

## Helpdesk Research Report: Research Capacity Strengthening

Date: 05.12.2011

**Query:** Please compile and summarise the main findings from published and grey literature (including donor evaluations) on research capacity strengthening interventions (both scientific and social science research capacity).

**Enquirer:** DFID Conflict Prevention and National Security Group

**Author:** Claire McLoughlin [claire@gsdrc.org](mailto:claire@gsdrc.org)

### Contents

1. Overview of main findings
2. Policy literature
3. Evaluations of interventions
4. Approaches to evaluating research capacity
5. Selection of research capacity strengthening initiatives
6. Sources

### 1. Overview of main findings

Much of the available literature on research capacity strengthening in developing countries appears to be focused on scientific (in particular health) research. There is relatively little material on strengthening capacity for social science research. Likewise, the most widely cited interventions, partnerships and initiatives for strengthening research capacity seem to be in the area of health. These include prominent South-led partnerships on clinical trials (e.g. European and Developing Countries Clinical Trials Partnership's (EDCTP's), private sector initiatives focused on addressing a single health problem (e.g. The Gates Malaria Partnership), North-South university partnerships (see European University Association, 2010), and Southern networks and partnerships that aim to collectively represent the views of Southern scholars and scientists (e.g. Initiative to Strengthen Health Research Capacity in Africa (ISHReCA).

Lack of an enabling legal framework, poor quality of secondary-school education, an absence of research leaders and role models, and the relatively low priority attached to research are all frequently cited as barriers to research capacity development in developing countries as a whole, and Africa in particular (Whitworth et al 2008). Studies have noted that previous research capacity strengthening interventions have largely focused on knowledge generation, and less attention has been paid to the dissemination and communication of research (Jones et al 2007).

Several recommendations for future research capacity interventions are commonly made across the policy and evaluation literature. These tend to broadly address the need for the following:

- **Sustainability:** Programmes need to be developed in collaboration with national authorities, address the specific needs of each country and be tailored to existing research capacity (Minja et al, 2011). Capacity needs assessments should be conducted at the start of programmes (Jones et al 2007). Training Southern scientists will not have long term effects unless investment is also made in the construction and equipment of research laboratories (Greenwood, 2006). Additional funding from government and industry is required to move beyond donor dependency and generate ongoing incentives for research. Projects with an innovation edge are much-needed and may be more likely to engage private sector partners (Annerstedt and Liyanage, 2008)
- **Reciprocal partnerships:** Partnership programmes should explicitly benefit both institutions in the South and North, including cost coverage, and there should be reciprocity in student and staff exchanges (European University Association, 2010). Host country partners should be involved in determining performance objectives, and genuine partnerships should be built on trust (Southern Africa Regional Research Association, 2011).
- **Long-term engagement:** Sida's long-term engagement with building sustainable research environments is frequently applauded in the literature. It has been suggested that one disadvantage of this long-term support, however, is that institutions may not be sufficiently stimulated to look for alternative sources of funding (Annerstedt and Liyanage, 2008).
- **Impact:** There is a need to focus on developing capacity for research that is nationally policy-relevant (Jones et al 2007). It is important to raise the profile of research with policy makers, the media, and local populations (Whitworth et al 2008). Policy makers in developing countries need greater appreciation of the role of research and greater ability to interpret research findings (Mgone et al, 2010).

Several of the materials reviewed for this report note some of the challenges involved in evaluating research capacity strengthening initiatives. Jones et al (2007) argue the apparent paucity of evaluations may be because outcomes can only really be assessed over the longer term, and because some initiatives have lacked a theory of cause and effect. Evaluation frameworks have been proposed (see Bates et al 2006 and Cooke 2005) that seek to identify appropriate ways of evaluating the impact of such activities without relying exclusively on outcomes that are easy to measure.

## 2. Policy literature

**Whitworth, J., et al 2008, 'Strengthening capacity for health research in Africa', *The Lancet*, Volume 372, Issue 9649, 1-7 pp. 1590-1593**

<http://www.sciencedirect.com/science/article/pii/S0140673608616608>

This paper outlines nine key requirements for strengthening research capacity in Africa, based on recommendations made by the [Initiative to Strengthen Health Research Capacity in Africa \(ISHReCA\)](#) – a forum for African scientists to collate ideas on capacity building and to speak with a collective voice. The recommendations fall into three categories, as follows:

### 1. Improve the research environment

- By ensuring a legal framework in which research can flourish: In many sub-Saharan African countries there is a non-conducive environment for research, the legislative framework has not kept pace with new trends in research, and legislative gaps hamper multi-institutional research such as clinical trials.
- By raising the profile of science and health research with policy makers, the media, and local populations: More appreciation of the benefits of research might lead to greater commitment to providing dedicated funding to national research budgets.

## 2. Support individuals

- By promoting secondary-school and tertiary-school science education: Secondary-school science education is needed. Key centres of research excellence should be identified at a regional and national level.
- By creating career pathways, developing critical mass, and recruiting and retaining talented scientists: Research-focused career pathways need to be established in key African institutions, and attractive packages should be available that provide internationally competitive salaries and opportunities for training and travel for postdoctoral researchers.
- By supporting senior scientists to act as research leaders and role models: There is a need to identify and support existing and potential research leaders in country, for example through endowed positions or guaranteed, long-term career funding.

## 3. Support institutions

- By developing competitive grant and fellowship schemes administered by African institutions: There is a need for government-driven schemes such as the Health Research Capacity Strengthening Initiative partnership (funded by DFID, IDRC, and the Wellcome Trust).
- By providing institutional support for infrastructure, management, and technical services, and strategic development planning: National governments' should take a central role in this.
- By promoting networks and partnerships, especially between African institutions: There is a need for close harmonisation between development agency donors and health-research sponsors, as well as increased alignment with national health-research priorities.
- By using funding mechanisms as drivers of change at African institutions: Both North-South and South-South networks and partnerships are essential.

*The following paper reinforces the above themes*: Whitworth J, Sewankambo NK, Snewin VA, 2010, Improving Implementation: Building Research Capacity in Maternal, Neonatal, and Child Health in Africa. PLoS Med 7(7): e1000299.

<http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.1000299>

### **Jones, N. et al. 2007, 'Research Capacity Strengthening in Africa: Trends, Gaps and Opportunities', A scoping study commissioned by DFID on behalf of IFORD**

<http://www.ukcds.org.uk/assets/file/publications/ODI-capacity-strengthening.pdf>

This review of research capacity strengthening initiatives identifies the Netherlands, Sweden, IDRC and IRD (France) and the WHO as leading donors in this area. It notes that in general there is a paucity of evaluations of research capacity strengthening initiatives, partly because such initiatives tend to be embedded in larger programmes, the outcomes can only really be assessed over the longer term, and because some initiatives have lacked a theory of cause and effect. The paper recommends the following for research capacity strengthening initiatives: long-term horizons (research capacity development takes time); greater cross-regional learning; building on existing capacities and conducting needs assessments at the start of programmes; focus on developing capacity for research that is nationally policy-relevant. The report concludes that most research

capacity support has focused primarily on knowledge generation and relatively little attention has been paid to building capacity for the dissemination and communication of research.

**European University Association, 2010, 'Africa-Europe Higher Education Cooperation for Development: Meeting Regional and Global Challenges', European University Association**  
[http://www.eua.be/Libraries/Publications\\_homepage\\_list/Africa-Europe\\_Higher\\_Education\\_Cooperation\\_White\\_Paper\\_EN\\_FR.sflb.ashx](http://www.eua.be/Libraries/Publications_homepage_list/Africa-Europe_Higher_Education_Cooperation_White_Paper_EN_FR.sflb.ashx)

This policy paper makes recommendations for the future of Africa-European cooperation in higher education. It is based on the findings of a multi-country, EU-funded project titled 'Access to Success: Fostering Success and Exchange between Europe and Africa'. The paper provides illustrative examples of how university partnerships can strategically contribute to developing the capacity of African universities. It encourages universities and academics working in partnership to view themselves as development actors, and presents the following specific recommendations for donors working in this area (pp. 21-22):

- 'Enhance coordination, collaboration and exchange with other agencies: Development cooperation agencies should seek ways to ensure complementarities, share practice and ensure better visibility and understanding of programmes and initiatives beyond the national context. The time is ripe for joint, European level projects in development, supported by European Union and national funding sources.
- Explore specifically joint projects to build higher education staff capacity: As higher education leadership training and staff capacity building is funded by several agencies, this is an area where development agencies and governments should enhance coordination and collaboration. In addition to avoiding duplication and competition, a European level project addressing several African countries would draw upon a variety of leadership approaches. This would help to generate international good practice and enhance the quality of such endeavours.
- Prioritise long-term university partnerships that are needs-based and flexible enough to accommodate and advance the diverse activities undertaken by universities. These activities may crosscut research, education, development cooperation, and institutional development, which should be embraced by funding mechanisms:
  - Consider that partnership programmes should explicitly benefit both institutions in the South and North, including cost coverage.
  - Consider reciprocity in student and staff exchange: Outgoing European mobility to Africa should be encouraged, to enable a larger number of European students and researchers to get firsthand experience and consider African perspectives for their research and in their future careers.
  - Embed mobility in collaborative frameworks, in order to prevent brain drain, and ensure benefits to both individuals and institutions.
  - Promote and fund mobility within Africa.'

**Mgone, C. et al, 2010, 'Linking research and development to strengthen health systems in Africa', Tropical Medicine and International Health, 15, pp.1404-1406**

<http://onlinelibrary.wiley.com.ezproxid.bham.ac.uk/doi/10.1111/j.1365-3156.2010.02661.x/full>

This brief article makes recommendations for supporting research and development in Africa based on the experience of the European and Developing Countries Clinical Trials Partnership's (EDCTP's). The EDCTP is an organisation that has experience in capacity development through strengthening ethics committees, grant procurement and management, upgrading laboratories, engaging

communities, communicating research findings and translating knowledge into action. It has been considered a model of good practice in Africa-led research collaboration, and a successful partnership that donors should continue to support through flexible, long-term funding (see Zumla et al, below). In particular, the paper recommends: avoiding waste in research; focusing research on high priority problems in line with the MDGs; making better use of information that is already available, national governments taking more responsibility for funding research, encouraging research collaboration; and measuring impact of investment in research.

The paper notes there is a dual need for both more research capacity but also for policy makers in developing countries to develop a 'greater appreciation of the role of research in developing effective health systems and have a greater ability to interpret research findings'. Furthermore, for research capacity building to be fit for purpose and sustainable, research needs to be integrated into health programmes through ongoing monitoring and evaluation and research needs to be seen to benefit health services. The paper concludes that 'in all likelihood, the investment in research will bring about far greater returns than the cost of research programmes, as is evident in developed countries'.

*For further information on the experience of the EDCTP, see: Zumla A, et al. 2010 Trials and tribulations of an African-led research and capacity development programme: the case for EDCTP investments, Trop Med Intl Health, 15: 489–94.*

<http://onlinelibrary.wiley.com.ezproxyd.bham.ac.uk/doi/10.1111/j.1365-3156.2010.02479.x/pdf>

**Southern Africa Regional University Research Association, 2011, 'Deepening Research Capacity and Collaboration across Universities in SADC: A Southern African Universities Regional Research and Development Fund', SARUA**

[http://www.sarua.org/files/publications/RDFund/SARU\\_RD%20Fund\\_May%202011%20Ver%201.pdf](http://www.sarua.org/files/publications/RDFund/SARU_RD%20Fund_May%202011%20Ver%201.pdf)

This report outlines the rationale behind a proposed new initiative that aims to support research in the higher education sector within SADC countries - the Southern African Universities Regional Research and Development Fund. As part of the scoping for the fund, the paper reviews the current policy environment with regard to research capacity development in the region, suggests priority areas for funding, and gives an overview of funding mechanisms currently being used by donors. It also provides a brief scoping of a range of current research capacity strengthening initiatives.

The paper finds that the majority of funds supporting higher education and Research and Development (R&D) initiatives operate on the basis of North-South cooperation, irrespective of the source of funding. It concludes that although a regional fund is needed, the sustainability of R&D in the region will require national governments to 'follow through on their commitments to build and maintain strong public universities by re-investing in these institutions and in particular providing adequate levels of funding for basic research (28).' It details some of the main challenges involved in engaging African Universities, highlighting the need for host country partners to be involved in determining performance objectives, the need for genuine partnerships built on trust, and adequate funding for overhead costs, amongst a number of other recommendations (see pp. 32-33).

### 3. Evaluations of interventions

#### Reviews/evaluations published in academic journals

**Minja, H. et al. 2011 'Impact of Health Research Capacity Strengthening in Low- and Middle-Income Countries: The Case of WHO/TDR Programmes'. *PLoS Neglected Tropical Diseases* 5(10)**

<http://www.plosntds.org/article/info%3Adoi%2F10.1371%2Fjournal.pntd.0001351>

This article evaluates the impact of individual and institutional capacity strengthening programmes conducted by the UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR). It finds that TDR grants had a 'great impact' on strengthening institutional infrastructure, particularly through acquisition of laboratory equipment, but lack of access to internet/e-mail and online journals prevented easy sharing of research information among researchers, media, policy makers, and other public and private stakeholders. Therefore, 'although some RCS organizations recognize the need to bridge the gap between research and policy, more can be done to promote research uptake i.e. synthesizing research results to show new knowledge production and promoting the use of evidence in decision-making.'

The report notes there is limited evaluation material to assist donors to identify, target and influence necessary factors that lead to an effective, efficient and relevant RCS programme in health: 'evaluating health RCS initiatives is complex, and achieving the objectives can take several years (often more than 10 years).'

The article concludes future health RCS programmes should:

- Address inequities in health research by taking into account the social and cultural situation of the grantee. Funding agencies should 'develop specific strategy to address some health research inequities such as gender imbalance and bias towards Anglophone countries' support. The data confirms that family responsibilities, particularly child bearing and rearing together with structural and cultural barriers, impinge on women's access to good scientific training.'
- Introduce criteria that encourage and support the development of research careers within and establish networks.
- Develop country-specific programmes in collaboration with national authorities to address the specific needs of each country, and identify how best to strengthen national health research systems. Support should be tailored to the existing research capacity in disease endemic countries and should focus on strengthening national health research systems, particularly in the least developing countries. The engagement of stakeholders at country level would facilitate the design of more specific and comprehensive strategies based on local needs.

**Öman, C.B. et al. 2009, 'Strategy for strengthening scientific capacity in developing countries on water and sanitation related issues', *Desalination*, Volume 248, Issues 1-3(15), pp. 658-665**  
<http://www.sciencedirect.com/science/article/pii/S001191640900647X>

This paper outlines a 'demand-driven' approach to research capacity strengthening that builds on local conditions. It is based on assessments of activities across a range of developing countries. The strategy aims at establishing close contact between the researchers and the end-users of the research findings. End-users are involved during the process of identifying research themes through field visits, thematic workshops, planning activities, and debriefing workshops. Researchers are encouraged to communicate in an accessible and easily understandable way with end-users. The review finds that where local partner organisations were active, research capacity strengthening outputs increased. It notes other recommendations for stakeholders engaging in research capacity strengthening:

- donors and recipients should understand and respect each other's interests
- sensitisation of the public
- conditional grants to ensure that funds are used appropriately
- addressing real problem solving to meet the demands of the people
- establishing databases for knowledge
- harmonisation of stakeholders' interests in building partnerships

- regional conferences and training programs
- developing indigenous knowledge-based and demand-derived networks to incorporate local people's needs
- training beyond Universities so as to reach local communities, different professions and lower-level academic careers.

**Greenwood, B., 2006, 'Capacity strengthening in malaria research: the Gates Malaria Partnership, Trends in Parasitology', Volume 22, Issue 7, pp. 278-284**

<http://www.sciencedirect.com/science/article/pii/S1471492206001097>

This paper reviews the Gates Malaria Partnership – a widely cited initiative that aimed to enhance knowledge and practice of malaria control at all levels, from policy making to local community involvement. The GMP ran a PhD programme to contribute to research capacity development. The paper finds that factors that contributed to the success of the PhD programme included 'the selection of highly motivated students, the encouragement of students to work on practical projects in Africa and the availability of funds to allow them to do this with an appropriate level of supervision'. The paper goes on to argue, however, that 'there is little point in training scientists from malaria-endemic countries if they do not have the facilities in which to use their skills when they return home'. Hence, the programme has also invested in the construction and equipment of research laboratories and malaria training centres.

**Donor and NGO evaluations**

**Boeren, A., et al. 2006, Sida/SAREC Bilateral Research Cooperation: Lessons Learned, SIDA Evaluation 06/17**

<http://sidapublications.citat.se/interface/stream/mabstream.asp?filetype=1&orderlistmainid=2052&printfileid=2052&filex=2842471109628>

This evaluation report assesses the bilateral research cooperation activities of the Swedish Development Cooperation Agency Department for Research (SAREC) in Mozambique, Tanzania, Bolivia and Nicaragua. The evaluation notes that 'the Sida/SAREC approach is rather unique for its long-term commitment to countries and partners, its multi-pronged approach to capacity building, and its willingness to get involved in university transformation processes necessary for its development'. The evaluation makes a number of detailed findings and recommendations for SIDA. These include:

- The interfacing of the Sida/SAREC-financed research activities with other Sida activities in-country was hampered by differences in programme perspectives (short-term solutions versus long-term investments), approaches (sector and budget support versus project support) and management structures (delegated versus centralized management).
- The incentives to carry out research at the supported institutions often remain heavily dependent on continued external (Sida/SAREC) support. Additional funding from government and industry is required and may lead to new and interesting research activities.
- In order to successfully fight local corruption practices, the research projects require rather strong hands-on management. 'Researchers need the discipline of regular reporting, and of having to manage their budgets. With proper, carefully organized research administration systems in place, the scope for corrupt practices definitely reduces'.
- Long-term commitment is needed to build sustainable research environments. The disadvantage of this long-term and unrelenting support is that sustainability is not always treated with a sense of urgency, and poor institutions may not be sufficiently stimulated to look for alternative sources of funding (5).

**Annerstedt, J., and Liyanage, S., 2008, Challenges when Shaping Capabilities for Research: Swedish Support to Bilateral Research Cooperation with Sri Lanka and Vietnam, 1976–2006, and a Look Ahead, Sida Evaluation**

<http://sidapublications.citat.se/interface/stream/mabstream.asp?filetype=1&orderlistmainid=1945&printfileid=1945&filex=2694255175650>

This paper reviews Sida cooperation with Sri Lanka and Vietnam in the area of research capacity strengthening. Amongst its many findings, the evaluation notes that research projects that have succeeded particularly well combine strong institutional, professional and personal linkages. Vague R&D objectives make resource mobilization complicated and prevent effective coordination, quality enhancement and evaluations. It also notes the need for ‘follow-through’: ‘Some of the most successful applied research projects present a continuous stream of research results that could be used to properly address, investigate and resolve problems, provided there is consistency in the innovation approach’.

Other recommendations include the following:

- ‘Fast and effective R&D capacity formation must include risk-taking that will allow limited mistakes and continuous adjustments to avoid errors.
- Long-term perspectives and a critical mass of R&D investments are needed to address significant problems in areas such as agriculture, fishery and public health.
- R&D projects with an innovation edge are much-needed and could quickly trigger engagements by business firms and other private sector partners to provide more of funding.
- Collaborative R&D projects could accommodate commercially viable services towards end-users, e.g. in public health.
- Science-based innovation activities need to become more ‘systemic’ or better integrated into the wider socio-economic fabric to become more relevant and useful. More user-centered interaction is needed for research results to be effectively exploited and new demand-led projects to be initiated.
- Public-private partnerships to sustain innovation environments (such as science parks and business incubators) could become effective modes of operation’.

In addition to the above, SIDA has conducted several other evaluations of its extensive, long-term programme of research capacity strengthening activities. A fuller list is provided in the attached word document entitled *SIDA research capacity evaluations since 2006*. This list was compiled for this report by SIDA.

**Onyejekwe, O., 2011, ‘Evaluation of IDRC Projects: Building Peace and Security Research Capacity in Eastern Africa and UPEACE – IDRC PhD Fellowships/UPEACE-IDRC Doctoral Research Awards (I and II)’, International Development**

<http://idl-bnc.idrc.ca/dspace/bitstream/10625/46971/1/133382.pdf>

This report evaluates the impact of two phases of IDRC-funded awards supporting PhD Fellows in Peace, Conflict, Security and Development. The awards aimed to increase capacity for peace and conflict research in Africa. The report finds that ‘the projects are yet to achieve the overall level of impact envisioned in their objectives and goals. This is attributable to some of the following reasons: the projects are ongoing (a number of the Doctoral Researchers and Fellows are yet to finish their programs and engage fully in endeavours (research, policy making and advocacy) where their expertise will be put to good use; the projects’ duration is short and recent, hence the total impact cannot be felt prematurely; there is still the need to create a critical mass of these researchers as envisioned in the projects; there is yet the need to support a formal network for knowledge sharing

and building synergies within the community of practice on peace and conflict studies across Sub Saharan Africa’.

#### 4. Approaches to evaluating research capacity

**Cooke, J., 2005, ‘A framework to evaluate research capacity building in health care’, BMC Family Practice 2005, 6:44**

<http://www.biomedcentral.com/1471-2296/6/44/>

This paper argues there is a need to establish a framework for planning and measuring progress on research capacity strengthening, and to initiate a debate about identifying what are appropriate outcomes for such activities. It stresses such an approach should not simply to rely on things that are easy to measure. The paper puts forward a suggested framework has been generated through analysis of the literature, using policy documents, position statements, a limited amount of empirical studies on evaluating research capacity building.

**Bates, I., et al. 2006, ‘Evaluating health research capacity building: An evidence-based tool’, PLoS Medicine**

<http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.0030299>

This article argues there is an urgent need for an evidence-based tool for determining whether the required research capacity infrastructure is present in a given setting, and for underpinning the design and evaluation of capacity-building programmes in health research. The paper describes the development and use of such a tool by stakeholders at the Komfo Anokye Teaching Hospital (KATH) in Kumasi, Ghana. It argues that the major advantages of this tool are that it enables an institution in a developing country to set its own priorities, to have control over local capacity building, and to evaluate progress in building capacity from its own perspective rather than from that of an external agency.

#### 5. Selection of research capacity strengthening initiatives

The following research capacity strengthening initiatives were identified in the course of compiling this research report:

- African Health Research Forum and University Science, Humanities and Engineering Partnerships in Africa (USHEPiA) (Rockerfeller Foundation): <http://web.uct.ac.za/misc/iapo/ushepia/bg.htm>
- EDU LINK – Building research capacity in African Universities (EU-funded): <http://www.acp-edulink.eu/content/building-research-capacity-african-universities>
- European and Developing Countries Clinical Trials Partnerships (EDCTP) Networks of Excellence: <http://www.edctp.org/>
- Fogarty International Center: <http://www.fic.nih.gov>
- FK Norway – Asia Health Research project: [http://www.impactalliance.org/ev\\_en.php?ID=49886\\_201&ID2=DO\\_TOPIC](http://www.impactalliance.org/ev_en.php?ID=49886_201&ID2=DO_TOPIC)

- Gates Malaria Partnership <http://www.gmp.lshtm.ac.uk>
- Initiative to Strengthen Health Research Capacity in Africa (multi-donor): <http://ishreca.tropika.net/>
- Leverhulme Royal Society Africa Awards: <http://royalsociety.org/Leverhulme-Royal-Society-Africa-Awards/>
- Malaria IPTi network (funded by the Bill & Melinda Gates Foundation, WHO, and UNICEF): <http://www.ipti-malaria.org>
- Malaria Capacity Development Consortium: <http://www.mcdconsortium.org>
- Netherlands African Partnership for Capacity Development and Clinical Interventions against Poverty-related Diseases; Netherlands Organisation for Scientific Research: <http://www.nwo.nl/naccap>
- Wellcome Trust: <http://www.wellcome.ac.uk/news/2009/Features/WTX055738.htm>

## 6. Sources

### Key websites

Capacity.org, The African Capacity Building Foundation, PubMed, LenCD, ScienceDirect, SIDA Research Cooperation, GDNNet, African Population and Health Research Centre, Africa Capacity Building Foundation, Thrive.or.ug, International Development Research Centre (IDRC)

### Experts consulted

Brian Lucas, Learning Network on Capacity Development (LenCD)  
 Fred Carden, International Development Research Centre (IDRC)  
 Jan Ubels, SNV  
 Wangu Mwangi, Capacity.org  
 Brian Greenwood, LSHTM Malaria Capacity Development Consortium  
 Hannah Akuffo, SIDA Unit for Research Cooperation  
 Basil Jones, African Development Bank  
 Jim Woodhill, Centre for Development Innovation, Wageningen University  
 Sonja Marjanovic, Rand Corporation

**About helpdesk research reports:** Helpdesk reports are based on two days of desk-based research. They are designed to provide a brief overview of the key issues; and a summary of some of the best literature available. Experts are contacted during the course of the research, and those able to provide input within the short time-frame are acknowledged.