

# Adaptation

Climate Change Adaptation in Africa



**CCAA Knowledge Sharing Framework**

As a research support and capacity development program, the CCAA will generate significant new knowledge resources to contribute to climate change adaptation in Africa. Given the practical orientation of CCAA's mission and goal – supporting climate change adaptation among the most vulnerable peoples in Africa - the emphasis will be on active engagement in knowledge generation and sharing processes, in support of active use of knowledge. This knowledge sharing framework sets out the broad parameter and scope of activities to ensure CCAA-generated knowledge is effectively managed and shared with user groups that can best apply it to the benefit of Africa's most vulnerable, the program's main beneficiaries.

The sharing of knowledge within, across and beyond CCAA funded projects will be achieved through communications and networking activities. This document elaborates on CCAA's strategies and operational support for knowledge sharing.

## **Objectives**

Knowledge sharing is instrumental to all four of the CCAA's four program objectives:

1. To strengthen the capacity of African scientists, organizations, decision-makers and others to contribute to adaptation to climate change.
2. To support adaptation by rural and urban people, particularly the most vulnerable, through action research.
3. To generate a better shared understanding of the findings of scientists and research institutes on climate variability and change.
4. To inform policy processes with good quality science-based knowledge.

It is particularly instrumental in achieving outcomes related to objective 3 (shared learning) and 4 (informed policies). The informal learning facilitated through knowledge sharing activities complements and builds upon the more formal education and training activities elaborated in CCAA's capacity building framework.

## **Knowledge users and producers**

Four sets of "boundary partners" are core to the CCAA program strategy. These groups will be the primary knowledge producers *and* users of CCAA-generated knowledge. These are: a) at-risk groups (organizations representing the poorest and most vulnerable individuals); b) policy-makers; c) researchers; and d) capacity developers. For the most part, but not exclusively, these boundary partners are Africa-based.

Because adaptation strategies in Africa evolve within a wider development framework, involving a range of local, regional and international actors, research outputs and program learnings will be shared more widely, in forms accessible to, and through processes involving, the broader community interested in African development and climate change adaptation.

Each of these knowledge users has unique needs, constraints and preference in terms of their use of knowledge and how it must be packaged and delivered. They also differ in the ways

and means in which they can contribute and share their knowledge.

The following table maps in broad and simplified terms some of the significant differences among knowledge users that have implications for CCAA’s support to knowledge sharing. This understanding of the knowledge needs and preferences of boundary partners will be continuously refined over the life of the program by soliciting input from boundary partners.

Target group	Knowledge needs/constraints	Knowledge contributions	Useful formats for knowledge exchange	CCAA needs to:
<b>African regional policymakers</b>	<ul style="list-style-type: none"> <li>• Those at executive levels need credible information in condensed form.</li> <li>• Those subject to electoral shifts and cycles must focus on short term horizon – Need actionable information relevant to current priorities.</li> <li>• Policymakers not always directly accessible to researchers, but influenced by public opinion, which in turn is shaped by mass media</li> </ul>	<ul style="list-style-type: none"> <li>• Bring essential knowledge on regional and local policy landscape – the current priorities, existing action frameworks, etc. to which adaptation research is relevant</li> </ul>	<ul style="list-style-type: none"> <li>• Executive summaries of research findings</li> <li>• News reports and articles on policy relevant research findings</li> <li>• Roundtable dialogues</li> <li>• Face-to-face meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Build partners’ capacities in:               <ul style="list-style-type: none"> <li>- producing short, policy-relevant briefs and other actionable summaries of key research findings;</li> <li>- media relations and other means of disseminating key findings</li> </ul> </li> <li>• Foster linkages between researchers, community reps and policymakers at the project level, and at a regional level</li> <li>• Support networking among policymakers interested in climate change adaptation</li> <li>• Solicit participation of regional policymakers in CCAA knowledge sharing events</li> </ul>

Target group	Knowledge needs/constraints	Knowledge contributions	Useful formats for knowledge exchange	CCAA needs to:
<b>Researchers</b>	<ul style="list-style-type: none"> <li>• Need access to credible research findings in their field</li> <li>• Need opportunities to present, debate and test their own research findings against others</li> <li>• Peer review and journal publication process remains essential to those in university setting</li> <li>• Need practical knowledge on CCAA-supported methodologies (PAR, OM, etc.)</li> <li>• Are often challenged in conveying findings to non-experts in plain language</li> </ul>	<ul style="list-style-type: none"> <li>• Offer expert knowledge in specific research areas</li> <li>• Practical experience to share with others on working with communities, monitoring and evaluation, and research methods and approaches.</li> <li>• Will encapsulate and report on research findings and project learnings</li> </ul>	<ul style="list-style-type: none"> <li>• Case studies</li> <li>• Peer reviewed journal articles</li> <li>• Roundtables</li> <li>• Research databases</li> <li>• Technical reports</li> <li>• Monitoring and evaluation reports</li> </ul>	<ul style="list-style-type: none"> <li>• Support publication of research findings</li> <li>• Support knowledge sharing roundtables</li> <li>• Support networking among researchers, policymakers and community reps</li> <li>• Build research partners capacities in communicating with non-specialist audiences</li> </ul>
<b>At-risk groups</b>	<ul style="list-style-type: none"> <li>• Need practical knowledge, in accessible formats, in local languages, that can be applied to reduce vulnerability to climate change</li> <li>• Have limited power and access to policy making processes.</li> <li>• Lack resources to see their knowledge captured, shared, and recognized as credible.</li> </ul>	<ul style="list-style-type: none"> <li>• Direct experience of the effects of various environmental practices.</li> <li>• Knowledge of indigenous systems and practices and how good practices can be sustained</li> <li>• Knowledge of culture, social belief systems and their symbiotic relationship with the environment</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge exchange workshops</li> <li>• Oral tradition (under the tree gatherings)</li> <li>• Audio-visual materials and broadcasts (video and radio)</li> <li>• Info exchange through local events</li> <li>• CBOs can be critical links for knowledge dissemination</li> </ul>	<ul style="list-style-type: none"> <li>• Work with organizations representing groups such as farmers cooperatives</li> <li>• Include reps of at-risk groups in program-hosted events and networks</li> <li>• Support research partners in communicating effectively with at-risk groups through both training and funding</li> </ul>

Target group	Knowledge needs/constraints	Knowledge contributions	Useful formats for knowledge exchange	CCAA needs to:
Capacity developers (eg. extension services, community facilitators)		<ul style="list-style-type: none"> <li>• Play important role as knowledge brokers</li> <li>• Can translated technical knowledge into popular terms and vice versa</li> </ul>	<ul style="list-style-type: none"> <li>• Most able to access knowledge in a wide range of formats</li> </ul>	<ul style="list-style-type: none"> <li>• Engage them effectively in bridging between scientific and local knowledge</li> </ul>

### Knowledge sharing processes

Action research, the predominant research methodology supported by the CCAA, is essentially a “learning by doing” process of knowledge exchange and testing among stakeholders. Documenting, testing and enriching indigenous knowledge of adaptation to climate variability by twinning it with scientific knowledge in a shared process of enquiry is at the heart of action research.

The climate change research community is clustered into different, poorly integrated subgroups with weak exchange of knowledge, understanding and approaches. Further, there is a need to orient the agendas of these researchers towards the needs of vulnerable groups and policy makers. CCAA takes a demand-driven approach to its work and seeks to facilitate a flow of climate adaptation knowledge and technologies generated by research or by local processes. Specifically, the program aims to make this knowledge accessible to the poor in rural and urban environments so they can combine it with their experience, test and implement improved and effective adaptation strategies. There are enormous issues of inequity of access to knowledge and technologies generated by research. CCAA’s knowledge sharing framework must confront these deficiencies affecting the flow of information and the instruments used in knowledge exchange.

The sections below deal with knowledge sharing processes particular to given user groups and contexts, starting with action research participants, and working outwards to those who must be engaged by the program in order to meet its goal of changing adaptive policy and practice to serve the needs of the poor.

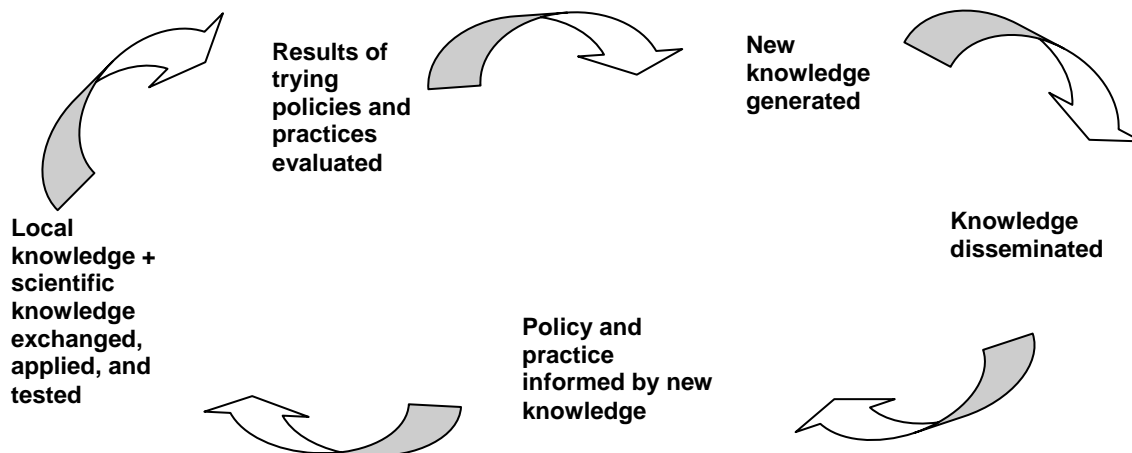
#### 1. KS *within* action research projects

Knowledge sharing will take place within the PAR projects and it is an intrinsic part of the PAR approach. The program will bring guidance and support to these projects in their communication and networking activities through research support projects.

At the project level, new knowledge generation results from an active process of learning through the exchange and testing of knowledge among project partners. There is an extensive body of indigenous knowledge of how to cope with climate variability and extremes in Africa, but a key assumption of the CCAA is that scientific know-how can validate, add value to, and contribute to wider application of local knowledge.

## Knowledge exchange within PAR process

Knowledge exchange through a shared undertaking of “learning by doing”



It is expected that partners collaborating in supported action research will use both **conventional and participatory communication tools and methods** to ensure policymakers and affected community groups contribute and have access to the knowledge produced. Specific tools and methods are defined by proponents as part of the proposal development process.

KS within action research projects contributes to all four objectives, but particularly:

- Adaptation by rural and urban poor
- Shared learning
- Informed policies (where policymakers are actively collaborating)

Examples of conventional communication tools and approaches used within projects

- Interim, technical and final reports
- Routine correspondence among project partners

Examples of participatory communication tools and approaches

- Community-level knowledge festivals built into community gatherings
- Multistakeholder dialogues
- Radio broadcasts by and for farming/fishing or other climate affected communities
- Participatory rural appraisal tools

## **2. KS among CCAA-supported projects**

Research partners benefit from the opportunity to learn from —and reflect on— shared challenges with others, particularly when engaged in innovative areas such as action research and adaptive learning. As part of the proposal development process, each proponent will elaborate on activities and tools to disseminate project findings. These will constitute some of the basic forms in which project-generated knowledge will be accessible to others. To support extensive interactive learning however, further CCAA program support will be provided to foster linkages, and create forums for shared learning and exchange among project partners, extending outward to include policymakers, and other stakeholders, who may benefit (see 3 below). The program will support the establishment of **networks**, linking program partners and others actively working on climate change adaptation. The program will establish a “**community of practice**” among project partners to promote shared learning on adaptation. This community of practice, to be developed in coordination with project partners, may entail

- A shared forum for ongoing exchange, via Internet or email listserv
- Periodic gatherings focusing on regional or thematic knowledge exchange
- A shared set of learning goals and learning processes
- Collaboration toward publication on thematic and cross cutting themes that are critical to development and climate change adaptation (land degradation, water/food security nexus and climate change implications)

KS among CCAA-supported projects contributes to all four objectives, but particularly

- Capacity strengthening
- Shared learning

Examples of KS among partners

- Regional learning workshops
- Web portal linking to partner sites and project outputs
- Web-based discussion forum
- List serve (email)
- Hardcopy dissemination of newsletters and project outputs

## **3. Knowledge exchange with research users instrumental to shaping African adaptation and development strategies**

Beyond those policymakers participating as partners within CCAA supported research, there are a range of international, regional and national actors that play key roles in shaping the overall context for African adaptation and development. These include bodies as diverse as national and sub-national government agencies, think-tanks and policy forums, research institutions, universities, non-governmental organisations and civil society organisations, decision-makers, private sector businesses, multi- and international institutions, and donor agencies. A great challenge for CCAA is to support and nurture new processes between these partners that functionally link adaptation research, implementation and policymaking, to meet the needs of the people and organisations of Africa. The greatest opportunity for nurturing these processes lies in engaging these parties directly in CCAA-supported action research. But other forms of engagement with these bodies will help to inform program directions, while broader dissemination of CCAA generated knowledge targeting

“influencers” not directly involved in the program can amplify the potential for policy impacts.

To ensure wider sharing and application of research findings, the program will support a range of activities and dissemination tools for the synthesis and sharing of relevant findings across bodies of thematically and/or geographically-related research. It will proactively seek opportunities to engage regional bodies in Africa, and relevant international bodies, in knowledge sharing events, such as by hosting thematic conferences exploring the potential for greater regional collaboration in addressing shared climate risks.

These wider knowledge-sharing activities will build on tools and processes linking partners outlined in 2 above. But additional resources will be devoted to knowledge translation and dissemination in forms and in forums most likely to involve influencers outside the program’s immediate reach.

Given the role of the public environment in influencing policy processes, the program will also engage media, and will encourage partners to engage media, to raise the visibility of the adaptation imperative in Africa and to profile relevant research contributing to solutions. The program will use press releases and other media tools, support media relations training for staff and other adaptation champions, and will support efforts to build media capacity to cover climate change adaptation.

The PMU will also be active in government and public relations, with staff and advisors using their influence, through meetings, presentations, displays, and briefings with government and public organizations to highlight the development impacts of climate change, and the important role research on adaptation can play in developing responsive policies. The CCAA PMU will also gain strategic knowledge from these engagements with government officials and other research users to ensure programming directions are demand-driven.

Wider KS with development and adaptation influencers contributes in particular to:

- Shared learning
- Informed policies

Examples of wider KS with development and adaptation influencers

- Case studies and profiles highlight key findings and learnings
- Successes and challenges of adaptive learning shared widely through news media
- Peer reviewed journal articles
- PMU staff and CCAA partners participate in international and regional forums on adaptation and development, both as presenters and participants
- CCAA hosts regional forums on thematic topics relevant to influencers, and supports their participation

#### **4. Ensuring knowledge moves “upward” to inform program and donor directions**

To guide program directions throughout its lifespan, CCAA will undertake periodic reviews and “meta-analyses” of program-wide findings along thematic, geographic and/or



methodological lines to enable reflection upon good practice in supporting adaptation research. Such reviews will likely necessitate commissioned studies, and will be complemented by learning retreats that bring together program staff and management, advisors and donor representatives to reflect on conclusions and ways forward.

CCAA's monitoring and evaluation framework is presented in annex 1 and develops the process by which project level findings continuously feed into program reporting mechanisms. M & E will also feed into the identification of key findings and learnings for wider dissemination (see 3 above).

KS to inform program and donor directions contributes in particular to:

- Shared learning
- Informed policies (CCAA and donors')

Examples of activities undertaken to inform program and donor directions

- Ongoing M & E at project and program level
- Studies commissioned periodically along thematic and/or geographic lines drawing on findings from a number of CCAA –supported projects
- Learning retreats
- Annual reports

## **5. Supporting knowledge sharing with the poor**

Given the program's primary focus on the involvement of vulnerable communities through action research, it is essential that knowledge-sharing activities include those that are led by and accessible to the urban and rural poor – those who most urgently need to apply knowledge of adaptation. For many, gaps in basic literacy and in using European languages mean that written forms of knowledge exchange – the reports, websites and databases so essential to researchers and other program partners – are of little use.

Within individual action research projects, it is expected that partners will engage and share knowledge in ways that are accessible to all. Where community-based partners seek to engage their broader communities, they will lead in the collaborative development of outreach activities and tools that will resonate locally and ensure that the needs and knowledge of poor communities reflect in project outputs. (See 1 above).

For wider sharing of knowledge essential to rural and urban communities, the program and its partners will make use of traditional knowledge sharing approaches, as well as fostering the use of popularly accessible media such as radio and to some extent video, to profile successful examples of adaptation that communities can learn from.

As the main beneficiaries of the CCAA program, the poor must also be represented in broader discussions on adaptation and development supported by the program.

Supporting knowledge sharing with the poor contributes in particular to:

- Adaptation by rural and urban poor
- Shared learning

Examples of activities to ensure the poor can access and contribute to knowledge on adaptation (beyond those used within projects as per 1 above):

- Representatives of fishers, farmers, slum-dwellers and other at-risk groups invited to participate in knowledge sharing forums outlined in 2 and 3 above
- Representatives of vulnerable groups included in supported networks and community of practice
- Input sought from representatives of vulnerable groups on program-level M&E processes
- Support provided for translation of knowledge outputs into forms accessible to the poor (use of video, radio, and television, practical guides produced in clear, simple, visual formats, in applicable local languages, knowledge caravans that build practical demonstrations into local events, etc.)
- Support for hands-on integration of good adaptive practice through agricultural extension services and other community-level learning vehicles
- At risk groups obtain support for organizing their own knowledge sharing events, to which they might invite researchers and policy-makers

### **Building on existing knowledge sharing and communication platforms**

CCAA and its partners will to the extent possible build on existing knowledge platforms already serving those who stand most to benefit from program-supported research and learning.

Both IDRC and DFID, the program's current funders, devote extensive resources to research communication and dissemination and have knowledge platforms that host supported research findings.

IDRC, for example:

- Has a public web site ([www.idrc.ca](http://www.idrc.ca)) which links to all supported research projects, and provides a platform hosting project outputs.
- Has IDRIS+ <http://idris.idrc.ca>, a publicly searchable database of all supported projects, with links to project reports, project web sites, and other project outputs.
- Hosts Biblio, a searchable online library of supported research outputs <http://idrinfo.idrc.ca/scripts/minisa.dll/144/LIBRARY?DIRECTSEARCH>
- Co-publishes funded research with academic book publishers worldwide. All IDRC-supported publications are available for free on the Centre's web site at [http://www.idrc.ca/en/ev-8958-201-1-DO\\_TOPIC.html](http://www.idrc.ca/en/ev-8958-201-1-DO_TOPIC.html).
- Produces *In Focus* titles ([http://www.idrc.ca/en/ev-32871-201-1-DO\\_TOPIC.html](http://www.idrc.ca/en/ev-32871-201-1-DO_TOPIC.html)) that translate and disseminate thematically linked research findings in print and electronic form, serving a range of users, including media, researchers, and policymakers. Each title constitutes a "knowledge pyramid" of linked components (cases studies, books, slideshows, video and other multimedia components).
- Has a communications division devoted to promoting research findings through publishing, media relations, public affairs and government relations.
- Has three regional offices in Africa which undertake various forms of outreach to researchers and research users, including hosting IDRC reference libraries, hosting

regional workshops and conferences, and enabling hardcopy distribution of knowledge resources on the continent.

As a program managed by IDRC, the CCAA program website “resides” on the IDRC website at [www.idrc.ca/ccaa](http://www.idrc.ca/ccaa). Knowledge generated by program partners will feed into all of the IDRC knowledge sharing and communications vehicles outlined above.

More detail on IDRC communications tools and activities can be found in the communication strategy that accompanies its 2005-2010 Corporate Strategy and Program Framework. (Available internally at [http://intranet.idrc.ca/en/ev-92414-201-1-DO\\_TOPIC.html](http://intranet.idrc.ca/en/ev-92414-201-1-DO_TOPIC.html))

DFID’s Central Research Division hosts the R4D portal (<http://www.research4development.info/index.asp>), a free-access on-line database containing information about research programs supported by DFID.

As a program co-funded by DFID, CCAA is already linked to the R4D platform at a number of points (including <http://www.research4development.info/researchTopics.asp?topic=Climate%20Change%20and%20Environment>) As supported research generates results, CCAA will contribute to features, profiles etc on the R4D portal and through other communication vehicles supported by DFID.

Learnings derived from CCAA monitoring and evaluation also feed into both IDRC and DFID’s own corporate assessment.

Other knowledge sharing, networking and communication platforms the CCAA can link with include:

- Tiempo Climate Cyberlibrary and Newswatch: <http://www.cru.uea.ac.uk/tiempo/>
- Research Africa: [www.research-africa.net](http://www.research-africa.net)
- Eldis - Linking Climate Adaptation (LCA) network [www.linkingclimateadaptation.org/](http://www.linkingclimateadaptation.org/)
- VARG (Vulnerability and Adaptation Resource Group) : <http://www.climatevarg.org/essd/env/varg.nsf>
- GIEWS/FAO (Global Information and Early Warning System): <http://www.fao.org/giews/english/cpfs/index.htm>
- West and Central African Council for Agricultural Research and Development (CORAF/WECARD): [www.isicad.org/coraf](http://www.isicad.org/coraf)

The program must also be “mapped into” regional and international processes such as

- UNFCCC SBSTA program of work on adaptation
- CSD-15 matrix
- Convention on Biodiversity

While building on these initiatives and platforms will support broader access to many key stakeholder groups, they have limited applicability for PMU and partner efforts to engage the poor. ICT infrastructure weaknesses in many African countries limits the utility of electronic

distribution of information given limited access, even within African scientific community, let alone resource poor communities.

In sum, while the electronic data bases and portals above will constitute the framework for housing, managing and distributing CCAA-generated knowledge, additional outreach and dissemination efforts, as outlined in the knowledge sharing processes above, are essential to ensuring access.

### **Enhancing knowledge sharing capacity through partnerships or commissioned services**

Much of the knowledge sharing activity outlined above will be conducted by CCAA PMU and research partners. There are areas however, in which outside expertise may significantly enhance the capacity of CCAA partners to effectively manage and share knowledge. Such areas include:

- Delivery of capacity building workshops in KM/ KS subtopics such as effective research communication, communication for policy influence, media relations
- Cross-thematic, program-wide learning analyses and syntheses
- Possible management of a web based portal that provides a dedicated adaptation-focused access point to CCAA-generated knowledge, linking to IDRC-housed project outputs and to partner web sites.
- Organizing knowledge exchange events and workshops that will bring fellows from other initiatives such as AIACC, CLACC, CCAA into a new fellowship programme; also to discuss how knowledge, common strategies and ideas of disseminating and sharing knowledge could be targeted for end users.
- Organising sensitization campaigns – discussions with farmers, youth groups, women’s organizations and policy makers, sharing with them knowledge on climate change adaptation but using this as an opportunity to understand their constraints and need for knowledge as well as contributing to improving our knowledge on similar subject areas

### **Monitoring and evaluation of knowledge sharing activities**

The following table of communication and networking activities, outcomes and outputs form the basis for assessing CCAA’s support to knowledge sharing. Monitoring and evaluation of knowledge sharing will be done through the same hybrid of results-based and outcome mapping approaches as the rest of the CCAA program

**Activities, outcomes and outputs expected from Activity type 2: Communication and networking**

<b>Activity</b>	<b>Outcomes</b>	<b>Outputs</b>
Guiding of communication and networking activities within PAR projects	All stakeholders in PAR projects are better able to share information and knowledge in formats that are accessible to the other groups	Communication products of projects (Web sites, reports, video documentaries and interviews, audio documentaries and interviews, etc...)
Facilitation of a community of practice among partners of supported projects as well as others involved in climate change adaptation	Members aware of other teams activities Members are acquainted with others working on the same subject and feel comfortable with asking them for help when needed	Activity report, reports of meetings, archive of exchanges on discussion list, case studies of knowledge exchanges between teams, radio interviews
Supporting knowledge exchange meetings and forums, including at risk groups, policy-makers and researchers	Participants are acquainted with each other and gain awareness about climate change as well as adaptation options and strategies	Reports of meetings, videos, radio interviews
Production of materials to disseminate information and knowledge to the public, especially to the poor and to policy-makers	The public, including the poor and most vulnerable groups as well as policy-makers, are more aware of the implications of climate change as well as adaptation options and strategies	Brochures, radio documentaries, radio dramas, video documentaries, video dramas, all available on the internet and through various media.
Review of adaptation options and strategies, synthesis of research results, identification of researchable questions	Researchers orient their research towards relevant themes that are a contribution to the scientific community as well as addressing concrete needs identified by the poor	Review documents, scientific papers, databases.