



## **Research Capacity Strengthening in Africa: Trends, Gaps and Opportunities**

*A scoping study commissioned by DFID on behalf of IFORD*

**Nicola Jones, Mark Bailey and Minna Lyytikäinen<sup>1</sup>**  
Overseas Development Institute  
111 Westminster Bridge Road  
London SE1 7JD

**November 2007**

**Contact author:** [n.jones@odi.org.uk](mailto:n.jones@odi.org.uk)

## **Executive summary**

### Overview

This report aims to provide an overview of donor support for development capacity building in Africa so as to inform IFORD and especially the Department for International Development (DFID)'s thinking about the value-added role they can respectively play in this environment, either as individual institutions or in partnership with other donors. In the case of DFID, the report is also designed to inform the Central Research Department's thinking around the role of capacity building in its next 5-year research strategy and 20-year Vision of development for poverty reduction.

The study included a desktop/web review of grey and published literature, a systematic review of existing evaluation documents and key informant interviews with donors, intermediary organisations and African institutions that receive support. The objectives of the study were to i) identify the leading donors in the field of research capacity strengthening, ii) identify the level and modalities of support, iii) identify possible areas of duplication and omission in terms of thematic/disciplinary and geographic coverage, iii) suggest where DFID (and other donors) can add value, and iv) identify opportunities for collaboration and partnership with which DFID can engage. Outputs include answers to these questions in this report (summarised below), an annotated bibliography on research capacity strengthening approaches and experiences, and a series of databases containing detailed information about research capacity building approaches supported by different types of donors, estimated donor spending levels, programme coverage (themes, geographical focus, phase in the knowledge generation and knowledge translation cycle) and evaluation findings.

*(incomplete)*

## Contents

<b>1. Introduction and study objectives.....</b>	<b>1</b>
a. Background	
b. Definitions and concepts	
c. Methodology	
d. Structure of study	
<b>2. Donor approaches to research capacity building.....</b>	<b>3</b>
a. Overview	
b. Funding	
c. Geographical coverage	
d. Typology of capacity strengthening approaches	
e. Approaches disaggregated by donors	
i. Bilaterals	
ii. Multilaterals	
iii. Private Foundations	
<b>3. Evidence of effectiveness?.....</b>	<b>10</b>
a. Evaluation evidence	
b. Key informant interviews	
<b>4. Conclusions and recommendations.....</b>	<b>12</b>
a. Harmonisation among donors	
b. Creating partnerships	
c. Modes of support	
d. Monitoring and evaluation	
e. Disciplinary/thematic focus	
<b>Glossary.....</b>	<b>15</b>

*Working to strengthen local expertise and scientific capacity is one of the most effective and lasting ways to affect positive policy change... (Hrynkow et al., 2003).*

## 1. Introduction and study objectives

### Background

As part of a broader commitment to harmonise development donor approaches and activities, the development research donor body, IFORD, has recognised the importance of taking stock of international initiatives designed to strengthen development research capacities in Africa.<sup>ii</sup> DFID, which is currently designing its next 5 year research strategy (2008-2013) informed by a 20 year vision of DFID's value-added role as a development research donor, is leading this process on behalf of IFORD as it has a particular interest in identifying areas where it can best contribute and opportunities for cross-donor collaboration and/or complementarity.<sup>iii</sup> The purpose of this report is to provide an overview of the levels and modalities of donor support for research capacity strengthening in Africa in order to inform these strategic choices and decision-making processes.

Rather than being exhaustive in scope, the report focuses on major initiatives by leading bilateral, multilateral and private foundation donors who specialise in research capacity strengthening. Building on an earlier but broader study commissioned by DFID and undertaken by ODI about the international development research landscape<sup>iv</sup>, it maps the quantity and type of donor support reaching African research institutes, think tanks, universities and networks. In addition, it discusses the views of the beneficiaries of such initiatives and where evaluation evidence is available, the impacts of donor support. This data is then analysed to identify potential gaps and opportunities that future DFID support to research capacity strengthening in Africa could fill.

### Definitions and concepts

The literature as well as the key informant interviews revealed a range of different definitions and understandings of research capacity building. While some focus more on technical and resource transfers (e.g. Kharas, 2005), others take a broader view and emphasise that any capacity building initiative must be informed by a nuanced understanding of the local socio-cultural and political context e.g. Harris, 2004).<sup>v</sup> In such cases the focus is not on developing capacities that do not exist, but rather on identifying and strengthening existing local capacities. Other authors place considerable emphasis on the power relations between northern donors and providers of research capacity strengthening services, and southern 'beneficiary' organisations. They argue that any initiative to support research capacities needs to be seen as a two-way collaborative process whereby northern partners stand to learn as much as southern partners (e.g. Harris, 2004; Stein and Ahmed, 2007). But in order to ensure the sustainability of capacity strengthening efforts, promoting local ownership over research priorities and agendas is of central importance (e.g. Velho, 2004).

Another important thread in the literature is a differentiation between various levels of capacity building. These are commonly divided into individual, institutional and system level approaches. At the **individual level**, capacity building initiatives focus on building up a critical mass of researchers competent in a particular thematic, disciplinary or methodological area, typically through the provision of post-graduate training or small research grants. As we discuss below, individual level approaches

have more recently expanded to include a broader range of stakeholders involved in knowledge generation, translation and uptake processes.

At the **institutional level**, the concern is with improving organisational structures, processes, resources, management and governance issues (including institutional reward systems that encourage partnership modes of working), so that local institutions are able to attract, train and retain capable researchers.

Although a comparatively newer area of focus, the **system level** approach is designed to improve national and regional innovation environments. The emphasis here is on the development of coherent policies, strategies and effective coordination across sectors and among governmental, non-governmental and international actors. It includes attention to funding transparency, remuneration, continuing education, access to information as well as strategic planning, priority setting, knowledge management and demand creation (see e.g. Nuyens, 2005).

We take a holistic view of research capacity building, and in this report are interested in i) **different levels** (individual, institutional, enabling environment), ii) all **phases of the knowledge generation and knowledge translation cycle** (from setting the research agenda and research design through to research use and communication), as well as iii) the **relational dimensions of capacity building** (are the actors involved forging equitable and sustainable partnerships? Are individual efforts coordinated and/or complementary and building towards a larger vision of enhancing local capacity to generate and use knowledge of relevance to the region's development challenges?).

#### Methodology

The methodological approach adopted for this study included the following components:

- a. A desktop review of published and grey literature on research capacity building, focused on both international and Africa-specific sources<sup>vi</sup> (please see Appendix 6 for this annotated bibliography).
- b. 20 key informant interviews with development research donors (bilaterals, multilaterals and private foundations), intermediary organisations who provide various capacity building services in the African region, as well as universities and research institutions that receive such support (see Appendix X for a comprehensive list of key informants). The objective of these interviews was to identify:
  - The key approaches to research capacity building undertaken by different donors and intermediary organisations, including conceptual understandings, time horizons, and focus on stages in the knowledge generation and knowledge translation cycle
  - The perceived strengths and weaknesses of these different approaches in terms of quality and impact
  - The geographic, thematic and/or disciplinary focus of these capacity strengthening initiatives
  - The level, adequacy and sustainability of funding for research capacity building
  - The types of monitoring and evaluation mechanisms in place to assess programme efficacy
  - Key gaps in the current capacity building environment and
  - Opportunities for collaboration or complementarities

- c. A supplementary web-based review to gather information about leading donors who invest in research capacity strengthening, including their history, objectives (including key target audiences and end users), funding, main programmes, recent evaluations, future plans etc.
- d. A systematic review of available evaluations on research capacity building approaches (see Appendix 5)<sup>vii</sup>
- e. Regular engagement with CRD staff and IFORD members to understand their priorities and objectives for this scoping paper.

It is important to note from the outset, however, that due to time and particularly limited budget and evaluation data, we were not able to answer all of the research questions as systematically as we would have liked. This will however require better data collection and knowledge management mechanisms among donors, as well as greater investment in the evaluation of capacity strengthening approaches.

### The study

The report is structured as follows: section 2 begins by presenting a typology of capacity building approaches, informed by the literature as well as an initial sample of key informant interviews. It then maps the major funders' approach to research capacity strengthening in Africa, including i) the volume of funding they invest, ii) the modalities they use to deliver support, iii) the main beneficiary institutions and networks, iv) the geographical spread of their programmes, and v) the sectoral and/or disciplinary focus of their work.

Section 3 focuses on the impact of research capacity strengthening efforts, drawing on evaluation evidence where it is available as well as key informant interviews with donors, intermediary and beneficiary organisations. It seeks to highlight examples of good practice, as well as areas of duplication or omission.

Section 4 presents our conclusions and recommendations as to how DFID (as well as other donors) could potentially fill existing gaps and also identifies opportunities for joint donor support. More detailed information on donor approaches, their history of involvement in this field, funding patterns, key intermediary and beneficiary organisations, geographical and thematic focus and evaluation findings are presented in the appendices.

## **2. Donor approaches to research capacity building**

### Overview

This section presents our key findings about the level, approach and mode of support provided by leading international donors involved in research capacity strengthening in Africa. It maps existing support mechanisms and programme coverage among bilateral, multilateral and private foundation donors, as well as seeks to identify critical gaps and opportunities to improve existing efforts. The literature suggests that a mapping of this nature with an eye to greater donor harmonisation and coordination is urgently needed, given what Roberts (2005) described as the "largely uncoordinated strategies and domestically driven policies towards capacity building in Africa".

### Funding

The difficulties entailed in providing accurate figures for donor funding of research capacity strengthening initiatives are numerous. Therefore the funding league table

we present below should be viewed as illustrative only. Although it represents our best efforts to assemble existing data and support from a number of key informants to this end, much greater attention to systematic and comparable data collection is required on the part of the donor community if we are to develop an accurate understanding of investment in this field. Problems we encountered in carrying out this exercise include: i) research capacity strengthening being integrated into research projects but only appearing in budgets as funding for research projects (i.e. donors often do not differentiate between funding for research and research capacity strengthening); ii) the fact that research capacity strengthening work often spans a number of different sectors and budgets (e.g. education, support to higher education, development research, health, agriculture); iii) the long-term nature of investment in research capacity strengthening and the fact that many projects span different annual budgets; iv) the hidden costs of research capacity strengthening work, e.g. should programme office staff costs be included as many POs provide mentoring and support to researchers and institutes, and v) where specific research capacity strengthening budgets can be identified, insufficient disaggregation by region, let alone country renders it difficult to estimate spending for Africa.

What does stand out in our donor spending league table is that the leaders in the capacity building field differ somewhat from those in the broader development research field (see Jones and Young, 2007). The Netherlands, Sweden, IDRC and IRD (France) would appear to represent the leading bilateral donors; WHO would appear to be the most significant multilateral in this field, while Rockefeller, Ford and more recently Hewlett lead among the group of private foundations. However, the overall proportion of dedicated spending to research capacity strengthening seems to be relatively limited, with the biggest overall donors spending comparatively little. For example, several key informants emphasised that Gates Foundation funding has done little to boost research capacity strengthening as they have only very recently come to recognise the importance of this approach.

**Table 1: Donor Research Capacity Support in Africa Spending League Table<sup>viii</sup>**

<i>Agency</i>	<i>Approximate annual budget for capacity building (million USD)</i>	<i>Year</i>
DSIG/ NUFFIC	\$140m	2005
PHEA (funded by 7 donors)	>\$60m	2005/6
WHO	>\$40m (TDR, HRP)	2007
Rockefeller	c.\$25m	Annually
SIDA-SAREC	c.\$25m	2006
IDRC	>\$20m	2006/7
NORAD	c.\$20m	2007
Hewlett	<\$20m (policy research institute funding programme)	2008
Ford	?<\$20m	Annually until 2010
ISP	c.\$3m	2007

#### Geographical coverage

The geographical coverage of support for research capacity is broad, with all countries in the region, with perhaps the exception of Mauritius, receiving at least one source of donor support. However, there is also considerable diversity as to the number of donors providing support in any one country – about one third of all countries receive just a single source, a quarter receive 2 or 3 sources and the remaining 42% benefit from multiple (up to 9 sources in the cases of South Africa and Ethiopia) forms of support. It is interesting to note that Anglophone African countries are disproportionately represented in the group receiving support from

multiple donors. This suggests that perhaps more attention has to be paid to language and socio-cultural barriers if those countries with low levels of support are to be more effectively targeted by the donor community. However, due to data limitations we are not able to assess the volume of support per country, only the number and type of support (partner country agreement, scholarship programme or a targeted research capacity strengthening programme).

#### Typology of capacity strengthening approaches

In order to identify concrete opportunities to strengthen and complement existing initiatives, the following discussion reviews capacity strengthening initiatives by bilateral, multilateral and private foundation donors according to a five-part typology, which we derived from our reading of the literature (see Appendix 6) and an initial sample of key informant interviews.

*Levels* denotes whether or not donors are focused on the individual, institution or enabling environment levels as their point of entry (see discussion above). Donors may be involved in only one area or increasingly two or three levels as part of a hybrid, flexible approach. The level at which donors are involved also shapes their primary southern partners (see Appendix 3).

*Modes* refer to how research capacities are enhanced, and may include a variety of funding (individual scholarships, research grants), training (short courses, MA and PhD courses, production of training materials, technical assistance, capacity building for end users), partnership (research partnerships, mentoring, peer to peer learning), network and infrastructural support mechanisms (e.g. funding for libraries, laboratories).

*Content* refers to the sector, cross-cutting theme or academic discipline around which research capacities are developed. As we discuss below there has been considerable attention to enhancing capacities in the health and agricultural sectors, natural sciences, technology and economics, but less support provided to humanities and non-economic social sciences. The literature suggests that this is not simply a matter of prioritising particular issues, but also linked to different politics of bridging research and policy. Natural science research tends to be the domain of highly specialised experts and the knowledge produced by them is often accepted as objective and technical, whereas policy debates related to social sciences and governance are by nature more contested.<sup>ix</sup>

*Stages* refer to the phase in the research process at which support is targeted. Whereas earlier capacity building initiatives focused primarily on knowledge generation, more recently there has been growing attention towards the development of research priorities and agendas (including their relevance to policy and local development challenges), as well as strengthening capacities to communicate research to key stakeholders and promoting uptake by end users (both policy and civil society audiences). This is in part shaped by a number of developments in recent years that have made the exploration of research-policy-practice links in Africa increasingly important, particularly the role that **African research** can have in informing policy and practice on the continent. **Democratisation** since the 1990s has opened up spaces for broader discussion and debate in the policy process, although obstacles, such as limited transparency and participation, remain. Simultaneously, negative experience with structural adjustment, which was implemented on the basis of economic theory rather than context-specific evidence (Ayuk and Jones, 2005) and a broader 'knowledge dependence' related to aid dependence (Ogbu 2006) have resulted in an impetus for **home-grown solutions** in international development: NEPAD, PRSPs and the MDGs all require local research capacity and stronger links



between locally relevant research and the policy process (Ayuk and Jones, 2005; Scoones et al. 2006).

#### Approaches disaggregated by donors

It is important to begin by noting that a number of important intermediary organisations—providers of research capacity building services—are funded by various donor community consortia. These include organisations such as the African Economic Research Consortium, the African Capacity Building Foundation, Association for Strengthening Agricultural Research in Eastern and Central Africa, Center for International Forestry Research, Council for the Development of Social Science Research in Africa (CODESRIA), International Institute for Tropical Agriculture, and the International Network for the Availability of Scientific Publications (see Appendix 3 for details). While such coordinated multi-donor efforts are clearly to be commended, a closer analysis of support to research capacity strengthening by different clusters of donors reveals a number of important differences in approach, level and mode of funding, and focus in the knowledge cycle.

#### Bilaterals

*History:* The length of time that bilaterals have been involved in CS varies considerably, with SAREC, IRD and IDRC enjoying the longest history of explicit CS work. While many donors have had a longer involvement with programmes that target individual capacities, a focus on institutional and especially system level capacity strengthening is much newer for many donors (post-2000).

*Levels and mode:* Bilaterals appear to be the main funder of **individual** level capacity building initiatives. Agencies such as Germany's DAAD, DANIDA and DGIS/NUFFIC fund a large number of scholarship programmes, whereas IDRC places greater emphasis on peer-to-peer learning through research networks and mentoring programmes whereby northern resource persons are paired with southern, often junior, researchers to develop and implement a research project. SDC invests in a sizeable programme for young researchers, while Japan and the Netherlands also place a particular emphasis on exchange programmes for researchers and other knowledge stakeholders.

However, broadly speaking, bilaterals are largely focused on providing **institutional** support to universities in Africa through the provision of research funding, support for research infrastructure (libraries, laboratories etc.), producing training and teaching materials for universities, and supporting MA and PhD programmes (especially ISP). This is an area where there are notable capacity gaps. The literature emphasises that key problems with research in universities include low salaries, lack of research funding, a high teaching burden for faculty and a resulting lack of culture of research, low-quality facilities and low access to documentation (Sawyer 2004; Langsam and Dennis 2004)

There is also a strong emphasis among bilaterals on facilitating partnerships between northern higher education institutions and southern counterparts, many of which have now enjoyed multi-year and even multi-decade relationships. In addition, a number of bilaterals support thematic-based research networks on health, agriculture (DANIDA), higher education, arts/culture (NORAD), applied sciences (SDC), and physical and mathematical sciences (ISP).

In terms of work at the **system** level, fewer bilaterals are involved.<sup>x</sup> The key exceptions are CIRAD, SIDA/SAREC and JICA. Working in the agricultural field CIRAD seeks to support national research systems through the identification of

research skills and training requirements, drawing up, implementing, monitoring and evaluating related training plans, and supporting research management processes. SIDA/SAREC, which has one of the longest track records in the research capacity field, is focused on integrating the long-term support that it provides to universities with national government's broader national research systems. Key informant interviews with SAREC highlighted that achieving such synergies is viewed as critical to achieving the sustainability of capacity strengthening work in the region. JICA is new to this area, having traditionally focused on individual-level approaches, but in 2006 launched the "Asia-Africa Knowledge Co-creation Program: New Mechanism for Promoting Asia-Africa Cooperation" programme in order to promote a more systematic approach to cross-regional learning, especially in critical but under-resourced areas such as community development and private sector development.

*Content:* Overall bilaterals appear to invest more in capacity building work that focuses on health and agriculture, natural and physical sciences, as well as economics. There is less overall attention accorded to humanities and non-economic social sciences, with important exceptions represented by NORAD (arts/culture, higher education) and NUFFIC (education, civil society, policies on poverty and good governance). Also of note is the fact that while agencies such as IDRC believe it is critical to have "something concrete to hang capacity building support on", i.e. a learning-by-doing approach, SIDA/SAREC's support is not thematic or discipline-based. Instead, their primary focus is on strengthening national higher education institutions to produce and reproduce post-graduate level researchers, and all the management, fund-raising, governance etc. challenges that this demands.

*Stage in knowledge cycle:* Although there has been a historic focus on knowledge generation, increasingly bilaterals are also investing in capacity strengthening to improve support for developing demand-led research agendas, for research communication and dissemination activities, and the uptake of knowledge by end users. DFID's earmarking of 10% for research communication in its grants to Development Research Centres (DRCs) and Research Partnership Consortia (RPCs) was mentioned several times as an example of best practice to promote knowledge translation. Others actively involved in this field emphasise the importance of stimulating the demand for policy-relevant knowledge. As Ayuk and Jones (2005) point out to date "[C]entres have not been proactive in exploring the demand side of policy research". Donors seeking to address the imbalance of the supply and demand of research knowledge include IDRC, whose activities in this area range from awards to development journalists to a new Knowledge Translation Initiative to support its multi-year multi-country Growth, Globalization and Poverty programme. Similarly, the Dutch Ministry of Foreign Affairs is now involved in a partnership programme to strengthen research-policy linkages with knowledge institutions whereby young researchers conduct projects for the Ministry and civil servants have opportunities to publish scholarly research and pursue post-graduate studies linked to their work.

### Multilaterals

*History:* In terms of multilaterals, the WHO, CGIAR and the ISP have been involved in capacity strengthening since the 1960s/70s and have over the years developed a diverse portfolio of work. More recent arrivals include the World Bank and especially the World Bank Institute, IFS, ICSU and the African Development Bank.

*Level and mode:* Although multilaterals do not focus as much on the **individual** level, the WHO has several innovative programmes that could be applied to other sectors: re-entry grants to encourage young scientists from disease-endemic countries to return to their home institutions within 12 months after graduation, and research

grants for higher education or post-doctoral training within a developing country institution.

In general, the focus of multilaterals is on providing **institutional** support to independent research organisations and research networks rather than universities, with the exception of UNESCO which has a specific mandate to focus on higher education. The WHO and CGIAR, for example, both provide funding to research teams based at developing country research institutions in order to support their ability to develop rigorous research proposals and projects. The World Bank Institute places a lot of emphasis on short thematically focused training courses, which have a strong focus on assisting 'clients' to apply knowledge to development challenges.

*Content:* Multilaterals invest heavily in supporting thematic-focused networks. There would appear to be a larger number of initiatives focused on health, agriculture, the natural sciences, natural resource management and the environment (see Table 2 below). However, the EU and particularly the World Bank Institute and the African Development Bank are focused on issues of poverty reduction, governance, trade and regional integration. What we cannot tell from available data is the relative investment and size of these various networks.

**Table 2:**  
**Thematic foci of research networks supported by multilateral donors in Africa**

Health – reproductive health, infectious tropical diseases and vaccination research	WHO, new programme by Wellcome Trust, EU
Agriculture and food security	CGIAR, EU
Natural sciences, traditional knowledge systems, ethics	ISP, ICSU
Energy and natural resource management, environment, technology, security, space	EU <sup>xi</sup> under 7 <sup>th</sup> Research Framework Agreement
Poverty reduction and MDGs, macroeconomic dynamics, growth, trade, governance and institutions, investment climate.	ADB's Knowledge Management Trust Fund, WB

*Stage in the knowledge cycle:* Like the bilateral donors, earlier capacity building work focused primarily on knowledge translation but agencies like the WHO and WB in particular are now increasingly focusing attention on research communication and support for knowledge management capacities. The WHO for example provides funding for communication and writing workshops which aim to strengthen communication skills, science writing and information management. The WBI's Knowledge for Development Programme (K4DP) is underpinned by the Bank's growing emphasis on the knowledge economy, and seeks to support knowledge management, research synthesis and learning from best practices.

#### Private foundations

*History:* The role of private foundations in supporting research capacity strengthening is relatively new, but rapidly expanding, as exemplified by the consortium of donors (Ford, Hewlett, Rockefeller, Carnegie, Andrew W Mellon, MacArthur, Kresge Foundations) involved in funding the Partnership for Higher Education in Africa (PHEA).

*Level and mode:* The focus to date has been on supporting sector-specific initiatives, especially through multi-donor research networks, such as the African Economic Research Consortium, the Association of African Universities, the University Science, Humanities and Engineering Partnerships in Africa programme, and the Council for the Development of Social Science Research in Africa). A number of donors also support these thematic networks at the individual level through the provision of research fellowships (e.g. Mellon, Rockefeller, Hewlett). Private foundations are also

investing in providing infrastructural support, including an innovative connectivity project dubbed the 'Bandwidth Consortium' linked to PHEA.

*Content:* Private foundations have largely focused their research capacity efforts on agriculture, health (including population and reproductive health, HIV/AIDS), education, the environment and economic development. The Ford Foundation would appear to stand out from the pack as its thematic foci in Africa are less traditional: asset building and community development, peace and social justice, knowledge, creativity and freedom.

*Stage in the knowledge cycle:* Again the primary emphasis has been on supporting knowledge generation among private foundations. However, the Ford Foundation invests substantially in media and creative communications approaches, and the Hewlett foundation has recently announced a multi-year 100million USD programme to support independent policy research institutes in order to promote the capacity of African researchers to engage in policy-relevant research.

As can be seen from the above discussion a large number of diverse research capacity strengthening initiatives are being supported by bilateral, multilateral and private foundation donors. Although there appears to be an increasing tendency towards greater cooperation as well as growing awareness of the importance in investing in knowledge translation and the creation of national research environments that facilitate the uptake of development knowledge by policy and civil society stakeholders, there is still a great deal to be done to provide well coordinated, synergistic programmes and policies. This is particularly the case in the areas of non-economic social sciences and humanities, which demand a high level of understanding of the local context, relationships between academia, civil society and the state, and power relations. The following section turns to a discussion of the relative effectiveness of these initiatives, based on the limited evaluation evidence that is available and telephone interviews with donors, intermediary organisations and beneficiary institutions.

### 3. Evidence of effectiveness?

#### Evaluation evidence

Overall our review of the evaluation literature reinforced Blagescu and Young (2005)'s conclusion that organisations involved in supporting research capacity building initiatives have been weak in monitoring the impact of their interventions. Part of the problem is that attempts to evaluate capacity building efforts and learn from past experiences have been constrained by a) the fact that capacity strengthening is often embedded in other programmes and thus difficult to separate out and monitor and evaluate specifically; and b) outcomes are typically medium to long-term and not easily attributable to a single intervention. In addition, programmes focused on learning-by-doing often lack not only a clear conceptualisation of capacity strengthening but also a theory of cause and effect (ibid).

Evaluations were only publicly available for a limited number of donors involved in capacity strengthening initiatives. These included IDRC, SIDA and DANIDA among bilaterals, and the WB among multilaterals (see Appendix 5 for details).<sup>xii</sup> We were unable to find evaluations in the field for private foundations. Similarly, evaluations of the work of intermediary organisations<sup>xiii</sup>—i.e. those that are funded by donors in order to provide capacity building support to beneficiary institutions—were also scarce. It should be noted, however, that some key informants pointed out that evaluations may have been carried out but had not widely circulated within organisations, let alone to the broader public for learning and communication purposes.

Among the evaluations we reviewed, DANIDA, SIDA and the WB relied predominantly on internal evaluations, whereas in the case of IDRC programmes, the SISERA Network and G-RAP programmes, external evaluations carried out by independent consultants were commissioned. A combination of methods was used in most cases, involving desk-based reviews of research outputs, interviews with staff and partners, field visits, participant surveys and/or interviews with end users (government decision-makers, donors, NGOs). In several cases, case studies of comparable programmes (IDRC, 2007) and tracer studies to understand the chain of impact had also been undertaken (SIDA, 2000).

In terms of common strengths identified by these evaluations, the following improvements following capacity building support were highlighted:

- Networks were a useful means to link up researchers and identify common or complementary research agendas
- Strong North-South partnerships had been forged
- Dissemination of research papers had been widespread
- Increased enrolment rates in local MA and PhD programmes
- Improved research administration and research management capacities
- Improved research quality and researcher skills

However, a number of important challenges were also emphasised. These included:

- limited impact of research generated on policy
- limited demand-led nature of research
- lack of quality assurance for research supported by capacity strengthening programmes
- exclusively local projects tended to be less fruitful than North-South partnerships
- a lack of gender analysis and gender balance within research capacity initiatives

- need for more industry-university cooperation to enhance the utility of research capacity building efforts
- inadequate (both regularity and quality) monitoring and evaluation mechanisms
- limited inroads into general institutional strengthening

#### Key informant interviews

Given the paucity of evaluation data, we complemented our analysis with telephone key informant interviews with donors, intermediary organisations and representatives from beneficiary institutions. The key themes that emerged were as follows:

*Long-term horizons and sustainability:* Rebuilding universities and graduate programmes is critically important due to its multiplier effect: African countries need to be able to produce and reproduce quality researchers, as well as cope with the challenges of research management, funding transparency and sustainability. As Johann Mouton from CReST argues:

*'Most African universities are very fragile, they are largely dependent on donor funding and government good will. In this kind of situation, there is no stability over time and little opportunities to accumulate intellectual capital. Long-term institutional stability should be the government's - rather than the donors' - responsibility. Instead, donors should work with those institutions that are stable and have most capacity and potential.'*

Although some donors in the field are concerned about the seemingly 'endless task' involved and the complexities and time-consuming nature of building up a sufficiently nuanced picture of the national research environments in diverse country contexts (e.g. SIDA has been working in this area over the last thirty years), it is also the case that Latin American and East Asian countries have largely succeeded in developing quality university and graduate programmes. In this regard, a number of key informants emphasised the need for greater cross-regional learning, and a forthcoming report by SIDA/SAREC comparing the cases of Vietnam (successful) and Sri Lanka (less successful) should provide a useful model for such analysis.

*Partnerships:* Beneficiaries emphasised the importance of supporting partnerships between Northern and Southern institutions, but also underscored the fact that donor requirements can sometimes be excessively cumbersome, especially in the case of institutions receiving multiple funding sources. In this regard the quality of partnerships monitoring framework developed by the Educational Research Network for West and Central Africa (ERNWACA) may provide a useful tool. Partnerships also need to be balanced on genuine collaboration:

*Northern partners can be an asset if they are motivated to work with African researchers and help them get research published. Often Northern researchers simply take the data and publish it themselves. Only if they are willing support and help local young researchers to get published, is the partnership worth anything.'* (Kathryn Touré, ERNWACA)

*Building on existing capacities:* Several key informants lamented that donors typically fail to recognise existing capacities and to use needs assessments as the starting point for capacity strengthening work. Needs assessments need to be based on an understanding of the history and context, especially as it is often the case that capacity has existed in the past, but then has disappeared. As Ebrima Sall from CODESRIA argues, it is important to understand why this has happened:

*'The main problem with donor approaches is that it is often assumed that there is no existing capacity at all. There is always previous experience and*

*expertise somewhere, and it is this pool of people that CS should aim to expand.'*

A number of beneficiaries noted that one of the key attributes of a good RCS donor is an in-depth understanding of the local context. Moreover, for capacity building efforts to be effective, donors have to focus on sectors and institutions that have the greatest potential to develop and to contribute to the country's development in the long run. Identifying such areas of comparative advantage and niche sectors, in coordination with governments, universities and research institutions, should be the starting point for an effective research capacity building strategy.

*Policy relevant research:* There was also a general consensus that there is a need to support local capacities in linking research topics to national and regional policy and development priorities, as too much research produced in the continent is of limited or no value to decision-makers.

*Industry linkages:* Several key informants emphasised that there is not necessarily a correlation between the number of MSc and PhDs trained and economic and social development. In the context of globalisation and growing urbanisation and industrialisation, what is needed to cross the knowledge divide is to strengthen links to industry and to support the translation of research into commercially viable products.

#### **4. Conclusions and recommendations for DFID**

Overall this study has highlighted the dearth and relative fragmentation of knowledge about capacity building support for research and research uptake in the African region. In light of these limitations and in particular given the unevenness of available information it is difficult to map the field with sufficient accuracy so as to make robust recommendations as to how DFID could best add value to this field. Nevertheless, our literature review and in particular phone interviews with key informants underscored the fact that DFID is a respected development research donor with a number of important potential comparative advantages that could be built on to make a valuable contribution to broader RCS efforts. Our conclusions and recommendations focus on five key areas:

##### Key recommendations

###### *Harmonisation*

- There is a growing level of coordination and collaboration among development research donors with respect to support for research capacity building, particularly in the form of jointly funded intermediary organisations and thematic research networks. However, there is still much room for improvement, especially given very high capacity strengthening needs in Africa and still relatively limited funding.
- A first step in terms of harmonisation that DFID and IFORD could support would be better data collection and communication about research capacity strengthening work, in order to develop a more accurate picture of the research capacity support environment. Ideally this would start from the bottom-up, i.e. through the prism of what type of harmonisation and coordination would serve beneficiary organisations most. This could be as simple as agreeing on shared reporting procedures for all donors that fund

any university or institute, but could also require donors to get together at the local level with each institution they fund to carry out systematic needs assessments.

- An equally important and urgent step is the need for DFID and IFORD to consult with national governments so that research capacity development work can be harmonised with the development of broader national research and innovation systems. Given that there are a number of other donors with a long track record in providing institutional support to universities in the region, and the fact that such support demands very long time horizons, DFID may be better placed to provide support to independent research institutions so as to support a diversity of voices and development thinkers.
- Harmonisation could also include a more strategic approach to the geographic coverage of existing and future research capacity strengthening programmes, as presently coverage is very uneven, particularly outside Anglophone Africa.

#### *Partnerships*

- Both the literature documenting best practice and key informant interviews emphasised the value of supporting long-term partnerships based on mutual respect and trust between Northern and Southern research institutions. However, it is important that such partnerships are based on demand from the South. Here DFID could draw on IDRC's model of funding proposals led by Southern institutions, and/or develop funding mechanisms that provide Southern partners with greater voice over resource allocations within such partnerships (e.g. Carnegie). Support in strengthening research management and knowledge management skills within Southern research institutions could also help to make more equitable partnerships viable and in keeping with quality assurance standards.
- Another important area of partnership that has been under-utilised is that of links between research institutes and the private sector. Given that this an area where few donors have concentrated resources and attention, it would seem to represent a potentially fruitful avenue to explore further.

#### *Modes of support*

- Overall our findings suggest that research capacity support is focused largely on knowledge generation within universities and research networks, but with little attention to the design of questions that resonate with national policy and development agendas, nor with support for conducting and communicating policy research. Given DFID's emphasis on and peer recognition for its research into use programme, coordinating with donors that are moving into supporting capacity development in this area—especially the Hewlett Foundation and IDRC—could be a fruitful area in which to invest. This could also include support for research synthesis work which is largely ignored in the literature, but emerged as critical if we are to reap and build upon the benefits of existing knowledge.

#### *Monitoring and Evaluation*

- This is an area that warrants urgent attention. A large number and variety of research capacity strengthening initiatives have been undertaken, but systematic learning from these programmes has been very weak. A key challenge for DFID and IFORD would be to develop a conceptual framework for M&E: what is the theory of change in research capacity building? What are the expected outcomes? What are the indicators? What is the optimal balance between evaluating CB in terms of policy-relevant research and the



extent to which it informs policy on the one hand, and supporting the achievement of more traditional academic indicators, particularly the number of journal publications, with which African key informants are also concerned?.

- DFID could also support a broader donor community effort to invest in monitoring and evaluating capacity building work, including existing multi-donor funded intermediary organisations and networks, and its own learning by doing modes embedded within DPCs and RPCs. These findings then need to be widely communicated and shared among donors, intermediaries, beneficiaries and potential beneficiaries. Given existing evaluation evidence that suggests that the gendered dimensions of such work have been overlooked in such programmes, particular attention should be paid to addressing this lacuna.

*Thematic/disciplinary focus*

- Lastly, our findings indicate that natural sciences, health, agriculture, and economic research are all receiving multiple forms of capacity strengthening support. By contrast, there appears to be a significantly lower investment in the social sciences and humanities. Given a growing realisation that poverty reduction, inclusive growth and good governance require more than technocratic solutions and instead call for critical social science, investing in support of (especially non-economic) social science methods and research would appear to be a potentially important area of contribution. This would however demand attention to and understanding of the local socio-cultural context, and the politics of the research-policy-practice environment, including governmental openness to critiques of existing social policies and governance practices.
- Supporting national and regional social science associations and networks could be an important avenue of support in this respect. These organisations often have experience in institutional support for universities and research institutes and benefit from good knowledge of the local context. Supporting their existing work and exploring new areas of cooperation may be a good way to support social science and humanities research capacity in Africa.

## Glossary

AAU	Association of African Universities
ACE	Arts and Cultural Education Programme (Norad)
AERC	African Economic Research Consortium
AfDB	African Development Bank
AfDBI	African Development Bank Institute
ACBF	African Capacity Building Foundation
AERC	African Economic Research Consortium
AGRA	Alliance for a Green Revolution in Africa
AICAD	African Institute for Capacity Development
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AVU	African Virtual University
AU	African Union
AusAID	Australian Agency for International Development
BMZ	German Federal Ministry for Economic Cooperation and Development
CGIAR	Consultative Group on International Agricultural Research
CHET	Centre for Higher Education Transformation (South Africa)
CIAT	International Centre for Tropical Agriculture
CIDA	Canadian International Development Agency
CIFOR	Center for International Forestry Research
CIRAD	French Agricultural Research Centre for International Development (Centre de coopération internationale en recherche agronomique pour le développement)
CODESRIA	Council for Development of Social Science Research in Africa
CORAF/	West and Central African Council for Agricultural Research WECARD and Development
CRCBD	Collaborative Research and Capacity Building for Development (USAID)
CRSP	Collaborative Research Support Programmes
DAAD	German Academic Exchange Service
DANIDA	Danish International Development Agency
DCO-OC	DGIS Research and Communication Department
DDRN	Danish Development Research Network
DFG	Deutsche Forschungsgemeinschaft (The German Research Foundation)
DFID	Department for International Development (UK)
DGIS	Dutch Ministry of Foreign Affairs
EC	European Commission
ENCAP	Environmental Assessment and Management Capacity Building Program (USAID)
ENRECA	Enhancement of Research Capacity (Danida)
EPFL	Ecoles Polytechniques fédérales de Lausanne, Switzerland
ERNWACA	Educational Research Network for West and Central Africa
EU	European Union
FARA	Forum for Agricultural Research in Africa
GDN	Global Development Network
GFAR	Global Forum on Agricultural Research
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (Germany)
HED	Higher Education for Development Program (USAID)
HINARI	Health InterNetwork Access to Research Initiative (WHO)
HRP	UNDP/UNFPA/WHO/World Bank- Special Programme of Research, Development and Research Training in Human Reproduction
ICT	Information Communications Technology

ICT4D	Information Communications Technology for Development
IDRC	International Development Research Centre (Canada)
IEHA	Initiative to End Hunger in Africa (USAID)
IFORD	International Forum of Research Donors for Development
IFP	International Fellowship Programme (Ford Foundation)
IFPRI	International Food Policy Research Institute
IFS	International Foundation for Science
IITA	International Institute for Tropical Agriculture
ILRI	International Livestock Research Institute
INASP	International Network for the Advancement of Scientific Publications
IRD	L'institut de recherche pour le développement- Research Institute for Development (France)
IRRI	International Rice Research Institute
ISP	International Science Programme
JICA	Japan International Cooperation Agency
KFPE	Commission for Research Partnerships with Developing Countries (Switzerland)
MDGs	Millennium Development Goals
NARS	National Agricultural Research Systems
NCCR-N-S	National Centres of Competence in Research North-South (Switzerland)
NEPAD	New Partnership for Africa's Development
NOMA	Norad's Programme for Master Studies
Norad	Norwegian Agency for Development Cooperation
NPT	The Netherlands Programme for the Institutional Strengthening of Post-secondary Education and Training capacity (Nuffic)
NUFFIC	Netherlands Organisation for International Cooperation in Higher Education
NUFU	Norwegian Council for Higher Education's Program for Development Research and Education
ODA	Official Development Assistance
ODI	Overseas Development Institute (UK)
OIRAD	Office of International Research, Education, and Development (Virginia Tech, USA)
OSSREA	Organisation for Social Science Research in Eastern and Southern Africa
RCS	Research Capacity Strengthening
RUF	Danish Council for Development Research
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
SADC	Southern African Development Community
SAREC	Department for Research Cooperation (Sida)
SARPN	Southern African Regional Poverty Network
SDC	Swiss Agency for Development and Co-operation
Sida	Swedish International Development Cooperation Agency
SIU	Norwegian Centre for International Cooperation in Higher Education
SNSF	Swiss National Science Foundation
TDR	UNICEF/ UNDP/ World Bank/WHO Special Programme for Research and Training in Tropical Diseases
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNRISD	United Nations Research Institute for Social Development
USAID	United States Agency for International Development
USHEPiA	University Science, Humanities and Engineering Partnerships in Africa
WB	World Bank
WBI	World Bank Institute

WHO World Health Organisation  
ZIL Swiss Centre for International Agriculture

---

<sup>i</sup> Additional research assistance was provided by Hayley Baker, and valuable comments and guidance were received from John Young.

<sup>ii</sup> The importance of such coordination was reinforced during this study as we learned that other scoping studies have also been recently undertaken by SAREC/SIDA and also by the IDRC and DFID-funded Capacity Building Collective (although the latter is somewhat broader than research capacity building).

<sup>iii</sup> As a cross-cutting theme, capacity building for development research and research utilisation is one of DFID's stated priorities. However, how support for research capacity strengthening meshes with DFID's broader emphasis on tackling problems 'with the best means available' which often entails using Northern research centres and laboratories (Akerblom, 2007) will clearly have to be debated and addressed.

<sup>iv</sup> Jones and Young (2007) argued that "Decision-making should be based on a clear 'theory of change' and if possible a corporate definition of capacity building so staff and stakeholders alike are clear about DFID's goals and underlying assumptions". In this regard, this follow up study is seen as an important first step in this process.

<sup>v</sup> Costello and Zumla (2000), for example, call for a phasing out of the 'annexed site' approach whereby foreign-led and funded research in developing countries remains semi-colonial in nature and dominated by Northern research priorities and research management.

<sup>vi</sup> Interestingly the available literature focuses largely on experiences in the health and science, technology and innovation sectors. We therefore made a particular effort to complement this sectoral focus with telephone interviews among donors, intermediaries and beneficiaries who are involved in the social sciences and humanities.

<sup>vii</sup> Although others have developed bibliographies on capacity building for policy advocacy (e.g. Blagescu and Young, 2005) and capacity building in general (e.g. Taylor et al., 2007), this is the first publicly available annotated bibliography focusing on research capacity building, especially in the African region.

<sup>viii</sup> See Appendix 2 for details and caveats.

<sup>ix</sup> A number of authors challenge this distinction/dichotomy and argues for more public participation in policy informed by natural sciences. Scoones et al. (2006) argue, for example, that public engagement in scientific debates and policy processes is necessary to address how research agendas are framed and the social purposes they serve, and to ensure that poorer people and communities will benefit from them (see also Leach and Scoones, 2006).

<sup>x</sup> A number of other agencies conceptualise their support to multilateral agencies and research networks as system level work, but do not accord it the same level of explicit strategic attention.

<sup>xi</sup> It was particularly difficult to collate information on EU research capacity strengthening efforts, in part because such efforts cut across multiple programmes and sectors. We were also unable to identify an EU staff member with an overview of relevant capacity strengthening activities.

<sup>xii</sup> If the donors for which evaluation evidence was available had carried out multiple evaluations, we reviewed a representative sample of these.

<sup>xiii</sup> See Appendix 3 for details of intermediaries