is strongly committed to harmonized donor reporting. Do you think that this can be achieved with CARTA's current donors or would the others demand individual reporting even if there was one overall CARTA report each year?

What reporting do you provide for CARTA members? Are there other ways that the secretariat ensures accountability to the membership?

How do you judge the current state of the CARTA M&E system, including the reporting from the members? Capacity to trace alumni? Addressing CARTA's own learning needs with accountability to the members and donors?

What are the roles of the Vice Chancellors Forum, The Patrons?

Do you feel the BoM functions well? Are the members proactive? Do they provide accountability to the broader membership?

Do you feel that CARTA's structures enable you to respond to changes and surprises that arise, or do donor demands or administrative procedures limit your flexibility? Can you give examples?

Interview guide for supervisors, other staff who have received training and focal points at each institution

Name:

Institution:

Date:

Location:

Has CARTA been able to support your work through providing new insights, innovations and other assistance from the overall network?

What has enabled this and what obstacles have been encountered?

Has CARTA influenced the practices at your institution in relation to gender equality in human resource management and in research priorities? If so, how?

What have been the positive and negative impacts of CARTA on your work as individuals and your organisations? Have any unintended positive impacts arisen?

Has CARTA influenced the overall research culture at your institution in relation to critical thinking, exchange, stronger research-based career paths, etc.? If so how?

What other results have been achieved in terms of innovations, administrative reform, greater gender equality or other aspects of the work of your institute?

How does the CARTA secretariat report to your institution? Is this sufficient? Are there other ways that the secretariat is accountable to its member institutions?

Does CARTA have a transparent and equitable relationship with your institution?

What are the equity implications of current structures for support to fellows?

Is there ownership within your institution for the changes promoted by CARTA in relation to supervision, gender equality, etc.? How does that manifest itself?

How do you see the quality and quantity of research produced by CARTA in relation to international standards?

Have the North-South and South-South supervision arrangements been appropriate and effective?

Do you feel that the benefits of the regional approach outweigh the transaction costs (in comparison to other forms of bilateral support to your institution)?

How has CARTA influenced the overall landscape of public health research in Africa?

Interview guide for Northern supervisors/mentors and JAS facilitation team members

Name:

Institution:

Date:

Location:

What is your relation to CARTA and how did it arise?

Do you feel that the arrangements for North-South and South-South supervision are appropriate and viable for the future? Do you have suggestion on how they could be improved?

Do you feel that the JAS approach makes a unique and important contribution to research in Africa? Can you give examples?

What are the pros and cons of the CARTA regional model in comparison with bilateral cooperation arrangements?

How do you judge the quality and quantity of CARTA research outputs in relation to international standards?

What are the implications of the heterogeneity among CARTA members in terms of ability to support fellows, pre-existing knowledge of research fellows, etc., in terms of being able to provide effective and equitable support?

Have you been involved in linking CARTA as a network or the individual members to other Swedish supported initiatives? If so, explain.

What drives your motivation for engaging with CARTA? Do you expect to maintain your current level of engagement in the future?

Interview guide for PhD fellows (most questions primarily relevant for first cohort, but can explore with new cohort)

Name:

Institution:

Date:

Location:

What are your general impressions of the quality of the support (supervision, JAS, and otherwise) you have received through CARTA for your studies? Can you give examples of good and bad practices?

Do you feel that the PhD training (in general and the JAS) is relevant in relation to what is required for (a) your own role as a researcher and faculty member at your home institution; and (b) the national needs and priorities in public health?

Do you experience that the CARTA network as a whole is providing you with relevant support to encourage innovative research?

Have you benefited from supervision from Northern or other African institutions and if so, how?

Do you feel that you have fair access to the benefits of CARTA in relation to other participating institutions?

Do you feel that the arrangements for the PhD training make room for equitable participation of male and female fellows? For fellows from institutions with more or less resources?

Does CARTA promote appropriate attention to research issues related to gender equality?

Has CARTA contributed to changes in your own commitments and methods in relation to gender aware research? If so, how?

How does CARTA differ from other related doctoral programmes (which ones)?

Are there added benefits for you as a doctoral fellow in being part of a regional programme as opposed to a purely national PhD programme? If so, what are these benefits?

Has your research been linked to any other Swedish supported research initiatives (e.g., INDEPTH) that you know of?

What have been the most significant outcomes of your research so far?

Have your attitudes and approaches towards critical thinking and exchange with other researchers, including scientific collaboration changed due to CARTA? Can you give examples?

Do you feel that CARTA has contributed to improving the quality of PhD supervision at your home institution? If so, how?

Is CARTA's work leading to changes in your own institution's systems for supervision, methods (adapted from the JAS), etc.?

Do you see CARTA as contributing (already or upon completion of your studies) to a better and more gender equitable environment for research, including future international collaboration? If so, how?

Interview guide for current and potential donors

Name:

Institution:

Date:

Location:

Please describe your relationship with CARTA

What were your institution's main initial reasons for supporting CARTA?

Which of these expectations have been fulfilled?

Which of these expectations have not been fulfilled?

What do you see as unique added values of the CARTA structure in relation to other regional and national programmes to support PhD research?

Can you suggest other institutions that CARTA could be compared with?

What is the added value of Swedish funding to CARTA in relation to the support they receive from other donors?

Does Sida take an appropriately proactive stance in the donor dialogue with CARTA?

What are your views about the potential of generating financial contributions from African (middle income) countries to CARTA in the future?

What is your 'exit strategy' for support to CARTA?

Annex six: CARTA fellows, cohorts 1-4

Cohort	First Name	Last Name	Gender	Nationality	Home Institution
1	Abatunde	Adedokun	Male	Nigeria	University of Ibadan
	Caroline	Sambai	Female	Kenya	Moi University
	Celine	Niwemahoro	Female	Rwanda	University of Rwanda
	Dieudonne	Uwizeye	Male	Rwanda	University of Rwanda
	Esnat Doro- thy	Chirwa	Female	Malawi	University of Malawi
	Esther	Nabakwe	Female	Kenya	Moi University
	François	Niragire	Male	Rwanda	University of Rwanda
	Fresier	Maseko	Male	Malawi	University of Malawi
	Joshua	Akinyemi	Male	Nigeria	University of Ibadan
	Kennedy	Otwombe	Male	South Africa	University of the Witwatersrand
	Steve	Kamndaya	Male	Malawi	University of Malawi
	Nicole	De Wet	Female	South Africa	University of the Witwatersrand
	Peter	Nyasulu	Male	South Africa	University of the Witwatersrand
	Rose	Opiyo	Female	Kenya	University of Nairobi
	Sulaimon	Afolabi	Male	Nigeria	Agincourt
	Sulaimon	Adedokun	Male	Nigeria	Obafemi Awolowo University
	Sunday	Adedini	Male	Nigeria	University of the Witwatersrand
	Taofeek	Awotidebe	Male	Nigeria	University of Ibadan
Victoria	Mwakalinga	Female	Tanzania	Ifakara Health Insti- tute	
Wells	Utembe	Male	Malawi	University of Malawi	
Cohort	First Name	Last Name	Gender	Nationality	Home Institution
2	Adebolajo	Adeyemo	Male	Nigeria	University of Ibadan
	Alinane	Linda	Female	Malawi	University of Malawi
	Austin	Mtethiwa	Male	Malawi	University of Malawi
	Diana	Menya	Female	Kenya	Moi University
	Evaline	Mcharo	Female	Tanzania	University of Dar es Salaam
	Francis	Fagbamigbe	Male	Nigeria	University of Ibadan

	Gabriel	Tumwine	Male	Uganda	Makerere University
	Gloria	Omosa-Manyonyi	Female	Kenya	University of Nairobi
	Herbert	Longwe	Male	Malawi	University of Malawi
	Humphrey	Shao	Male	Tanzania	Ifakara Health Institute
	John	Njenga	Male	kenya	University of Nairobi
	Mary	Obiyan	Female	Nigeria	Obafemi Awolowo University
	Mary	Oluwatoba	Female	Nigeria	University of Ibadan
	Maurice	Mutisya	Male	Kenya	African Population and Health Research Centre
	Peter	Mwamba	Male	Kenya	University of Nairobi
	Peter	Mwamtobe	Male	Malawi	University of Malawi
	Primrose	Mtshali	Female	South Africa	University of the Witwatersrand
	Sarah	Nakubulwa	Female	Uganda	Makerere University
	Scovia	Mbalinda	Female	Uganda	Makerere University
	Simbarashe	Takuva	Male	South Africa	University of the Witwatersrand
	Stephen	Wandera	Male	Uganda	Makerere University
Cohort 3	First Name	Last Name	Gender	Nationality	Home Institution
	Adesola	Sangowawa	Female	Nigeria	University of Ibadan
	Adefolarin	Olufolake	Female	Nigeria	University of Ibadan
	Thomas	Olusegun	Male	Nigeria	University of Ibadan
	Obasola	Oluwaseun	Female	Nigeria	University of Ibadan
	Charles	Kato	Male	Uganda	Makerere University
	Marjorie	Kyomuhendo-Niyitegeka	Female	Uganda	Makerere University
	Evangeline	Njiru	Female	Kenya	Moi University
	Fredrick	Okaka	Male	Kenya	Moi University
	Judith	Mangeni	Female	Kenya	Moi University
	Providence	Kiptoo-Kiptoon	Female	Kenya	Moi University
	Emmanuel	Sebahutu	Male	Rwanda	University of Rwanda
	Joel	Faronbi	Male	Nigeria	Obafemi Awolowo University
	Melvin	Agunbiade	Male	Nigeria	Obafemi Awolowo University
	Banjo	Olufunmilayo	Female	Nigeria	Obafemi Awolowo

					University
	Anitha	Anitha	Female	Tanzania	University of Dar es Salaam
	Charles	Mwale	Male	Malawi	University of Malawi
	Save	Kumwenda	Male	Malawi	University of Malawi
	Tonney	Nyirenda	Male	Malawi	University of Malawi
	Angeline	Chepchirchir	Female	Kenya	University of Nairobi
	Anne	Khisa	Female	Kenya	University of Nairobi
	Nicolette	Naidoo	Female	South Africa	University of the Witwatersrand
	Samanta	Tresha	Female	South Africa	University of the Witwatersrand
Cohort 4	First Name	Last Name	Gender	Nationality	Home Institution
	Babatunde	Adedokun	Male	Nigeria	University of Ibadan
	Caroline	Sambai	Female	Kenya	Moi University
	Celine	Niwemahoro	Female	Rwanda	University of Rwanda
	Dieudonne	Uwizeye	Male	Rwanda	University of Rwanda
	Esnat Dorothy	Chirwa	Female	Malawi	University of Malawi
	Esther	Nabakwe	Female	Kenya	Moi University
	François	Niragire	Male	Rwanda	University of Rwanda
	Fresier	Maseko	Male	Malawi	University of Malawi
	Joshua	Akinyemi	Male	Nigeria	University of Ibadan
	Kennedy	Otwombe	Male	South Africa	University of the Witwatersrand
	Steve	Kamndaya	Male	Malawi	University of Malawi
	Nicole	De Wet	Female	South Africa	University of the Witwatersrand
	Peter	Nyasulu	Male	South Africa	University of the Witwatersrand
	Rose	Opiyo	Female	Kenya	University of Nairobi
	Sulaimon	Afolabi	Male	Nigeria	Agincourt
	Sulaimon	Adedokun	Male	Nigeria	Obafemi Awolowo University
	Sunday	Adedini	Male	Nigeria	University of the Witwatersrand
	Taofeek	Awotidebe	Male	Nigeria	University of Ibadan
	Victoria	Mwakalinga	Female	Tanzania	Ifakara Health Institute
	Wells	Utembe	Male	Malawi	University of Malawi



Evaluation of the Consortium for Advanced Research Training in Africa (CARTA)

The Consortium for Advanced Research Training in Africa is a unique and effective, African-led regional doctoral programme. It represents a model that can inform other initiatives in terms of the possibilities, and also the level of human and financial investments required, to raise the quality standards of PhD education and introduce new methods of doctoral supervision and support to research. The programme has been able to mobilise strong commitments from a range of large and small African and Northern universities and research institutes in a notably equitable manner. Even if prospects for continued financing are uncertain, this programme contains lessons that should be applied in other Sida financed doctoral programmes.

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