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COMMUNICATING RESEARCH FOR UTILISATION (CRU)

Specialist Professional and Institutional Capacity Building in sub-Saharan Africa

FINAL REPORT OF THE CRU SCOPING STUDY 2010

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EXECUTIVE SUMMARY

BACKGROUND

Getting research into use is a critical factor in achieving outcomes that improve the quality of life of poor people in Africa. Effective research communicationⁱ is vital to achieve research uptake and measurement of the impact of investment in development research. Researchers are expected to be key communication intermediaries but there is very little institutional support for researchers to reach their readerships. Even well-funded researchers tend to work in relative isolation, which does not build institutional capacity. With effective institutional strategies and permanent capacity in place, universities can utilise research communication to have a significant impact on the stakeholders that influence social and economic policy and practice.

PURPOSE

This small-scale study considered the potential of a complementary approach to existing research communication initiatives in sub-Saharan Africa (SSA); a meso-level strategy to build capacity inside the institution where the researcher is employed, and to establish research communication expertise as a core competency set. It examined whether central capacity could better support researchers, better utilise the externally-funded support given on a project by project basis, enable learning from multiple projects, and make the research outputs of universities more visible, accessible, useable, cost-effective and sustainable.

SCOPE

The need, demand and potential for capacity-building was examined through:

- On-line survey responses from 35 administrators working in the central offices of 30 African universities in 11 countries, together with 23 African researchers.
- Face to face focus groups held in Tanzania, Malawi, Botswana and South Africa involving 55 individuals in 4 universities and 7 DFID research programmes.
- Interviews with 5 international funding bodies with programmes in the field.
- A feedback sessionⁱⁱ at the International Network of Research Management Societies (INORMS) conference, attended by 35 delegates from 14 countries.

KEY FINDINGS

1. **Universities are aware that stakeholders want research to be communicated effectively.** Pressure comes from donor requirements and from local and national government and continental agencies. They are being drawn into economic and social development programmes that are aligned with national and continental strategies including achieving the MDGs. They are operating in an environment in which research funding is programme driven, allocated on a competitive basis, and where potential impact has to be demonstrated.
2. **The donors interviewed reported a high and long-term involvement in institutional capacity-building,** and an increasing interest in research communication. Some have supported selected research management functions, typically the generation and management of projects and internal information repositories. Funders are supporting universities' investments in the ICT capacity, information platforms and application technologies that are important pre-requisites for research communication impact.
3. **There is evidence in universities of a willingness to improve their capabilities.** The principle of getting research into use is well established, often being included in the institutional mission statement and individual's employment contracts. Several universities have invested in the related areas of research management and research dissemination (though not research communication), from their own resources. The numbers of staff employed in relevant offices has increased in the past five years. Universities have established offices and recruited staff with specialist skills such as contract and information management, public relations and journalism. The offices that would support research communication appear well placed to promote wider change as the reporting line is directly to university's executive management.
4. **Constraints were also identified.** Not all universities have invested in support capacity, and generally it comes from a low base. Support capacity is divided between offices such as public

affairs, communications, research management and extension and there is relatively little contact between functions. With a few exceptions, the management and expert skills base within these functions is not well developed. Support units are small compared with their user-base of academic researchers and have difficulty in maintaining their profile and reputation within the university. Some units suffer from a perception among academics that ‘non-academics’ cannot assist with disseminating academic research.

CONCLUSIONS

1. An intervention to develop SSA universities as key intermediary institutions with organisational capacity in research communication would be timely, address gaps in current provision and would complement current programmes to improve the capacity of individual researchers to get research into use.
2. An intervention should be selective – focussing initially on universities with existing capacity and a suitable research profile.
3. Intervention is required at the strategic level to ensure coordination within and between central functions, and better communication between central offices and academic staff. This will include improved use of the rapidly increasing ICT capacity in universities.
4. Improving and aligning institutional capacity and professional expertise into a functional unit is critical for sustainability, to ensure the necessary visibility and accessibility to academic staff, and to help ensure that long term support is available for researchers not supported by donor programmes, especially the next generation of researchers.
5. Strong demand exists for a specialised multi-disciplinary professional qualification – for accredited courses, delivered in modularised formats to allow for in-service and distance learning modes.
6. There is great potential to add value to the DFID Research Communication Uptakeⁱⁱⁱ portfolio by establishing a special interest learning community in SSA universities.

RECOMMENDATIONS

1. **A capacity-building project of this type would require a five year intervention to ensure sustainability.**
2. **To achieve measurable and effective outcomes the intervention should build from current capacity, promote alignment and improvement of resource and investment plans and develop a professional culture at three levels:**
3. **For individuals – the design, accreditation and delivery of professional development training that within five years becomes a self-sustaining programme and a qualification that is internationally recognised.**
4. **For institutions – to enrol universities in a planned change strategy to embed research communication technical expertise and adoption of measures to monitor, evaluate, benchmark and share good practice in research communication management.**
5. **At system level – two thrusts; one to ensure that SSA universities’ improved research communication capacity is widely used by donors, governments and international agencies; another to liaise and work with sub-regional university management associations and networks to promote research communication, ‘piggy-backing’ on their regular events and activities.**
6. **The intervention should complement the many other SSA regional research capacity building initiatives being currently funded.**

The outcome should be to have permanent capacity in SSA universities to carry out research communication competently and strategically, to optimise engagement with the full range of key research users and thus increase the potential for science to have an impact on the quality of life of Africa’s people.

INTRODUCTION

The importance of research to economic and social development is well recognised. Despite this, and the significant resources that are provided from many institutions and agencies for development research, it is known that a significant proportion of the research that is available is not taken up and utilized by the users for which it is intended. In the developing country institutions where research is done, researchers face inhibitors and practical barriers to effective communication. They are expected to be a key intermediary resource to provide solutions to improve the quality of life of poor people in Africa, but there is very little institutional support for them. In the main researchers in SSA operate individualistically and in relative isolation. Whilst some funding bodies support individual research projects to communicate their work, the ability to deliver consistently varies. Without effective institutional support, research communication has limited impact and does not provide the learning experience to embed effective research communication in the wider research system.

Purpose of the study

The purpose of this study is three-fold:

- to establish, in a sample of universities in sub-Saharan Africa, the current level of awareness of the importance of maximizing the conditions for uptake of development research, using appropriate modes of communication and dissemination to inform their diverse external institutional stakeholder communities, including national agencies and international development funders;
- to establish the current and potential individual and institutional capacity in these universities to provide support to researchers planning, undertaking and communicating their research findings; and to establish the demand for strengthened capacity;
- to establish the supply and demand for academically accredited post-graduate certificate and degree courses in the theory and practice of strategic research communication and uptake planning and evaluation, and the demand for the types of modes of delivery that would be most practical and effective.

The study responds to three DFID policy decisions:

- to support and improve the systematic communication of Global Public Goods research by building and strengthening the capacity of researchers and the institutions in which they work.
- to strengthen the capacity of southern countries, institutions and researchers to lead and participate as strong partners in its research for development programmes in sub-Saharan Africa (SSA) within the Millennium Development Programme, and to influence future programme development.
- to the point made in the Working Paper on Research Communication that support is needed in three connected areas. First, to improve the incentives for researchers to communicate; second to build skills at personal and institutional levels to more effectively communicate so that the conditions for uptake by identified users of research evidence are identified, planned and optimised; and third to strengthen the capacity and demand for evidence in policy and practice.

BACKGROUND

Sub-Saharan African Research Capacity in Context

Numerous studies over the past 10–15 years^{iv} demonstrate that research capacity at formerly well-resourced and supported universities in sub-Saharan Africa (SSA) has deteriorated. The cumulative effect of years of low levels higher education support funding and the huge growth in student enrolments in higher education institutions, combined with continuing political instability in many African countries that has weakened national science systems, has created a state of affairs described as the “de-institutionalization” of science. This state has been further exacerbated by the ‘individualisation’ of research where comparatively few leading African (or

Africa-centric) northern researchers effectively operate on the periphery of universities. These projects may contribute to social and economic development, but they do relatively little to raise capacity and learning in the institution – a critical issue if African universities are to reduce their dependency on overseas funding in the long term.

There are, however, some grounds for optimism. Although Sub-Saharan Africa's share of world science, measured by papers published in the citation indexes of the Institute for Scientific Information, has declined steadily over the past decade, output in an absolute sense has remained constant. The policies of international development funders and national governments toward higher education support have started to change. Science is accepted as a strong and deep driver of innovation and development and the level of support to universities and to their research capacity is increasing, though unevenly. There are robust institutions (universities and research centres) that have survived the ruptures of political changes and economic fluctuations, where pockets of significant research are still found. There are also well-established links and networks with strong research establishment elsewhere, and initiatives by aid and donor organizations are supporting capacity-building^v. In these countries and institutions, there may now be significant potential for a programme to 're-institutionalise' research capacity.

Research Communication Activity in Context

The convergence of ICT is providing accessibility options that are easier and cheaper for a wide range of research communication initiatives to be implemented, and to have a reach and impact that has not been possible before. This provides a context where there are exciting opportunities for research institutions to breach the boundaries between science and the public it serves.

Current donor policy in Africa tends to assume that that research communication is best facilitated on a project basis between the producers of research findings and the potential users of the research, perhaps involving intermediary expertise brought in specifically for the project concerned. This approach is appropriate in some cases, but depends critically on the skills, enthusiasm and priorities of academics. In the United Kingdom there has been recognition by government that additional impetus for communication and dissemination is needed. Universities are recognized as vital intermediary institutions, and that support is a legitimate responsibility of government. This has been expressed through specific initiatives and reinforced by the funding mechanisms of the Higher Education Funding Councils in recent years.

This scoping study is based on the hypothesis that a strategy similar to the UK's could be applied in Africa. It suggests that the potential for SSA universities to be effective intermediary institutions has been under-utilised. Embedding research communication resources, capacity and expertise in universities is a holistic approach that offers the prospect of developing permanent and sustainable capabilities.

The current approach favoured by international funders operates in a less than efficient context for several reasons:

- Scope and sustainability – strategies that develop skills within individual projects and programmes and produce research outcomes that are identified only within that domain tend not to leave any impact on the wider research capacity of the institution.
- Skills and ability - academics may not possess the skills, time or interest to undertake effective communication of their research. Whilst some may be interested in learning such skills, including the use of new user-friendly technologies, and continuous review and evaluation of the outputs and outcomes of their work, others will not.
- Duplication – developing specialist skills on a project-by-project basis runs the risk of duplication in programmes and thematic subject areas, as well as between projects.
- Time lags – disseminating research findings on a project-by-project basis tends to result at best in activity that is confined to the period during and immediately following completion

of the project. The impact of the research outcomes is often difficult to validate at the conclusion of the project period, but by the time impact should be measured the project team has dispersed.

- Recognition and incentives – lack of recognition at institutional level, and lack of incentives for academics to develop the communication element of their research, have been identified as significant barriers to the accessibility of research.

ACU studies^{vi} have provided evidence that SSA universities have recognized that specialist functions are needed if their goal to be socially responsive, research-intensive institutions is to be achieved. Universities are aware that the reputation of the institution is well served by publicising research findings, and that contributing to public awareness of and access to science findings is a factor in securing future subsidies from government as well as funding from national and international funding bodies. Specialist support offices have been established in the past ten years, but with limited capacity.

The scope and titles of these offices vary but each has a focus on providing externally facing services:

- *Research Offices* – these have responsibility for helping staff to gain external funding for projects and to ensure compliance with funder requirements when the funding is secured. The offices have been drawn into the administration for compliance purposes of wider research issues such as human subjects' rights, ethics, and for recording and reporting the outcomes of research. They have responsibility for distributing internal research funds and for developing academic staff's research capacity – including supporting their academic dissemination activities. They often have responsibility for intellectual property management and any commercial licensing of research.
- *Public Relations/Communications Offices* – these have historically had responsibility for providing basic information about the university, supplemented with open days, public exhibitions and the organization of interviews with their leading scientists by journalists in the print and audio media. Some responsibility for wider dissemination of research and increasingly these offices are taking advantage of the ICT applications that allow direct interaction with audiences that are becoming available as SSA universities' access to and use of ICTs improves.
- *Extension and Community Services* – universities in SSA have a long and strong tradition of community extension work, and this is commonly one of the key performance areas in academic staff contracts. Dissemination of practical research findings represents only one element of this; extension activity is likely to involve technology transfer to communities and businesses and it might also embrace short course provision.

The critical issue to be addressed by this study is to establish whether SSA universities have the potential to develop their current distributed capacity and the weak management of their **research dissemination** activities into a strategically planned, resourced and **integrated core research communication function and capability**.

Understanding “Research Communication”

“Research Communication” is a field of knowledge in which DFID acts as a ‘thought leader’ and advocate. The DFID-funded report on Learning Lessons in Research Uptake and Use^{vii} undertaken in 2009 reviewed the communication work undertaken by DFID funded research communication intermediary projects, and the communication work being funded by other international development organisations that fund research^{viii}. In the study Tripleline Consulting (2009)^{ix} has proposed a working definition of research communication as:

“a two-way process (and related strategies and mechanisms), whereby researchers interact and communicate with potential or actual intermediate and end users of research with the aim of making research more relevant for users, and to facilitate the understanding and application of research by users.”

This definition does not specifically include the institution's role, nor does it address the key difference between research dissemination and research communication.

This study, with its emphasis on building capacity in institutions as well as individuals, has of necessity started to 'drill down' to a definition of the organizational methodologies, strategies, processes and mechanisms that must be established, implemented and managed to support researchers to carry out 'research communication for uptake and utilisation'. In our view research dissemination is only one of the elements of good research communication.

“Research Communication works with scientific research that has both a traditional focus on exploring, building and disseminating the body of knowledge in the academic domains, and a newer and wider focus on maximizing the conditions for the application of research for developmental outcomes. It has an equally important focus on ensuring the accessibility of research findings by communicating and disseminating in different ways for different categories of users, to maximize the impact of research outcomes. It takes place in a context of rapidly improving ICT capacity, accessibility and integration that provides institutions with the means to reach multiple audiences and readerships. It is a ‘whole research cycle’ model and methodology using an iterative, designed and managed process to incorporate multi-stakeholder needs and demands; producing strategies to incorporate communication, monitoring and evaluation and dissemination processes into research management.

NOTE : The term 'research communication' is used throughout this report as a 'short-hand' term that includes all the elements described in this definition.

THE STUDY

A mixed-methods approach was followed in conducting the study, combining desktop research, the analysis of existing information and data, as well as collecting corroborating data through a web-based survey and individual and focus-group interviews with key stakeholders in the region. (See the CRU Scoping Study Terms of Reference – Annexure A).

Communication with participants and other stakeholders about the purpose, progress and findings of the survey has been undertaken in a variety of modes, including using the project website www.cruonline.net throughout the study, and conducting a feedback session at the INORMS conference in Cape Town in April 2010 which was attended by thirty five delegates from 14 countries, and included a good representation from the funding bodies attending the event^x.

The structure of the on-line survey and the interviews was designed to:

- Elicit responses from universities in Kenya, Tanzania, Ruanda, Uganda, Zambia, Malawi, Mozambique, Zimbabwe, Botswana, Swaziland, Lesotho, South Africa, Namibia, Ghana, Nigeria, Cameroon, Côte d'Ivoire.
- Elicit responses from three focus group events in Tanzania, Botswana and Malawi, designed to get a deeper level of information about current and potential intentions and capacity, from university participants.
- Elicit responses from an interview with a research-intensive and mature ICT-resourced South African university that has already put some research communication management capacity in place.
- Elicit responses from interviews with key individuals in a select range of development research funding bodies.
- Elicit responses from interviews with a select number of African regional and national S&T government agencies that require universities to support their national growth strategies.

FINDINGS

The findings of the online survey, the consultations with the focus groups at universities, and the interviews with the funders are presented in detail in Annexures B - Online Survey, C – Focus Groups and D - Funders. Here we give a broad overview.

The Online Survey

The survey successfully elicited responses from 30 institutions in 11 SSA countries. Two broad respondent groups were identified; persons working in a range of university management and administrative support offices, and academics who had identified themselves as active researchers. Results from the survey can be summarised under the following headings:

Awareness and Willingness in Universities to undertake Research Communication

Answers in this section were overwhelmingly positive, which was perhaps to be expected, given that these were universities that had chosen to respond to the survey.

Seventy percent of institutions have a mission statement that referred specifically to research resources being made available to external communities and stakeholders.

Although three levels of dissemination targets were identified in the survey, responses on dissemination showed that national and local interests (83% and 78% respectively) were seen to be more important than international and global dissemination (65%). Sixty-two percent have a specific office or posts dedicated to communicating and getting research into use. There was evidence that these offices needed greater exposure on campuses, with only nine of the twenty three researchers responding knowing that such a mechanism was in place at their institution. Nonetheless, 24 institutions were able to cite specific initiatives.

Fifty-nine percent of the respondents said that research active-staff are provided with training and guidance on how to incorporate stakeholder needs and dissemination activity in designing their research projects, mainly through internally organized workshops. Interestingly, there appeared to be some moves towards investing in researcher support. Fifty-nine percent of those

responding said that the number of staff in their office had increased during the last five years. Capacity however, is relatively small – 26 of the offices have less than ten staff; 15 have less than five .

Officers appear to be politically well placed within the institution – most report directly to Vice-Chancellor, Deputy Vice-Chancellor or other senior officials. Given the political structure of many African universities, this can be regarded as a positive sign, particularly when combined with the evidence of growth above. In 40% of cases, the reporting line of the office has changed within the last five years reflecting the increasing importance of research to universities' external relations.

Most respondents recognised that research dissemination functions are a legitimate or key element in their remit. For example, 76% considered that their office either has prime or shared responsibility for the identification of university research activity that would be of potential interest to external users. Seventy-nine percent said the same of maintaining a database of research undertaken at the university, 63% of establishing or involvement in outreach and extension activities (with a further 29% saying that this was covered elsewhere in the institution). Sixty-two percent considered training and assisting researchers to present their findings to external audiences to be part of their responsibility. When asked whether such functions would be a legitimate function of their offices if further resources were available, response rates were even higher.

Current Capacity to make an Impact in Universities

Set against this relatively positive picture, there was considerable doubt whether offices currently have the appropriate resources or expertise to make the necessary impact on an institution- wide basis. 24 out of the 35 respondents in PR and communications offices reported that their staff have had little or no training in such areas. This was reinforced by the comments from researchers, who generally appeared less aware of support available in their institutions.

An interesting trend, although limited, was for central public relations and communications offices to have recruited staff with formal qualifications in marketing, communications and public relations. In research management offices, no examples of recruitment of external staff with formal qualifications in PR and communications were reported. Relatively few offices, whether research or communications, have access to specialist external resources. Only 12% have regular access to external experts such as science writers and journalists and the same proportion to media consultants. None have regular access to external 'knowledge brokers' on a although 36% reported occasional access. Twenty-two percent have regular access to external databases.

Respondents appeared to take a realistic and sober view of the current performance of their institutions .On a scale of 1-4 (4 highest), only 14% rated performance in bringing research to the general public as very strong, and only 11% said the same of identifying and bringing research findings to the attention of specific user groups such as NGOs and government departments. The weakest areas were seen as identifying and bringing research findings to the attention of the international development community, as well as to local users of developmental research where only 6% rated performance as very strong, and over 60% gave a rating of either 1 or 2. Ensuring that research activity was reported in the media was rated somewhat stronger, with 52% giving ratings of 3 or 4, and only 20% rating performance as very poor. Interestingly, 59% cited lack of internal knowledge about emerging research findings as being a key factor, suggesting a need to improve the flow of information within institutions.

Responses from researchers produced a similar pattern, but they typically regarded the performance of the institution as weak, suggesting that institutional capacity requires further promotion amongst academic staff.

When asked what factors inhibited offices from helping research staff and postgraduate students to be more effective in making their findings more accessible and useable, lack of

support staff was cited as the largest factor (77% rating 3 or 4), but interestingly this was closely followed by lack of expertise amongst the existing staff (73%) and lack of continuing professional development and further qualifications for staff (67%), suggesting that significantly more impact could be made with current resources with more training.

Respondents were also asked to give their views on which factors hindered research staff and postgraduate students from undertaking such functions themselves. Lack of knowledge of how to write up and present research findings was cited as the largest factor (73% grading 4 or 3), followed by lack of knowledge of appropriate publication modes (67%), lack of external contacts (67%), lack of incentives (64%), lack of communication and presentational skills (58%), lack of time (58%) and lack of interest (52%). Although survey respondents typically worked for central offices, 44% also rated lack of support from such offices to be a key factor by grading 4 or 3.

Researcher responses again followed a similar pattern, but were more pronounced with 68% considering that lack of support from central offices is a factor. Lack of time, lack of knowledge about publication modes and how to present findings were seen as key issues by researchers.

Priorities for Upscaling Resources and Capabilities

Respondents were asked to indicate to what extent their office should prioritise certain areas of activity if further resources were available. Several priority areas stood out. Sixty-seven percent rated more time to plan and carry out communication strategies as a high priority (4). Training for office staff in media and communication skills came closely behind (66% rating 4 and 91% rating 2 - 4). Support for direct links with NGO's, government and other users of research were closely behind, followed by the use of specific consultants to help in particular cases. Fifty five percent also rated support for database development to be a priority. This reflected the finding from focus groups that knowledge of existing research activity within the institution remained a significant barrier for some offices, and that offices needed to develop significantly higher profiles within their own institutions.

The need (and demand) for further training rated consistently highly – although not necessarily for conventional academic awards. Conventional qualifications at Masters level and post-graduate level were only cited by 40% of respondents but a stronger demand (90% of the respondents) was identified for more flexible delivery and learning modes that could be undertaken 'on the job', such as executive short courses and continuing professional development modules.

The Key Findings from the online survey

These can be summarised as follows:

- There is widespread recognition of the importance of research dissemination^{xi} per se and willingness, in principle, for offices to assume more responsibility for it.
- Offices appear politically well placed to alter institutional structures, policies and culture, reporting at high levels in the political structure.
- In recent years there has been some growth in the numbers of staff in offices that would be involved in managing research communication, although most offices remain small in overall numbers.
- A few offices have contracted staff with formal qualifications in public relations and journalism, but generally publicity and research management and administration is learned on the job.
- Demand for formal qualifications is high in both research and public relations/communications offices –especially for continuing professional development (CPD) qualifications that can be undertaken on-site, with minimal requirements for time away from work.
- There is recognition that generally universities do not perform well in getting research known and used by external stakeholders. Lack of support for academic staff from the

central university offices is cited – both by offices themselves and by academic staff - as a significant factor.

- Academic staff are personally constrained by other factors in performing research dissemination, including a lack of expertise, lack of external knowledge and contacts, lack of incentives and lack of time^{xii}.
- Services provided by central offices are not widely recognised by researchers, suggesting a lack of profile in the wider university community;
- Central offices are primarily constrained by a lack of staff and time, but also by a lack of expertise amongst existing staff, and a lack of budgets to ‘buy-in’ expensive external expertise.
- There appears to be little communication between central offices, and poor facilities to share and manage information between central offices, suggesting that universities could take a more holistic view in managing their internal systems to optimize their external relations.

Essentially, these results demonstrate a gap between intention and action. Universities overwhelmingly accept that research undertaken for external stakeholders’ benefit is an important function. They have put in place offices whose formal functions include management of external stakeholder relations and have increased their internal resource provision in recent years. Yet while there is recognition that their capabilities are still weak, the survey responses and case studies of existing activity provide evidence that much could be achieved by better use of existing resources, and relatively small scale interventions. For example, whilst the lack of central office staff capacity to manage and carry out research communication activity was cited as both the biggest issue and highest priority for further action, in each case it was followed closely by an expression of the need for more training of existing staff, indicating that specialist up-skilling is seen as a way of resolving some of the current constraints. Support for facilitation of alignment processes to improve communication and cross-functional working practices was also seen to be important.

Focus Groups

Research uptake and utilisation is an issue that provokes interest at university executive level. Each focus group event was hosted by central university management at the levels of Vice and Pro Vice-Chancellor and Divisional Director. Participants included academic faculty and departmental heads, divisional heads of research, directors of development and technology transfer units within the university, communication/publicity management and managers of communications units of research programmes attached to the universities. The range of roles held by participants allowed for diverse views to be elicited about whether and how research communication is done. At each university the dissemination of applied research findings and engagement with its stakeholder communities is a formal requirement at both individual and institutional levels, and at an SSA regional level, it is an issue that is actively on the institutional strengthening agenda of governments, academic associations and interest groups. However, optimizing the conditions for uptake and utilization through strategic research communication management as described in this study, is a new concept.

The findings of the focus groups corroborate those of the online survey but also brought into focus several issues not covered in the survey. In part the face to face format provided a better forum to discuss the difference between ‘research dissemination’ as generally understood and ‘research communication’ as defined in this study. Having representatives of DFID-funded project research communication units present was helpful as they could explain what is required to do effective research communication. There was consequently a better understanding of research communication as a process that needs planned institutional resourcing and cross-functional organizational alignment; and which is difficult for individual researchers to undertake.

It was noted that research funded by external funders with their own programmatic goals is a very important factor in supporting research activity in universities, providing additional

resources to individual researchers, but African researchers generally do not have a dominant role in conceptualizing and managing these research projects, although the results of the research are for the benefit local communities and local researchers and research workers undertake the field work and do the practical dissemination of research findings. In passing, we noted that in at least one institution, substantial work being undertaken by individual academics for DFID (albeit on a sub-contract basis) appeared to be unknown to the central research office; a small example, perhaps, of how donors can inadvertently contribute to the ‘de-institutionalisation of research’.

The Key Findings from the Focus Groups

These can be summarized as follows :

- Although the idea of research communication as defined in this study is not widely recognized, there is widespread recognition of the importance of research dissemination per se and willingness, in principle, to assume more responsibility for research communication and its management.
- The level of interest in integrating research communication into university functions is somewhat dependent on current ICT resources and research and public relations capacity, those that are currently better resourced are more eager to do so. Significantly, the process of conducting this study has itself raised interest and re-orientation of strategy formulation in at least one university.^{xiii}
- The characteristics of each university were markedly different and none represented an ‘ideal type’. However some baseline requirements were identified to be proxy measures for a research intensive university:
 - Formal research orientation - demonstrated by the research portfolio being held at VC, DVC or Pro VC level, by policies ratified by Senate and Council, a functional research management and research support office, with a staff of at least 5.
 - Formal publicity orientation – demonstrated by the publicity, communication and community engagement/extension portfolio being held at VC, DVC or Pro VC level, by policies ratified by Senate and Council, functional management and support office, with a staff of at least 5.
 - Formal community engagement orientation – demonstrated by this portfolio being held at least at Faculty level.
 - ICT infrastructure and access to bandwidth - demonstrated by ICT portfolio held at VC, DVC or Pro VC level, by a functional IT management and support office, by intranet and e-mailing facilities, and by an official website.
 - Database(s), available on the intranet, holding records of all academic publications for the past 5 years.
 - Database(s), available on the intranet, holding records of all research contracts and grants accepted in the past 5 years.
 - At least one current international development research collaboration project located at the university, either within the academic structures and/or with formal affiliated status.
- There is a perceived critical disjuncture, variable but present in each university, between the goals of academic excellence and social responsibility, experienced by all but a few researchers.
- In some universities the recognition and rewards given to researchers for ‘traditional’ academic publication, in contrast to that given to so-called ‘grey literature’ is experienced by individual researchers as having to make a choice to do one or the other. The types of dissemination that focus on optimization of the conditions for uptake and utilisation by informed and popular readerships and audiences tend to fall within the latter category, and so university resources tend to be directed toward uptake by academic readerships.
- Having research findings taken up in society is not as valued by researchers looking for individual and institution-based academic rewards, but researchers who have broken into research collaborations at the regional and international levels perceive their potential field of influence to be global, directed toward more diverse audiences and therefore wish to have

impact at this level. Institution-level recognition is given to those researchers who achieve an international reputation.

- A common finding was that at the national strategic level, each university is being drawn in as a key player in the national growth and development strategy; and in all cases the national strategy has been formally articulated to be aligned with the aims of the Millennium Development Goals.
- All the universities reported that their governments have established institutions such as national Commissions of Science and Technology, which are regulating the ways in which universities are to be articulated into the national STI systems and national economic development programmes.
- Governments are becoming strong ‘drivers’ to which universities have to respond. In most cases, governments are funding competitive, project-based research in their own right, albeit on a small scale, and are requiring that there is stronger governance, management and support for research at institutional level.
- Existing research communication management expertise in universities is limited, and tends to be located in units that rely almost entirely on external funding and specific projects. This expertise is not being shared within the institutional structures whose gradual growth is reported above.

Funders

The discussions with the funding bodies brought yet another perspective to the findings, focusing on the systemic issues that help or hinder institutional capacity-building in SSA. The discussions were informed by the DFID-funded donor study undertaken in 2009^{xiv}, but with a narrower focus, namely to establish whether donors have, intend to have, or are researching the need to have programmes that specifically support research communication and research communication capacity-strengthening at SSA universities.

There is now an appreciation among funders of the importance of supporting research dissemination and several, namely the EC, the IDRC, and increasingly the US National Institutes of Health provide some earmarked support on a project by project basis. None but DFID explicitly earmark funding for research communication, as distinct from research dissemination.

However the IDRC, in following up in their Scholarly Communication and Access to Knowledge project,^{xv} are now supporting a study at four SSA universities that will track the dispersal patterns of different types of research outputs, and the use to which they are put.

Our hypothesis that a multi-stranded approach to capacity-building is needed has been corroborated by three of the funders^{xvi}, on the basis of their evaluation of their previous programmes. These have found that:

- Capacity-building of individuals is not sufficient, there is seldom a lasting, wider impact, and it quickly dissipates when external funding is no longer available.
- The conditions for sustainability of capacity-building interventions are not present when capacity-building is determined by the duration of programmatic funding only.
- Research capacity-building should be accompanied by a concurrent governance, organizational awareness building and change process that fosters the conditions for the acceptance and embedding of the capacity-building into the core functions of the institution.
- The rollout of the process should be of sufficient duration to allow for a demonstration of how capacity can add value to the university’s ability to respond to internal and external drivers, and thus the worth of the university itself investing in permanent capacity.

CONCLUSIONS

The findings of this study demonstrate that the need and demand by individuals for professional development studies in research communication is strong; and the state of readiness and current capacity in some universities in the region has been established to be present, but unfocused.

Taken together the above elements indicate significant interest within universities to improve the impact of research by reaching and influencing external stakeholders more effectively. This appears to have been encouraged by recognition that the area is increasingly important to donors and governments, but is not only in response to external drivers, as universities want to position themselves to be influential players in national science technology and innovation systems, and global players in the research domains within which they have specialist world-class capacity.

Some investment germane to research communication is being made by universities, although from a small base, and in ways that are not yet well co-ordinated. Examples of university-led activity were found, but on the other hand, there is recognition that the effectiveness of the work is varied. In part, this is due to factors beyond the control of the central functional offices, such as incentives for academic research staff, and the institutional level of support resources available for the offices to carry out their work. Equally, there are indications from the university respondents that more could be achieved with current resources; if increased awareness of the strategic importance of research communication by senior university management results in alignment of functions; and professional development opportunities become available.

A new type of intervention, that complements the many current re-institutionalisation initiatives being supported by international funders and some African governments, is needed to simultaneously address strengthening of research communication capacity at the institutional and individual levels. Carrying out effective research communication has the potential to raise the profile of local researchers and universities among their peers and with policy-makers, to improve their ability to win more grants for their research and enhance their standing and influence in SSA and internationally.

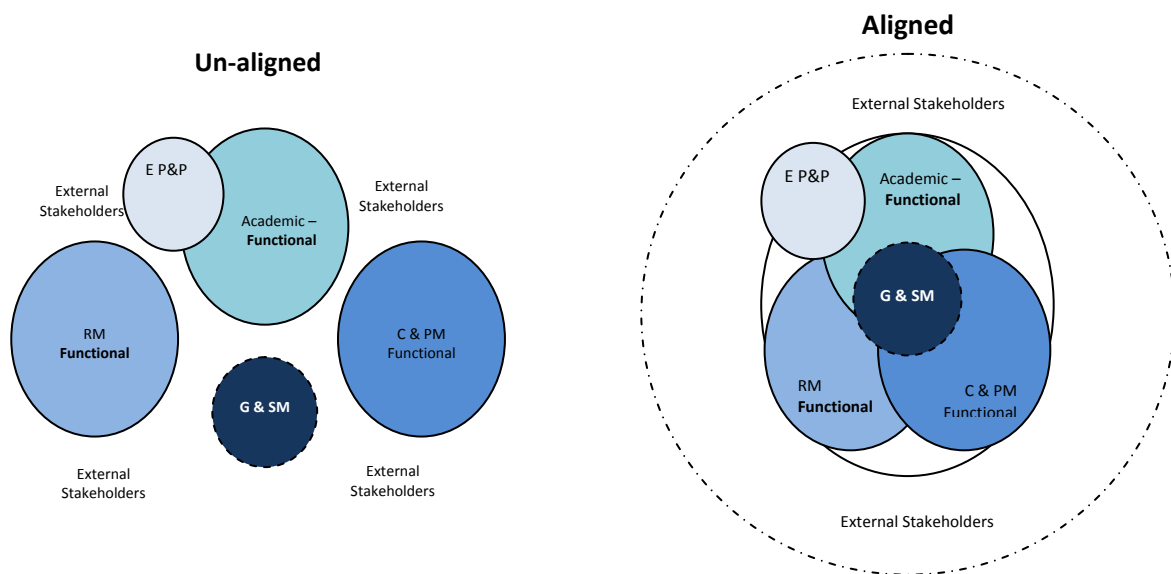
At the institutional level there needs to be a set of activities to support university management to change the prevailing culture and achieve organizational re-alignment and resourcing, and at the individual level there needs to be an accredited professional development offering that permanently builds the capabilities of both the administrators and academics, particularly the next generation of researchers.

Organisational Re-alignment in Institutions

In order for research communication to be 'mainstreamed' and to have significant impact on universities' ability to service their external stakeholders the current structures, policies and practices will have to be reviewed, and a planned change process put in place to re-align them. This necessarily involves consideration of the university's research outcomes, its outreach and external relations at the strategic level, and re-organization of the university's resources at the functional level.

In all the universities in the study there are currently 'silo' management structures with weak communication channels and weak cross-functional management responsibility between the research and publicity/communication functions. The decision as to where formal overall strategic management responsibility would lie would vary at each university, but the cross-functional nature of effective research communication management does require that functional responsibility for different aspects of research communication management would have to include both academic and administrative structures.

Diagram : Strategic and Functional Alignment of Research Communication Management



E P&P	Externally funded Programme and Projects
Academic Functional	Academic – Faculties, Colleges Functional
RM Functional	Research Management Functional
C&PM Functional	Communication and Publicity Management Functional
G & SM	Governance and Strategic Management

There is a need also for the universities to review their oversight of the institutes, centres, units and programmes that are largely externally funded and operate fairly autonomously ‘on the margins’ of the university structures, in order to bring them closer both at strategic and functional levels.

Implementing a coherent organizational re-alignment strategy to establish a central and accessible research communication unit with technical support and management services should provide the necessary conditions for the outcomes of research undertaken by university staff to be managed to the advantage of the institution and its researchers, raising the research profile with interested and affected stakeholders and improving accessibility and reach to the institutions and communities that require research findings to provide evidence and solutions.

Professional Development Training for Individuals

Although the study reveals a trend towards university recruitment of staff with qualifications in public relations, marketing and journalism, this is not yet the norm, and on the evidence of this study, these professionals tend not to have a specific background in the methods needed for (re)-packaging science for diverse readerships, audiences and users. In the area of research management, though there has been quite significant provision of training in the past decade, by donors and research management associations, the lack of, and demand for, internationally recognized, accredited qualifications was noted in the survey results and at session after session at the recent conference of INORMS – the major international forum for university research managers which in 2010 was held in Africa for the first time^{xvii}.

There is a strong demand for formally accredited professional training in research communication management, designed and ‘packaged’ in modular, short-course formats to take account of the needs of different target groups. Accreditation that is internationally recognized for continuing professional development requirements was said to be important. There is a demand for training that includes both electronic individual distance-learning and physically located classroom modes. There also a demand for accredited short courses that could be

licensed for local delivery (with additional value added with web-based materials available from the licensing institution). In SSA the Centre for Research into Evaluation, Science and Technology has a significant research profile, but also a post-graduate level courses in science and technology evaluation. The Centre's course offerings and proposal for a new specialist programme in research communication is set out in Annexure E.

The focus of this study has been on universities; however courses in the areas described would also be relevant to the needs of individual academics. We anticipate that the key target groups universities would be as follows;

Support Staff

- Research managers and officers responsible for assisting researchers to prepare research proposals, and monitoring the progress and outcomes of research projects in compliance with funder requirements.
- Publicity managers and officers responsible for assisting researchers with the dissemination of research. Research communication management would add to the journalism and/or communication credentials of staff.

Research communication management could become career path in its own right, a specialization within research management and within publicity/outreach management. Professional qualifications would improve their status and profile with the academic community.

Academic Staff

- Researchers already active in funded research programmes needing to improve their skills in conceptualising, designing and managing projects that include research communication; and researchers wishing to 'break in' to the research-for-development sector.
- Post-graduate researchers in training. A number of universities are now offering courses in generic research skills such as comparative methodologies and frameworks, research information management and use of the internet and digital libraries.

Including research communication in the array of skills needed to be an effective researcher would enhance their careers.

Other Target Groups for Professional Development

- An additional target group for training was identified in the interviews with government science technology and innovation (STI) department representatives. These departments are charged with the evaluation of the impact of research on socio-economic development. Research communication management, with its in-built monitoring and evaluation process methodological framework and emphasis on outcomes and measures of uptake and utilization was recognized as a being potentially valuable for the evaluation of impact.
- And although not included in this study, it is likely that the demand in the NGO sector which has a strong need for effective relationships with and influence on government and the communities they work in, would be strong.

Such involvement and a common qualification would also contribute to closer relationships between academic institutions and policy makers, more generally, which forms another element in DFID research communication strategy.

In view of the international donor interest in research communication being raised by DFID's and the UKCD's initiatives, and the funders' interest at the INORMS conference in April 2010 it is possible that other funders may well be interested in supporting elements of this project.

Building Synergies between Research Communication Initiatives

In the interviews there was consistent feedback from researchers and managers in SSA universities there is a real awareness of the enormous scope and range of information that is available on any subject, but there are two main constraints to the use of it: difficulty in accessing it (though the costs of access are decreasing and digital publishing is improving) and even more difficulty in narrowing down and deciding what is of value to assimilate, customize

or utilize or innovate from. For these reasons, DFID research communication projects such as SciDev.net and Research Africa that ‘sift’, ‘categorise’, reference and ‘push’ research-related information have particular value for these audiences. Accessibility is not enough, packaging and delivery to the desktop or even better, using the mobile phone screen as a pathway to the desktop information, is crucially important. An intervention that focuses specifically on learning resources perhaps based on the model of DFID’s Comms Corner, but made dynamic with ‘push’ technologies), and good practice (garnered from DFID R4D and RPCs’ communication strategies and outputs) that caters specifically for SSA intermediary institutions, research communities and projects funded by DFID and other development funders, would add value. It would also complement the planned African Communication Support Facility and add value to the Research Uptake portfolio by drawing SSA universities into a permanent learning community, (perhaps on the model of INASP’s value-add work with librarians).

Among the current funder initiatives three current projects have practical value for the conceptualization of the CRU project. Two are funded by the IDRC, one a governance/capacity building project in selected West African universities^{xviii} and the other a scholarly research communication project in selected SSA universities, are relevant. SIDA’s^{xix} programme of longterm research capacity-building support to selected SSA universities,^{xx} was reported by one of the institutions in this study, the University of Dar es Salaam, to have had a significant impact.

RECOMMENDATIONS

Not all SSA universities have the capacity to benefit from an intervention to embed research communication as a core function on the lines described above but from the limited evidence of this survey, and the collaborators’ extensive background knowledge of SSA universities, we estimate that between thirty and fifty public universities could be enrolled. Access to the professional development programme, however, should not be limited to participating universities but should be marketed widely throughout the region.

The advice of funders of institution and capacity-building projects in Africa should be followed, and a concurrent institutional strengthening and governance thrust should be an important element in the intervention.

Individual Level

At individual level, the focus of the intervention should be the development of the accredited cross-disciplinary curriculum, and should meet the need for:

- Professional development of staff in universities and research institutes who are charged with the responsibility for ‘outward-facing’ communication and uptake of research;
- Professional development of researchers, and inclusion of the methods and skills of research communication in doctoral and post-doctoral training courses.
- Professional development of staff in government ministries who are charged with the responsibility of evaluating the impact of research uptake and utilisation in national programme implementation;
- Professional development of staff in development NGOs.

Individual researchers whose work demonstrates that it is possible to adapt and produce their research findings for a number of readerships and audiences ranging from disciplinary colleagues to public television and radio should be identified as role models.

Institutional Level

The institutional level interventions in universities should meet the need to establish an environment that is conducive to the integration of research communication as a core function, including:

- Strategic level awareness building and support in identification of the optimal location(s) of specialized research communication capacity at each university.
- Strategic level planning for budgets to sustain capacity permanently.

- Strategic level awareness building and facilitation of organizational changes that provide incentives for and recognition of work that optimizes the uptake and utilization of research by stakeholders.
- Awareness building to have research communication management elevated to a strategic management level that encompasses community, national and international exposure and reputation-enhancement.
- Functional level planning for skills development, identification of individuals that will undertake the professional development training and will staff the research communications unit.
- Facilitation of strategic planning and stakeholder identification for the university's research communication thrust.
- Benchmarking and other events to establish good practice and to reduce the isolation felt by practitioners by building a community;
- Building confidence, by show casing effective examples of good research communication on research communication information platforms.
- Providing small scale support for novel initiatives.

Systems Level

The intervention should provide:

- Activity funding for complementary work with sub-regional associations^{xxi} and networks^{xxii} to organize research communication management capacity-building, piggy-backing on the regular events and meetings that are part of their normal activities. This has proved to be an effective strategy in all the ACU's facilitation and development support programmes in SSA.
- A concurrent advocacy thrust should be carried out to ensure that funders, governments and international agencies are aware of the 'home-grown' capacity that becomes available, and to encourage them to use these universities as a source of information and advice and as a resource for their programmes to have greater impact in SSA.
- There is great potential to add value to the DFID Research Uptake portfolio by establishing an open access special interest community learning portal and multi-media delivery services for SSA universities that provide practical lessons research communication for uptake and utilization.

Sustainability

Sustainability has been a central theme of this report; in particular the need to ensure that institutions have permanent capacity to support research communication, rather than relying on donor funding which is confined to specific, time bound projects. Participating universities should be required to provide evidence that their baseline conditions are in place, indicate formal commitment in participation, and to estimate the extent and indirect costs of their commitment of time and resources. This latter exercise will provide a foundation for sustainability planning, and should be included in the overall cost-base of the intervention as 'in-kind' counterpart contributions.

The DFID project monitoring, review and evaluation process should include regular assessment of institutional spending, contributions and progress towards institutional sustainability. The project communication strategy should have a strong focus on marketing.

The sub-regional associations and networks should be key actors in achieving sustainability. There are many disciplinary, thematic and interest groupings that have established a robust, influential and long-term presence in SSA, several of them benefiting from DFID funding^{xxiii}. Integrating research communication as a specialism within research management is the next step in the development of robust and permanent support capacity for Africa's researchers and research institutions.

Timeframes

Universities will need time to undertake their organizational alignment processes, so that a central (though possibly ‘virtual’ centralised) research communication unit can be established. Concurrently, staff will undertake professional development training and institutional research communication strategies will be planned and implemented. Given the levels of existing interest, and range of likely participants, we believe the impact of this intervention could be widespread and significant in five to seven years. We also believe that the proposed strand of professional development activity has the potential to become self-funding within five years, once the curriculum design, development, delivery and early implementation costs have been seed-funded. **In view of the above, we recommend that any intervention should be of five years duration.**

Footnotes

ⁱ The definition of research communication that grounds the study can be found on the CRU website

<http://www.cruonline.net/blog/diana-blog/what-is-research-communication/>

ⁱⁱ <http://www.inorms.org/documents/dfidscopingstudydianacoates.pdf>

ⁱⁱⁱ DFID Research Report 2009-2010 Research Communication and Uptake portfolio, p. 67.

^{iv} CREST Reports available from Prof Johann Mouton, jm6@sun.ac.za.

^v For example: Partnership for Higher Education in Africa, www.foundation-partnership.org, DFID's INASP project, www.inasp.info, Wellcome Trust Africa Initiative www.wellcome.ac.uk/funding/biomedical-science/grants/other-initiatives/WTDO28338.htm

^{vi} ACU - [The demand for research management support in African universities](#)

This is the report of an ACU-SARIMA seminar that took place in Cape Town, South Africa, in 2005 - the purpose of the seminar, and key questions that it sought to address informed the Research Africa project proposal. The event aimed to establish whether African universities had the expertise and desire to benefit from greater external support for their research management functions, and, if so, what forms of support would be most appropriate.

Published: February 2005.

ACU - [International research management: benchmarking programme](#)

The benchmarking exercise reported in this document sought to facilitate this process amongst 15 universities from nine countries. In most cases, as responses from the United Kingdom, Australia, Canada, the United States, New Zealand and South Africa suggested, the basic issues were familiar. There was much common ground in the environment in which universities were operating, and the processes that they were developing in response to this. The exercise utilised a benchmarking process, unique to the ACU and designed specifically for use in university management processes.

Published: May 2006.

^{vii} Proctor, F. et al. (2009) Learning Lessons on Research Uptake and Use : a Review of DFID's Research Communication Programmes. Tripleline Consulting.

^{viii} Adolph, B. et al. (2009) Learning Lessons on Research Uptake and Use – Donor Review on Research Communication. Tripleline Consulting.

^{ix} Adolph, B et al. Tripleline Consulting (2009), p.10

<http://www.research4development.info/SearchResearchDatabase.asp?OutputID=181483>

^x The report of the donor seminar at INORMS is available from Dr John Kirkland.

^{xi} Research paper for the West African Research and Innovation Management Association. Kirkland, J & Roberts, L. (2008) Extension work and the dissemination of research outputs. ACU.

^{xii} For a more detailed examination of the obstacles facing academic staff see Harle, J. (2009) The Nairobi Report – Frameworks for Africa. UK Research Collaboration in the Social Sciences and Humanities. A Report for The British Academy by the ACU.

^{xiii} "We have already started to re-think the way in which the Research and Public Affairs Divisions can set up systems to share information and formally plan our research communication strategy.: Verbal communication from the Director of Research, University of Botswana.

^{xiv} Adolph, B et al (2009) Learning lessons on research uptake and use: donor review on research communication. Tripleline Consulting.

^{xv} IDRC project: Scholarly communication and access to knowledge <http://www.sca2kafrica.org/>

^{xvi} IDRC: Camara, A & Toure, K. Strategies for research and to make research matter. Research Global Issue 24, 2010;

Wellcome Trust African Institutions Initiative

^{xvii} www.inorms.org

^{xviii} IDRC WARO papers http://www.idrc.ca/en/ev-150873-201-1-DO_TOPIC.html

^{xix} See the INORMS presentation, SIDA-SAREC: Akuffo, A. & Widerberg, S. Research management/Administrative reform. Presentation at the INORMS conference, Cape Town 2010. <http://www.inorms.org/documents/hannahakuffo.pdf>

^{xx} http://www.research4development.info/PDF/Outputs/Consultation/ResCapacityStrengthenAfrica_Doc4.pdf

^{xxi} Southern African Research and Innovation Management Association (SARIMA), West African Research and Innovation Management Association (WARIMA), East African Research and Innovation Management Association (EARIMA) to be launched in November 2010.

^{xxii} For example the Wellcome Trust's Africa Capacity-Building Initiative in the health area, the US National Institutes of Health Fogarty Programme, the IDRC's Acacia Programme

^{xxiii} As an example, the ACU, CREST and OSD have been closely involved in the establishment, consolidation and evaluation of general research and innovation management and services in SSA universities since first envisioned at a workshop in Durban, South Africa in 2002. In eight years, with responsible use of support funding from DFID^{xxiii}, the National Research Foundation and Department of Science of Technology of South Africa, USAID, SIDA and the Carnegie Foundation, SARIMA and WARIMA have been established, consolidated their membership, expanded their activities and become full members of the worldwide umbrella organization, INORMS, effectively building South-South and North-South relations.