# Climate change communication and social learning - Review and strategy development for CCAFS

Working Paper No. 22

CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

Blane Harvey, Jonathan Ensor, Liz Carlile, Ben Garside, Zachary Patterson, Lars Otto Naess

CLIMATE CHANGE AGRICULTURE AND FOOD SECURITY

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# Abstract

This working paper offers an overview of current theory and practice on climate change communication and social learning in the global South with a view of informing CCAFS strategy in this area. It presents a theoretical framework for understanding social learning and communication approaches and reviews the current landscape of approaches, tools and decision aids in communicating climate change in the context of development. It reviews the challenges of communicating complex issues and scientific evidence as well as relevant local knowledge and perspectives and explores user needs and perceptions both within the CGIAR family and amongst other stakeholders. It provides some case studies from within the CGIAR network of institutions and highlights key themes and recommendations for adopting a social learning approach to communicating climate change and adaptation.



**Keywords**

Climate change communication; Community engagement; Decision-making tools; Participatory research; Social learning

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# Acronyms

| | |
|---|---|
| ALIN | Arid Lands Information Network (Kenya) |
| CIAT | International Center for Tropical Agriculture |
| CCAFS | CGIAR Research Program Climate Change, Agriculture and Food Security |
| CGIAR | Consultative Group on International Agricultural Research |
| IDRC | International Development Research Centre |
| IFPRI | International Food Policy Research Institute |
| IIED | International Institute for Environment and Development |
| ICRAF | World Agroforestry Centre |
| ICTs | Information and Communication Technologies |
| IDS | Institute of Development Studies |
| ILRI | International Livestock Research Institute |

# Introduction

This discussion paper has been commissioned by the CGIAR Research Program Climate Change, Agriculture and Food Security (CCAFS) under its theme "Integration for Decision Making" (Theme 4) to assist in addressing the theme's objectives of:

- Exploring approaches and methods that enhance knowledge-to-action linkages with a wide range of partners,
- Developing and communicating socially-differentiated decision aids and information for different stakeholders.

An essential activity under Theme 4 is to develop enhanced decision support and communication tools so that policymakers, development partners, researchers and farmers can make decisions with a greater understanding of the interactions between local conditions, national policies and programs, and international development, in the face of multiple drivers of change.

These objectives highlight challenges and incentives for CCAFS to support effective climate change communication and social learning at local levels, some of which are presented in this paper for a shared discussion and dialogue with stakeholders and partners.

The contents of this paper have been shaped by a multi-stage investigation led by the Institute of Development Studies (IDS) and the International Institute for Environment and Development (IIED) in collaboration with the University of York. The investigation was designed to take stock of current theory and practice in relation to climate change communication and social learning in the global South, particularly at the local scale, and taking account of practices occurring both inside and outside of the CGIAR system. This approach consisted of:

- A review of recent literature on climate change communication and social learning with a focus on local-level action in the global South;
- A targeted survey of 45 respondents working at local and international scales on climate change communication outside of the CGIAR network, and interviews with approximately 15 participants working within the CG system;

- A mapping and analysis of 67 communication, knowledge sharing and learning initiatives from inside and outside the CGIAR system.

The findings from this investigation point to a range of needs and opportunities which CCAFS could engage with at – and across – local, sub-national, national and international scales, though this paper will focus on actions at local and sub-national levels. They also raise questions regarding the internal functioning and strategy of the CCAFS network and how this might best support improved communication and social learning on climate change. Social learning approaches may help reframe agricultural research to be more outcome-oriented and involve the intended target groups within the research process itself. For the purposes of this discussion paper we have sought to distil these into eight "themes for discussion" which can serve as a starting point for dialogue among the stakeholders involved in articulating the CCAFS strategy. These points should be understood in the context of the specific focus of work under Theme 4, which is decision making at local levels in the CCAFS target regions of the global South. They can be summarised as the following:

1. Which of the wide range of resources and opportunities identified through this study are the most appropriate starting points for CCAFS engagement?
2. How to strategically invest in existing small scale initiatives, and link them to cross-scalar, cross-stakeholder processes which can bring added value?
3. How should the CCAFS team identify the most appropriate communication aims for a given issue or stakeholder group?
4. What are the opportunities and barriers to promoting an internal shift (within the CGIAR network) toward a stronger social-learning approach and outcome-oriented research that involves the intended target groups?
5. How can CCAFS resources be strategically targeted to improve the quality, appropriateness, timeliness, etc. of communication and learning initiatives and products in ways that can improve uptake among end users at the local level?
6. How might the development and deployment of appropriate social learning and community-level communication strategies be mainstreamed into CG practice and with outside actors?
7. Are we currently placing an appropriate balance of emphasis on innovation of *technology*, of *methodology,* and of maximising existing approaches?

8. How will power, knowledge and voice influence multi-stakeholder dialogues where different types of experience and practice are being brought together to promote two-way communication and learning?

This report draws its conclusions from these themes and highlights some key areas where CCAFS can prioritise its work going forward. We note that CCAFS is going to great lengths to reshape its thinking on programme design and practice in ways that enhance the contributions of research to sustainable development and is asking itself where it is best suited to add value. In doing so the team is challenging the CGIAR's more traditional model and develop new ways of engaging staff and programmes by way of a more shared learning model. There is clearly a leadership role for CCAFS in promoting and supporting social learning methodologies in its projects both inside the CGIAR and with other partners. An understanding of the importance of social differentiation, time and scale and the implications of this for successful social learning projects is essential and finally CCAFS can add real value by building on strong successful partnerships and forging new relationships with different stakeholders to bring about change.

# 1.0 Background and theoretical framework

## Background to CGIAR and CCAFS

CGIAR – a loose association of 15 autonomous research centres – has been the central instigator and steward of international research on agriculture for development for nearly four decades[1], evolving and reforming to respond to changing demands. A further evolution after a major two-year consultation resulted in the 2010 strategy and results framework that articulated a new vision and objectives. The ambition was even better delivery of research results through new CGIAR Research Programs (CRPs). The Climate Change Agriculture and Food Security Research Programme (CCAFS) was one of the first of these launched in November 2010.

The CCAFS research programme runs across all CGIAR centres and works in partnership with the Earth System Science Partnership (ESSP). CCAFS is organised into four key themes; 1) Adaptation to Progressive Climate Change, 2) Adaptation through Managing Climate Risk, 3) Pro-Poor Climate Change Mitigation and 4) Integration for Decision Making. All four are research themes, the first three responsible for much of the 'field work' and theme four responsible for a cross-cutting or overarching framework that ensures 'effective engagement with rural communities and institutional and policy stakeholders; grounds CCAFS in the policy context; and provides, through a demand-driven process, downscaled analyses and tools for future climates'[2].

The CCAFS team leading Theme 4 is well under way to developing many of these tools and frameworks as well as exploring in some detail the key challenges in moving towards more outcome-oriented research, delivering effective engagement and what this means for sharing knowledge as opposed to just information. One of the anticipated outcomes of the Theme 4 work on the use of data and tools for planning and decision-making is:

- Socially-differentiated decision aids and information developed and communicated for different stakeholders

[1] CGIAR Website 2012 http://www.cgiar.org/who/history/index.html

[2] CCAFS website http://ccafs.cgiar.org/our-work/research-themes

In an effort to ensure that these tools and decision aids are responsive to the specific needs of different groups of stakeholders at local levels, CCAFS has sought to link them to communication and social learning processes that promote dialogue and engagement between researchers and end-users. The research reported in this Working Paper outlines the current state of theory and practice on climate change communication and social learning in the global South. It offers areas for reflection and recommendations, which may assist in shaping a strategy for achieving the CCAFS Theme outcomes noted above.

### Climate change and communication

Climate change has become a worldwide concern, increasingly impacting the livelihoods of individuals in both the global North and South. The need to develop effective adaptation and mitigation strategies in the South has become crucial to securing livelihoods and community development. A critical element in promoting effective and successful adaptation and mitigation strategies is communication. Originally presented as a complex and abstract scientific problem, climate change information is increasingly being shared and discussed across disciplines and stakeholder groups at a range of scales. Effective communication among stakeholders can help to identify problems, raise awareness, encourage dialogue, and influence behavioural change (Johnson 2011; Moser 2010; Nerlich, Koteyko and Brown 2010). However, in order to communicate effectively on climate change and appropriate strategies for responding to it, it is important to understand and acknowledge how differently situated individuals and communities think about, interpret, and discuss its drivers and impacts (Africa Talks Climate, BBC World Service Trust 2010).

### Communication, knowledge, and learning

This paper takes a broad view of communication as an exchange of information through mediation, which in turn can influence the formulation, transfer, and reception of the shared information (Silverstone, 2005). Mediation techniques can include traditional, linear broadcast-style approaches, participatory and social media, citizen-led grassroots approaches including street theatre and storytelling, and other forms of knowledge intermediary and brokerage work (Fisher and Kunaratnam 2007; see also Rothenbuhler and Coman 2005). For Castells (2007), mediated communication and information exchange are tied to historic social forms of power and counter-power, of domination and social change. In this sense, mediated

messages play a key role in influencing people's perceptions on social and political issues (Carvalho 2010; Silverstone 2005). In the context of climate change, mediated communication can have a direct impact on the ways in which an individual or community frames, views, and reacts to climate change challenges (Johnson 2011; Carvalho 2010; Nisbet 2009).

Many existing theories on knowledge production lack a clear connection with learning processes (Morey, Maybury and Thuraisingham 2000). When knowledge transmission occurs through a learning process that is driven by the one-way delivery of data and information, what Freire (1970) referred to as a 'banking model', it can reinforce structural relationships of power. This creates and maintains monopolies of knowledge within societies, contributing 'very strongly to the mobilization of bias' and the declaration that the knowledge of some individuals or groups is more valid than others (Gaventa and Cornwall 2008). Those who are encouraging social and behavioural change, like mitigation and adaptation to climate change, must critically analyze the politics of knowledge production and encourage the alteration of power relations embedded in learning (Wilson 2001). This is particularly relevant in the context of local-level adaptation to climate change, where adaptive practice is often closely linked to the everyday practices of community members; practices which may be deeply rooted in their culture, worldviews and modes of social organisation.

One way in which the power dynamics of learning can become more equitable is through shared or dialogical approaches to knowledge production. This process encourages discussion among various voices within a community. As a result of iterative loops of action and reflection, shared knowledge, awareness, and skills can be learned and acted upon by the multiple participants. This results in conditions for not only the sharing of existing knowledge, but co-producing (between different actors) new knowledge that draws from a breadth of understanding of development challenges. Many refer to this participatory form of knowledge creation as social learning.

Social learning has received increasing attention as an approach to tackling the complex problem of human induced climate change (Collins and Ison 2009; Pahl-Wostl et al. 2008). Keen (2005) defines social learning as 'the collective action and reflection that takes place amongst both individuals and groups when they work to improve the management of the interrelationships between social and ecological systems'. Social learning builds from an

understanding that knowledge implies learning and the ability to use information. An individual's knowledge is constructed on the basis of (limited) experiences: one person's knowledge of a given issue will not necessarily be the same as another's. Our individual understanding of the world is therefore partial. Social learning approaches aim to overcome this limitation by facilitating knowledge sharing and joint learning experiences between stakeholders. Through working together to better understand their situation, new, shared, ways of knowing are generated.

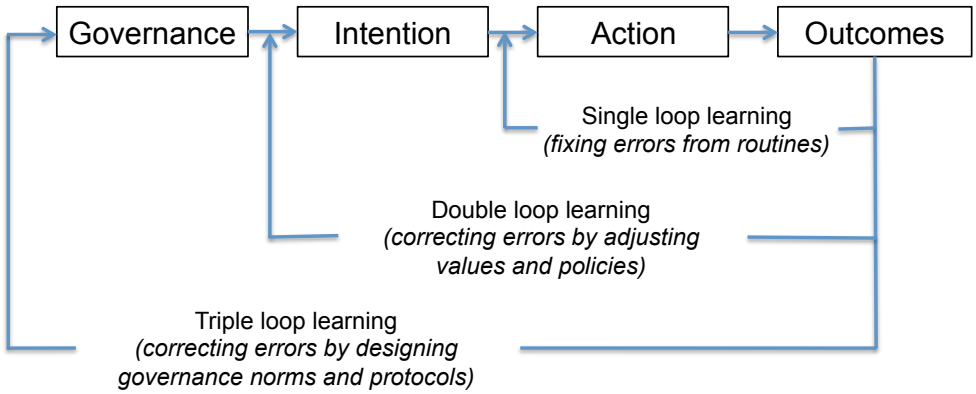
As Collins and Ison (2009a) point out, 'the term social learning has arisen in response to a growing recognition that learning occurs through situated and collective engagement with others'. Social learning expands the notion of communication beyond a linear process of information provision by explicitly seeking to engage stakeholders in a process of knowledge creation that induces behaviour change through a shared process of learning by doing. However, social learning is not synonymous with stakeholder participation, though the two are often conflated. Reed et al. (2010) argue that while considerable evidence suggests that participatory processes can facilitate social learning, the fact that participation takes place does not guarantee that social learning has happened. Conversely, it may also take place without facilitated participatory processes (for example, it may occur spontaneously through social media).

The significant point is that what results is 'a change in understanding that goes beyond the individual to become situated within wider social units or communities of practice' (Reed et al 2010). The 'change in understanding' is often intended to be significant, challenging values by questioning how problems are conceptualised (so called 'double loop' learning, leading to changes in policies or management goals) or prompting structural changes at the level of the governance system itself (triple-loop learning, challenging organisational purpose, for example; see Figure 1). The intention is to move beyond technical fixes in response to perceived problems (Diduck 2010) yet single-loop learning (yielding only alterations to existing routines or actions) may also be the outcome. Political, historical and institutional context is significant in determining how social learning processes will translate into outcomes, and successful innovations (or adaptations) that question conventional responses to challenges may fail to be reproduced if structural barriers remain unchallenged or in the absence of processes to support the 'codification of new routines and practices or

formalization of new rules' (Pahl-Wostl 2009). Challenges in practice include addressing power inequalities between actors in social learning processes (Armitage et al. 2011; Van Bommel et al. 2009) and in ensuring that shared learning emerges from multi-stakeholder meetings (Cundill and Fabricius 2009).

As Armitage et al. (2008) suggest, greater attention is needed to 'capacity-building, recognition of the role of risk, and consideration of how incentives could be used to encourage learning. Further consideration of the role of power and marginality among groups participating in the learning process is also needed, as is more systematic evaluation to monitor and measure learning outcomes.' For all these reasons, there is no one-size-fits all management arrangement that enables social learning (Pahl-Wostl 2009).

**Figure 1 multiple loop learning for environmental or resource management**




Armitage et al. 2008

## Communicating for development

Best viewed as a process rather than a product, communication for development places techniques and technologies at the service of development outcomes. Fraser and Restrepo-Estrada (1998) provide a thorough definition when they explain that 'communication for development is the use of communication processes, techniques, and media to help people toward a full awareness of their situation and their options for change ... to help [them] plan actions for change and sustainable development'. For those involved in communication for development, what counts is the impact of the communication process in enhancing people's ability to manage their own lives and livelihoods (Quarry and Ramirez 2009). This process involves a social exchange that includes listening, establishing trust, sharing knowledge, debate, and building common vision for the future (Mefalopulos 2008). However, many

communication initiatives have focused on the creation and dissemination of northern-produced and focused knowledge. This has resulted in a monopoly of certain persons or institutions over what are the 'valid' forms and types of development discourse, further marginalizing segments of developing societies (Harvey et al. 2009). By integrating a more participatory approach, development communication has recognized the knowledge of local populations in forming and implementing development approaches and policies (Gumucio-Dagron 2009).

### Communicating climate change in the context of development

Communication in climate change aims to engage individuals and communities through information dissemination and debate in order to encourage the behavioural changes necessary to mitigate and adapt to increasing climate variability (Moser 2010; Marx, et al 2007). This said, much of the climate change communication that occurs in the global North is linear, providing information and public awareness while doing little to engage the public in discussion on the issues and solutions (Johnson 2011). There has been a shift in climate change communication over the past decade, however, as many studies have shown that in order to be effective communication must move beyond simply providing information to include raising awareness and promoting active public engagement (Moser 2010; Nerlich, et al. 2010; Russill and Nyssa 2009; Moser and Dillin 2007). This move was influenced in large part by communicators taking climate change discourse out of the isolated spheres of science and policy, opening up the discussion of climate to many more audiences and forums (Moser 2010). This form of communication has blended a broad spectrum of disciplines that encompass psychology, anthropology, economics, history, environmental science and policy, and climate science (CRED 2009). Furthermore, the focus has shifted to appropriate language, metaphor, and analogy; combining science with narrative storytelling; using vivid visual imagery and experiential scenarios; and delivering by trusted messengers (CRED 2009). More localized communication initiatives and platforms abound, including community theatre and centres, and discussions within local religious facilities. More recently, community radio, web forums, participatory web 2.0 platforms, mobile phones, and various other information communication technologies (ICTs) are being utilised (Thompson 2008).

## Audiences

It is essential for any effective communication effort to know its audience. In recent years many communicators have rejected the simplistic views of target audience, and have adopted approaches aimed at better understanding how to engage people at an affective, emotional level (Nerlich, et al. 2010; Maibach and Priest 2009). An example of such an approach is one which begins by engaging the audience in exploratory, bottom-up, dialogue in order to gain an understanding of the local, non-expert climate knowledge and perceptions, rather than only top-down, expert information sharing (Nerlich, et al. 2010; Maibach and Priest 2009). Understanding people's perceptions and knowledge of weather and climate is critical for effective communication of scientific forecasts with specific communities and social groups. This social differentiation of communication and engagement strategies (according to gender, social status, livelihood, etc.) is frequently noted, but is seldom apparent in specific initiatives, as the research outlined below has revealed (see Naab and Koranteng 2012 for an example of recent CCAFS practice in this area).

The local knowledge of some audiences provides a framework to explain the relationships between particular climatic events and livelihood activities, such as farming (Kaland-Joshua 2011; Rengalakshmi 2007). Patt and Schröter (2008) highlight the importance of a shared dialogue between all stakeholders in their review of a failed policymaker-driven adaptation policy implemented in Mozambique. Their findings suggest that 'greater attention to the risk perceptions of residents in [local communities] affected by climate change is important at the time that policies are being designed'. The attention on local risk perceptions called for here involves better understanding how communities (and social groups within communities) understand and respond differently to risk. Pidgeon and Fischhoff (2011) highlight a number of challenges to effectively communicating risk in the context of climate change. They note that risk is defined differently by different people depending on the outcomes at stake, and that emotions and social processes play a key role in response to risk. This in turn should inform communication strategies. They also highlight the need for climate research and communication to provide estimates on risk and cognitive representations of the process creating or controlling the risks. These challenges for effectively communicating in ways that are appropriate to specific audiences are further complicated by the complex and uncertain nature of climate change, as well as its timescale, which is often well beyond the timescales that shape decision making at local levels. Further, provision of these types of information are

not sufficient in and of itself, as it must be supported by social, political and economic conditions which enable differently situated people to take action based on their understanding/assessment of the risks at hand (Pidgeon and Fischhoff, 2011). As such, some communicators have attempted to overcome this challenge in the global South by framing climate science in people's day-to-day lives and local knowledge (Artur and Hilhorst 2012; Corner 2011, Newsham and Thomas 2011; Kalanda-Joshua et al. 2011).

### Types and roles of information

Building on the challenges above, the aims and audience of a particular climate change communication initiative help inform which platform is best suited for delivery of the communication, as well as what role or function the communication is meant to serve. Communicating seasonal climate information provides an important example. Several studies during and after the 1998 El Nino demonstrated that seasonal forecasts were of limited use for farmers, even in a year with a very strong climate signal. Since then a number of studies have been carried out involving, for example, repeated workshops to both help improve the understanding of what makes forecasts useful, and to help farmers understand forecasts. Studies have highlighted the need for partnerships between users and providers (e.g. Patt et al. 2007) and have looked at the role of local knowledge and interlinkages with scientific knowledge (e.g. Kihupi et al. 2003). Elsewhere, emphasis has been placed on importance of consciously addressing the cross-scale relationships that are inherent in climate change in order to better understand and respond to emerging problems. Boundary and bridging organisations, that link actors across scales, have shown particular promise in this regard (Cash et al. 2006; Cash 2006).

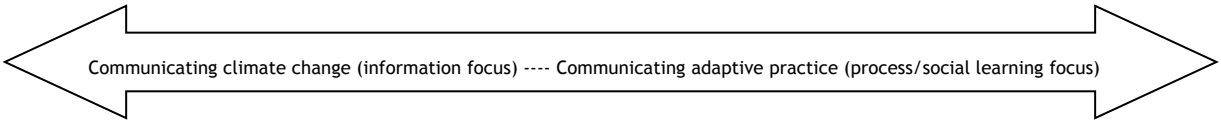
### Aims of communication

These challenging traits have helped to define more specific aims for climate change communication, guiding the messages and delivery processes to go beyond information sharing and education. Moser (2010) distinguishes three broad categories of climate change communication, categories which do not necessarily build on one another. Below, we build upon these categories and their associated aims (see Table 1). We have added aims specific to climate change communication in the global south, and building on Moser's work, posit that these could be understood as sitting upon a continuum of approaches to engagement which range from a more straightforward model of information dissemination, to more process-

oriented approaches well-suited to social learning. This underscores the link between the types of change sought – from simply informing audiences on new issues to re-thinking key systems and behaviours – and the types of approach required for achieving these changes.

**Table 1: Continuum of climate change communication aims**

| Inform and educate individuals about climate change | Achieve some type and level of social engagement/action | Bring about changes in social norms and cultural values |
|---|---|---|
| - Inform on science (including level of consensus and magnitude of the problem)<br>- Inform on causes<br>- Inform on current and potential impacts<br>- Inform on possible solutions<br>- Inform on mitigation practices<br>- Inform on risk management<br>- Inform on adaptation practices<br>- Inform on political/policy responses | - Encourage consumption-related action<br>- Encourage political/civic action across unusual boundaries or scales<br>- Encourage action which helps people to adapt or reduce their vulnerability and/or exposure<br>- Encourage action/behaviour that encourages' forward-learning'/adaptation | - Influencing values through early education<br>- Influencing values through pervasive modelling<br>- Influencing on climate "smart" or "resilient" thinking/planning |




Source: adapted from Moser (2010)

## 1.1 Review of user needs and perceptions

In order to better understand the current 'state of play' in climate change communication and social learning, as well as the priority needs perceived by a cross-section of stakeholders, the research team has looked at recent literature on the issue, and has conducted three surveys which had a total of 45 respondents:

- The first, with a targeted group of key informants selected at the outset of the study for their contributions to climate change communication in relation to: understanding local experiences of climate change communication in the South; developing communication initiatives; or contributing to our theoretical understanding of the field, including CCAFS members
- The second, an open survey delivered through targeted online communities: The Community Based Adaptation Exchange (CBAX), hosted by IDS; Climate Change Media

Partnership, hosted by IIED; and Nexus for ICTs, Climate Change and Development hosted by University of Manchester/IDRC

- The third, delivered to farmers, extension/environmental officers, and decision makers at district scale in Kenya by ALIN Kenya.

### Summary of key points from stakeholder surveys

When asked about the differences between communicating climate change in the North and South, there was general agreement that there are distinctly different priorities and constraints within which communication must take place in the global South. These include:

- The need for basic understanding of drivers and impacts of climate change;
- Limited availability of information, tools, strategies and enabling policies with which to work;
- Greater reliance on face-to-face communication;
- Focus on building resilience and adaptive capacity a higher priority than mitigation;
- Need for sharing response strategies.

Respondents suggested that, between information dissemination; knowledge management; and communications strategies, the area in greatest need for improvement is communication strategies. One respondent suggests:

"I would prioritise the dissemination and communication of community-owned solutions, in other words, capacities should be built to empower communities to share their own solutions. This has a lot to do with the type of information developed (more visual and less textual) rather than just its content."

Overwhelmingly, the communication needs for farmers and decision-makers were highlighted as a particular area of concern by respondents, especially for the provision of basic information to assist in decision-making. As one respondent described, there is a need for 'clear information that is of sufficient (and no more) detail for decisions at hand, fit for purpose and actionable'.

However, in contrast to the point on basic information provision raised above, another area highlighted by numerous respondents was the need to create platforms for communication across different scales and types of stakeholders. For example, one respondent noted that *"decision-makers need partnerships that support learning and negotiation platforms that*

*allow for transparency and accountability in information dissemination, decision-making, and resource allocation."* On this same point, there appears to be a gap between the priority stakeholder groups highlighted by respondents and the platforms currently available for communication and knowledge sharing. Professional networks, conferences and online forums were cited most frequently, with community groups being 3rd most cited. Innovative small-scale technologies such as mobile phones were virtually unmentioned among respondents. *"There are many conferences where institutions and organizations at the global level can dialogue on issues, but at the field level the situation is very different."*

Further, on the engagement at particular scales, there was wide consensus on the need to work within local languages; values; cultural systems at local scales, but even at those scales there is a need to differentiate. This was noted in the context of India for example:

"Heavily stratified societies, such as the Indian one, need appropriate strategies for say big farmers and small, marginal farmers. For small farmers it is the immediate livelihood question that comes first, pushing adaptation practices to the back, though they are also the most vulnerable to climate change. For the big farmers who are better connected to market, access to information and adaptation is relatively easier. Communication strategies for these two groups shall vary enormously as priorities are different."

In line with our proposed continuum of climate communication aims (Table 1 above), a number of respondents differentiated general climate change communication from communication on adaptation by highlighting the forms of engagement, behavioural change and socio-institutional shifts that the latter should stimulate. The process-oriented aspects of the latter were also highlighted by several respondents, such as one who suggested that *"communicating climate change implies providing climate information - seasonal forecasts, scenarios, models. Communicating for adaptation implies disseminating tools and methodologies/technologies/practices that help people adapt and do things differently."* It is this latter focus and approach to communication that is the focus of CCAFS' interest under Theme 4.2, and which we propose are particularly well suited to social learning processes as opposed to linear communication strategies.

The barriers to getting information to targeted audiences noted by respondents can be clustered into two groups, which have some overlap with one another: barriers presented by the construction/dissemination of messages (messages not made relevant; not presented in

appropriate language; shared at the wrong time; unclear messaging); and barriers at the level of message reception (literacy – be it textual or informational; lack of access to information; etc.). Overwhelmingly, respondents highlighted barriers presented in the former group. Radio was cited by a few respondents as a potential option for overcoming some of the barriers because of the built-in feedback loops (call-ins etc.) and use of local and non-text-based language.

On factors that influence the success of communications, the most widely held agreement was on the contextualisation of the content being communicated (which is contingent on already understanding the perceptions and realities of local populations). Other factors included the use of appropriate language (tongue and content), participatory processes for engagement rather than top-down communications.

Finally, there was emphasis on striking a balance between building capacity for better using existing knowledge and strategies for communication and supporting the development of new innovations. This said many of the most commonly cited examples of good practice appear to have been based upon older formats such as radio, face to face facilitation, and 'traditional' forms such as song, dance and theatre. Thus it becomes important to differentiate between technological and methodological innovation. Which should be supported and how?

## 1.2 Analysis of CGIAR centre needs and perceptions

### The CGIAR model

Traditionally the CGIAR model has been one of funding large sophisticated scientific research programmes and a number of these have also developed their own sophisticated and innovative methods for sharing their research. The early history and growth of the CGIAR centres has meant that these programmes have also tended to be focused at the individual CGIAR centre level rather than shared across centres. The credibility of the CGIAR centres themselves is inevitably based on the quality of their research outputs and the reputations of the researchers. Research reputations are built through publication in peer reviewed journals, working papers, presentations at workshops, peer to peer dialogue and review and all the incentive structures and challenges for researchers the world over are geared to this model – a model that will ensure delivery for the first of the CCAFS engagement and communication objectives above (providing a credible and authoritative platform for scientific information)

but is in direct conflict with the second (facilitating user-driven research, science-based dialogue).

A recent paper by Clark et al (2011) looking at efforts to improve the linkages among research programmes and experiential knowledge and action on the ground suggests the question for 'scientists, program managers and donors is therefore not whether but rather how to modify programme design and practice in ways that help to realise the great potential of research programs to support sustainable development.' Indeed CCAFS is going to great lengths to do just that and is asking itself where it is best suited to add value. Where can it most effectively contribute to getting its research to those that most need it and building a research agenda that truly reflect its stakeholders' needs. The CCAFS team are working hard to challenge the CGIAR's more traditional model and develop new ways of engaging staff and programmes by way of a more shared learning model.

Having spoken to a number of researchers in CGIAR centres it is our contention that there are broadly three kinds of researcher/research teams within the CGIAR. Those who are the 'hard scientists', the more traditional researchers who focus in on their projects, find their own funding, are less concerned about the strategic themes or carrying out shared or new communications initiatives – and feel that the top-priority is the need for more research to improve the quality and quantity of information and modelling coming from climate science. The second group we suggest are the researchers who are supportive of, and interested in the CCAFS themes and the drive CCAFS is making to work in different ways but feel that communications or engagement is not their speciality so are happy to pass on their information to others in CCAFS or elsewhere, to do something with it. The third group are those researchers who are happy to be champions of a more CCAFS style approach – stronger engagement and learning with and from communities – and who have been embracing new ways of working, particularly at community level, to align scientific research with community knowledge.

Understanding and analysing this internal model and how it positions CCAFS and CGIAR as a provider of robust science or a catalyst for shared learning is essential for thinking through next steps. Historically, the principal CGIAR donors have bought into the traditional scientific research model and while the emerging aspiration may be for closer engagement on the ground it is likely that the level of support for such a shift is nowhere near that needed to

implement a cross-CGIAR programme of social learning. CCAFS need to articulate a clear strategy that reflects a more effective engagement and shared learning agenda while recognising the limitations of a full social learning model. It will be a considerable challenge to bring the more traditional researchers towards a more participatory way of working. Indeed, one CGIAR scientist was of the view that it was hard to communicate on an issue before the scientific research had been done.

### Climate change, the science vs. climate change adaptation

CCAFS' themes focus on climate change adaptation, mitigation and managing risk. Building knowledge for adaptation to climate change is different from researching the science of climate change. In speaking with CGIAR staff, and to other communicators of climate change, it is clear that for communications strategies in support of adaptation and understanding of the science and the knowledge behind how we experience practical adaptation is needed but there is some discussion as to which comes first. For some it is important to provide the fullest understanding of the science before starting to communicate to the wider world and to communities in particular. For a community already coping with the effects of climate change, the 'science' can appear irrelevant. Many CGIAR projects are discussing climate change science within their project framework alongside other urgent needs perceived as more relevant by the communities with whom they work. Communities have been 'adapting' to climate variability and change for millennia and have a vast amount of contextual information and experience that, combined with research, can provide a rich source of adaptation knowledge. This knowledge – evolved and refined in a social learning environment – is at the heart of survival for vulnerable communities. It is this knowledge that CCAFS seeks to support and harness for the benefit of communities adapting to climate change. Finding the balance between resourcing and supporting new research on climate science as well as allocating resources to working closely with communities to interpret their own knowledge and learning of what works for adaptation in a range of different contexts is a considerable challenge for CCAFS. Exploring how the 'loop can be closed' by feeding back bottom-up adaptation knowledge into the evolution of climate science models, and crop science is also a major part of this learning process. Funding models, researcher incentives and project cycles do not always facilitate this kind of listening and shared reflection.

### Communication or social learning

'Communication' covers all interaction, anything from purely disseminating information to a defined target audience/s through to the activities that take place in a truly social learning process. The pre-conditions for social learning are more challenging – particularly for organisations like the CGIAR. Reed et al. (2010) remind us that "for social learning to occur, the ideas and attitudes learned by members of the small group must diffuse to members of the wider social units or communities of practice to which they belong". Siebenhuner and Ossietzky (undated) also put forward three key institutional attributes needed to foster a social learning environment – proper arrangements for institutional learning that actively include gathering external knowledge, organisational openness and committed leaders and change agents.

The real challenges here for CCAFS are around changing an internal mindset amongst the many and not the few. It is about bringing the body of researchers on board to support a truly learning organisation and one that supports a highly intensive mode of working. How would the CGIAR facilitate this learning environment, how would it ensure that the learning from a small network of very concentrated community programmes would filter back into the strategic development of mega programmes or a change in donor agendas and funding priorities? From our survey and from our conversations with CGIAR colleagues it is clear that the tension between focussing on understanding the climate science on the one hand and on the science and knowledge of adaptation on the other need to be clarified. Researching adaptation relies on a much more effective ability for social learning. Community focused communication strategies are one thing, true social learning quite another. Two further challenges relevant for CCAFS in this regard are around scale and partnerships.

### Scale

To work effectively at community level requires considerable resourcing as well as a good understanding of the processes of social learning inside the organisations. Firm relationships need to be built, coined by Patti Kristjanson (pers comms) as "thoughtful engagement" in a conversation about linking knowledge with action - these relationships need to be conducted in local languages, research shared through a range of traditional and non-traditional methodologies and technologies. Each community has its own context, culture, and its own

perceived needs. Increasingly we understand that language is important to working with communities and yet few are able to do this well.

If CCAFS develops this way of working – is it really practicable? How can this kind of engagement be taken to scale? Some researchers in CGIAR have been exploring with others a "landscape approach"[3] a new initiative that brings cross sector dialogue across landscapes and communities to develop policy and investment. But even in this context, the challenges of a truly social learning approach is hard to take to scale. Nuanced communications strategies targeting different levels of engagement are needed, good capacity to absorb and share information is needed both at community level and also within key partnerships or within the policy environment. CCAFS' strategy places it as an organisation seeking to inform policy and practice at multiple scales - global, regional and local but it cannot do all this alone – there is also increasing evidence from our recent survey that more definition of the role of key intermediaries is worth exploring.

### Partnerships

CCAFS' 2010 Engagement and Communications Strategy identifies 9 different groups of possible partners: Core partners (their own group of centres and funding partners); Policy makers (international, national and local); National implementing agencies; technical agencies; Farmers' organisations and rural communities of practice; Private sector and industry; Civil society organizations (international, national and local); the research community; donors; and media. Within this identification is recognition of the more traditional role of the CGIAR fraternity and these stakeholders represent familiar groups for CGIAR to share its evidence and raise awareness for international policy change.

CCAFS Theme 4 however, is not implementing this strategy but is working to develop a new understanding of the most effective ways to support communication for social learning and behavioural change at community level and in ever-changing and complex contexts – like climate change and agricultural food security. This Theme 4 strategy will need to use different communication approaches and methodologies – some tried-and-tested and some new – but above all will need to enlist the help of new partners and alliances. A discussion of new

[3] Landscapes for People, Food and Nature Initiative, Workshop, Nairobi March 2012 http://landscapes.ecoagriculture.org/pages/dialogue

partnerships needs to analyse more closely the respective roles for partners to increase the two way flow for information – the recommendations in this report will suggest there is potential for a more nuanced and different, possibly interpretation, role for infomediaries, at local, national and global levels, and of the relationships between these different groups – around which power relations, social norms and epistemological beliefs can facilitate or complicate shared meaning-making (Reed et al 2006; Harvey 2011).

### Portfolio of approaches

Rather than assuming there are infinite numbers of tools and approaches, CCAFS has questioned to what extent it should present a portfolio of approaches that are tried and tested techniques for communication in certain circumstances. It is true that we do have excellent bodies of work that have compiled the evidence and understanding for what works in communicating across all audiences. There is clearly the desire to list, categorise and understand each of these. Indeed that is the role of the communication/knowledge specialist. The challenge is that each situation is different, each relationship is different, each audience is different and the greatest impact is achieved by understanding that each particular situation and building a strategy using a range of approaches to ensure success. One way to encourage a more strategic approach to communications and engagement is to value and resource communications work but in a way that is closely tied to measuring impact and success. Greater investment and time spent in developing good theories of change and impact pathways developed from an understanding and analysis of local realities and local thinking would help endorse the use of particular approaches and strategies.

It is clear too that donors influence the type of communication strategy that can be deployed as well as influence the choice of approach or tactic. A lack of understanding of the different kinds of communications strategies that can be developed for different kinds of engagement usually results in too little support for critical activities (Carlile 2011). Working with donors to build their understanding and confidence in the full range of communication activities and social learning engagement might secure greater investment in vital shared learning. Linking communications to impact will increase the likelihood of success and open up the possibility for new ways of working.

### Innovate or renovate

CGIAR centres have had the funding, freedom and intellectual capital to innovate successfully and have developed some interesting and exciting tools such as the International Food Policy Research Institute (IFPRI) state of the art economic modelling on the different scenarios of climate change and CCAFS initiative, Climate Analogues, that models for communities what their environment may look like in the future by looking at another communities environment that matches their predicted changes. Without this level of innovation we would not have the benefit of being able to share huge datasets and sophisticated scientific modelling techniques. This kind of innovation remains vital. How can organisations like CGIAR combine this facility to innovate on a grand scale with an ability to renovate tried and tested techniques and bring about the transformational change that communities are looking for? Where do we need new innovation and where do we need to use technology that is already working? The transformative role that mobile telephony is playing in rural Africa at last offers a successful channel for communication to large numbers of people and through which we can share basic information. We do not need to innovate further here we just need to adapt our communications strategies to ensure we use this medium most effectively?

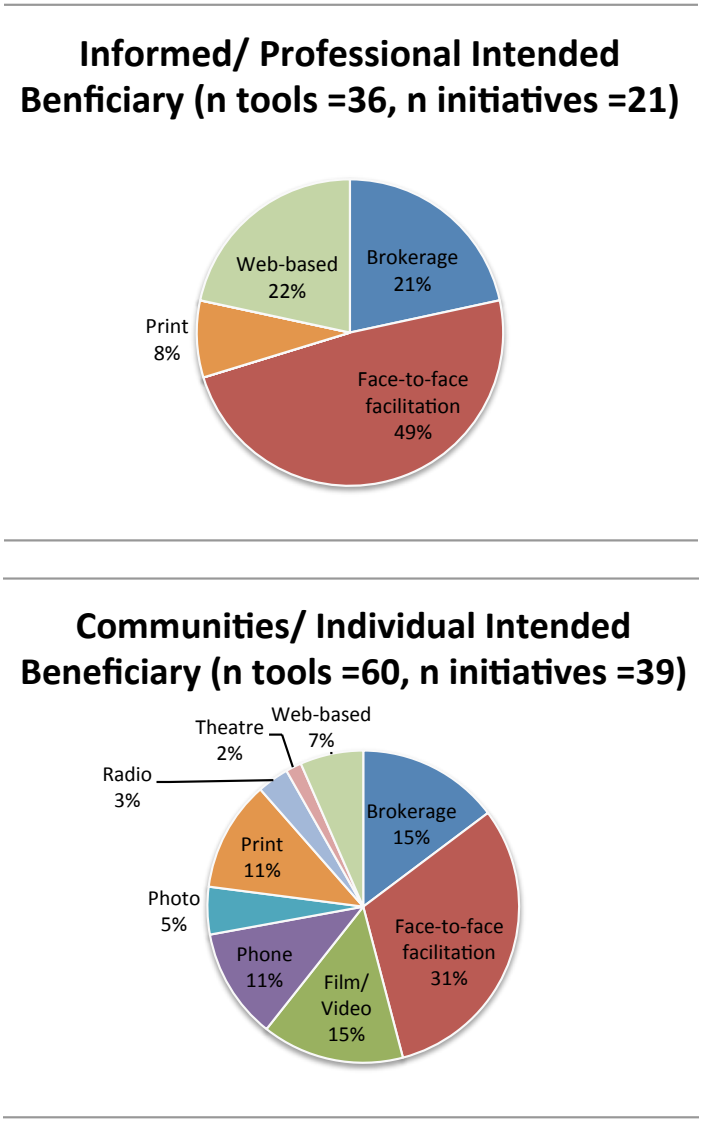
Researching the best ways that a combination of hi- and low-tech information systems can be supported, that tried and tested methodologies are refined and more closely synchronised by facilitating appropriate partnerships that can make that happen could be of benefit to all.

# 2.0 Current landscape of approaches, tools and decision aides

The research team conducted an extensive review of existing tools, approaches and decision aids in order to establish the current landscape of climate change communication initiatives. While such a survey cannot be comprehensive and does not claim to be a representative sample, an extensive search was made and a total of 67 initiatives were analysed, including 10 drawn from CGIAR centres. The complete database is available as an electronic annex to this report, enabling searching and analysis according to 17 information fields, including scale, beneficiaries, technology platform and language. The following five boxes provide highlights

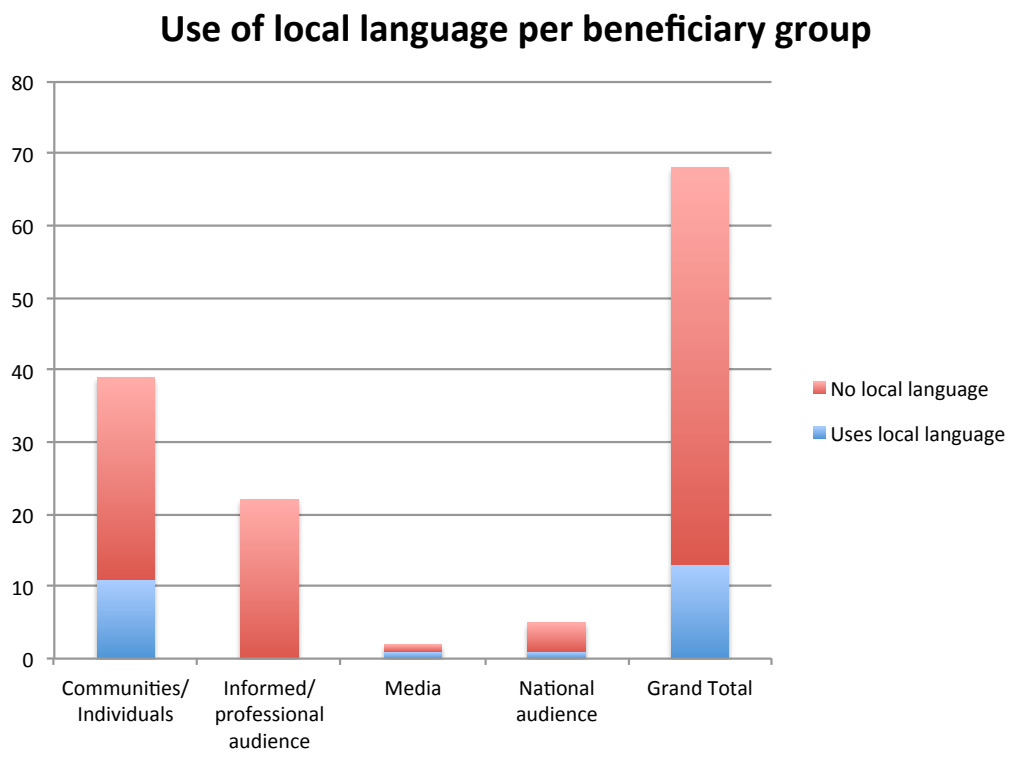
of the team's analysis of the dataset. Further information can be found in the graphical analyses provided in the Appendix.

**Box 1: Communication tools**




In the initiatives surveyed, there is a greater proportion of facilitation and brokerage for the informed/ professional audience (n=36) than at the community level (n=60) - reflecting the stakeholder observation that there is a need for more cross-scale platforms that include community level actors, and for households and communities to have the opportunity to share solutions and experiences. This is further reinforced when web-based tools that take the form of virtual meeting spaces are included into the mix of initiatives. Are actors at the community level missing out on the most effective communications strategies, compared to those in more accessible locations? Note - many initiatives use multiple tools. Total n tools =110, total n initiatives =67.

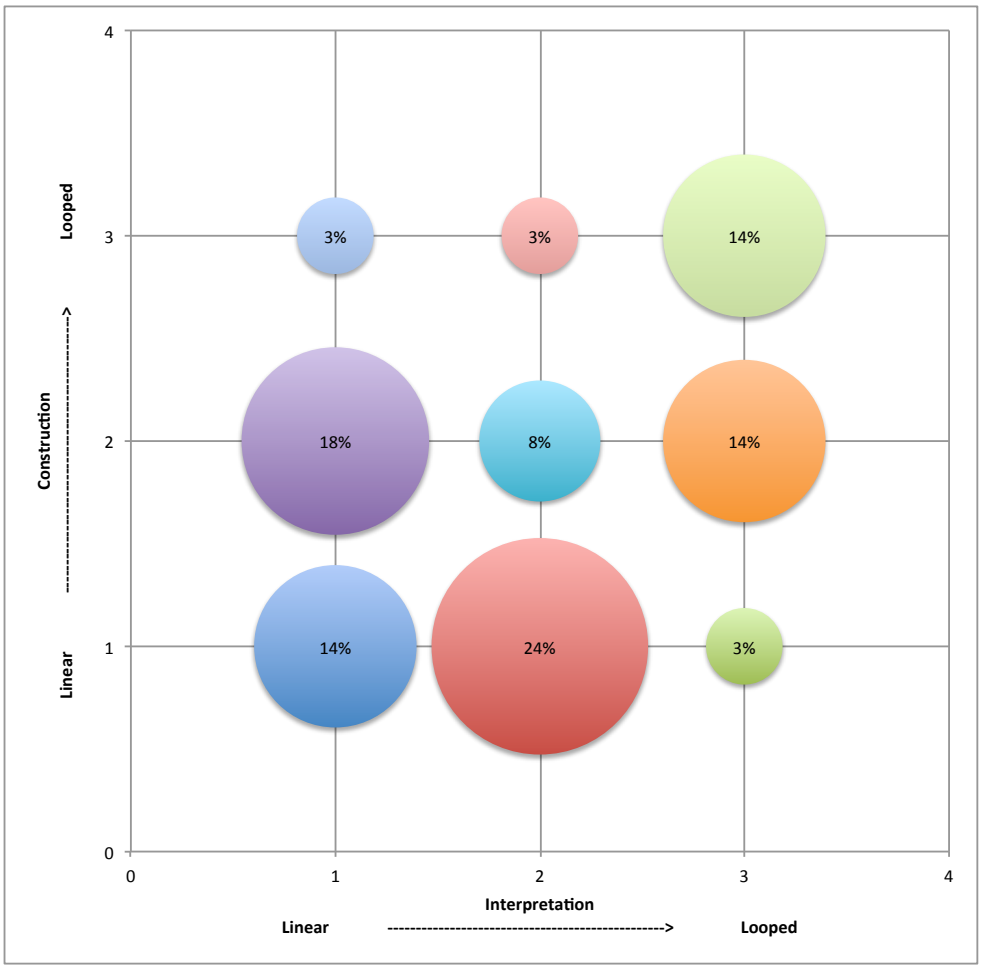
**Box 2**




The utilisation of appropriate local languages is repeatedly referred to in the stakeholder responses – both as a key factor in successful approaches, and as a barrier to successful communication when absent. The survey of initiatives suggests that local language is all too often overlooked in climate change communication even when local communities are the intended beneficiaries. (Note – n=68 due to one local language initiative targeting communities/individuals and informed/professional audience).

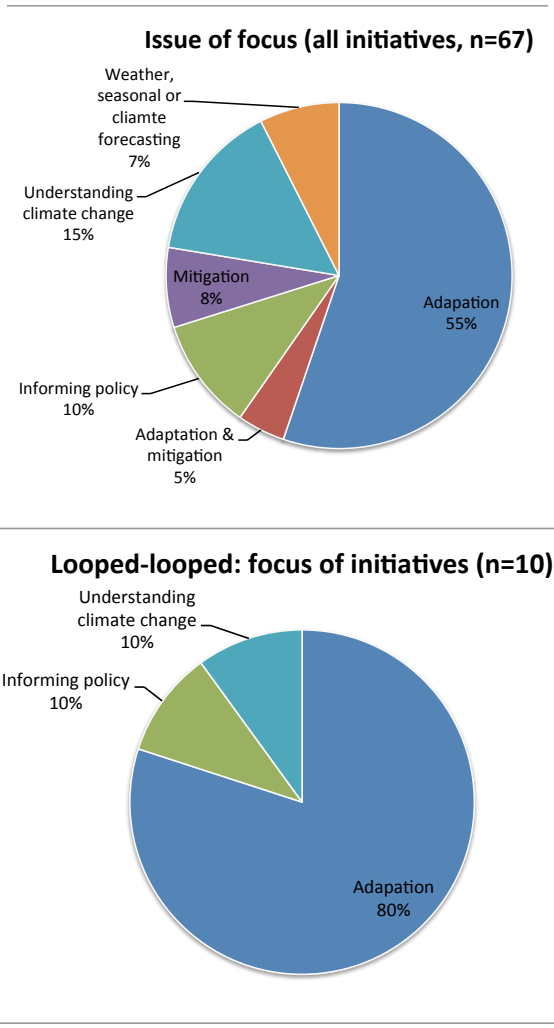
## Box 3: Construction and interpretation

The understanding of communication set out in the Introduction suggests a continuum of communication models, with linear, didactic communication at one extreme and iterative, co-constructed and process-based learning models at the other. This applies equally to both the *construction/dissemination* and the *reception/interpretation* of information in a given approach. Thus we can map a two dimensional space of construction against interpretation, with a spectrum from *linear* (one-way) to *looped* (iterative and reflective) along each axis, as illustrated below. In the survey of initiatives, we scored each example on a scale from 1 - 3 along each axis. 'Looped-looped', for example, refers to initiatives that scored 3 in both construction and interpretation, suggestive of strong social learning approaches.




The above graphic maps all initiatives in the database (n=67) in terms of their approach to construction and interpretation. Stakeholder calls for local participation, approaches aimed at behavioural change, opportunities for information sharing and knowledge building, and the need to contextualise climate information within the specific environment and risk perception of different actors all point to the need for 'looped-looped' strategies that provide opportunities for shared knowledge creation. The survey of initiatives suggests that only a minority of approaches (14%) provide such opportunities, while the vast majority (56%) still rely on linear, top down information provision in message construction, interpretation, or both.

## Box 4 Focus of Initiatives

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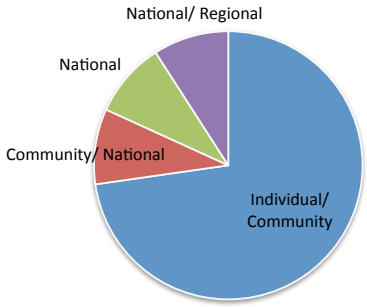
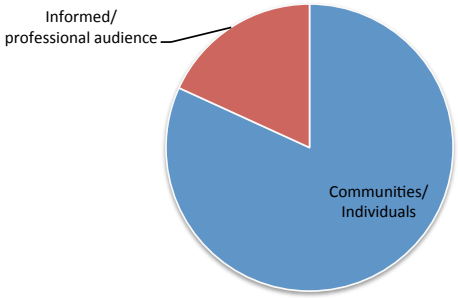
**Box 5 Scale and beneficiaries**

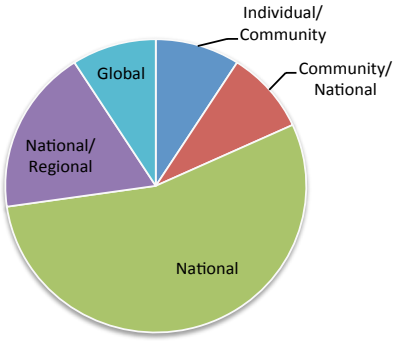
**Looped-Looped: scale of initiative**



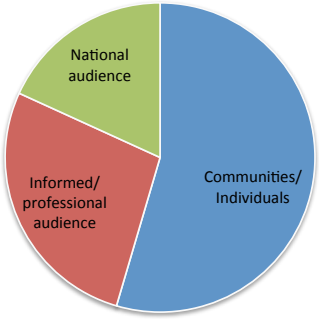

**Looped-Looped: Intended beneficiaries**




**Linear-Linear: scale of initiative**




**Linear-Linear: Intended beneficiaries**




The majority (although not all) of the 'looped-looped' approaches in the survey operate at the community scale with a focus on local beneficiaries. 'Linear-linear' information provision approaches operate mainly at a national scale, even though the majority of intended beneficiaries are local. The relative ease with which information provision approaches can be applied may explain the broader scale of operation (presumably increasing community beneficiary numbers reported to donors), but this approach does not necessarily meet the needs of communities as expressed in the stakeholder survey. Is there a way to provide national scale support for 'looped-looped' approaches that retains community and context specificity while reaching a wider audience? (Looped-Looped n =10; Linear-Linear n =9).

## 2.1 Mapping existing CGIAR tools and practices

The appendix to this synthesis paper explores in more detail 11 case studies of projects aimed at communicating climate change – six examples were from the CGIAR and four from elsewhere. Examples were chosen that highlighted elements of social learning and new ways of working that encourage a more reflexive and reflective way of sharing information and building understanding. In this section we look at those projects run by CGIAR institutions.

In terms of the "Construction and Interpretation" assessment of initiatives highlighted in Box 3 (above) two of these projects received a 1/3 scoring (1 for construction and 3 for

interpretation) and the remaining four had a 2/3 scoring (2 for construction and 3 for interpretation). This scoring methodology, paired with the continuum of communications aims (Table 1 above) demonstrates that projects can be situated anywhere along a scale that goes from merely informing and educating through to actually engaging in a two-way dialogue with targeted groups.

This move towards a style of working that reflects a greater potential for social learning, within the CGIAR, is extremely encouraging. As we have already stated in this report the history and culture of the centres and the incentive structures for researchers is often not conducive to this kind of "high transaction cost" activity. The challenges for the CGIAR to take on a social learning style of working are considerable and further themes are highlighted in Section 1.2. The case studies chosen here demonstrate some considerable move toward innovation and leadership and a conscious intention to work more closely with communities experiencing climate change.

Keen (2005) and Collins and Ison (2009a) remind us that collective action and reflection are key to social learning and that social learning is looking for change that goes beyond the individual. To achieve this change means working interactively together to build understanding and share knowledge.

Our lowest scoring initiatives on the linear-looped scorecard are The Index Based Livestock Insurance Project (IBLI) at ILRI and IFPRI's Global Futures project. These projects score lowest on construction because they were originally formed to deliver a pre-designed product to specifically targeted beneficiaries. They are now evolving elements of co-creation and co-learning. The IBLI project is helping to develop a new market for livestock insurance that can be used by pastoralists. One of the ways of sharing understanding and co-creation of new products has been through designing a game together. It is hoped that this game can be computerised and therefore have greater impact at scale. The game scenario offers a good platform for sharing knowledge and perspectives and is an ideal way of recording the different challenges that climate change presents to the pastoralist community.

Global Futures is essentially a sophisticated global modelling tool that can help those working in agricultural development to boost yields. Global Futures has ambitions to reach out beyond the policy environment to farmers. Through a number of evolutions this project has led to Food Security CASE maps that are interactive online maps that have been developed through

dialogue and discussion with local policy makers and farmer communities. While neither of these projects are using approaches in line with triple looped learning it is clear that there is an appetite to take a more dialogic approach to their development.

Four of the projects had a higher score of 2/3, suggesting more dialogical and learning-oriented approaches. These were Communicating Carbon, a CCAFS/ICRAF project, Coffee Under pressure by CIAT and Climate Analogues run by CCAFS/CIAT and the Regional Socio-Economic and Governance Scenarios project led by Oxford University in association with CCAFS. All of these initiatives have a high component of stakeholder engagement and collective involvement. The scenarios project relies heavily on building regional narratives through local stakeholder engagement and then discusses the implications of these over a number of time frame scenarios. The project is also designed to develop strong links between the stakeholders aimed at surviving well beyond the life of the conference into a learning group and scenarios will begin to be used in planning processes.

Coffee under Pressure works with communities of coffee farmers and through discussion and dialogue on farming issues introduces themes and challenges of the changing climatic environment. The project then responds to articulated information needs. The long term focus of climate change is discussed through the short term realities of daily life reminding us that context is key and true collective learning has to be built into context.

Climate Analogues (CA) has an exciting ambition to make climate change more tangible for communities by encouraging the exchange of information between communities. The Analogue tool helps to identify current geographic areas that mirror the future reality for a community. That community can then discuss with those communities already experiencing their potential future what works well for them in this changing environment. This shared reflection and discussion of what works best and how it might be developed to reflect a new reality holds the hallmark of social learning but it is early days in terms of building up an inventory of shared knowledge.

An important part of CCAFS/ICRAF's Communicating Carbon project was the development of a toolkit co-constructed with carbon project practitioners who work closely with farmers. The practitioners work as brokers between farmers and carbon buyers ensuring smallholders have free, prior and informed consent for all transactions. This collective co-construction and

then implementation is a key principle of a new style of working but the farming community themselves were still one stage removed.

We know that relevance, an understanding of context, awareness of social differentiation, timescales and different levels of engagement are vital to providing an enabling environment that can ensure the kind of social learning that generates change. These case studies reflect a genuine move to co-create knowledge and engage with stakeholders but each one has a long way to go to ensure there is parity in learning and knowledge sharing. These experiences offer an increasingly rich resource in being able to evaluate the costs and behavioural changes needed to ensure CCAFS/CGIAR incorporate a more social learning approach to climate change communication

## 2.2 Sample case studies

The table below provides an overview of the ten case studies conducted on CGIAR and external initiatives with potentially interesting approaches to communication, knowledge sharing and social learning. More detailed studies of each are included in the appendix to this report.

**Table 2: Sample of communication, knowledge sharing and social learning initiatives**

| Name of project | Purpose | Project activity | Communication type | 'Take Away' points for reflection |
|---|---|---|---|---|
| Global Futures, IFPRI/CCAFS | Inform, educate individuals about science, causes, impacts, solutions of climate change | State of the art economic modelling for different scenarios | Mostly linear "push", increasingly attempting to get a more two-way pull engagement. 1/3 on the Linear/Looped scorecard | How the evolution from a fairly straightforward scenario has encouraged new potential for working closely with local policy makers and communities. Lessons to be learned on levels of adaptability to a more shared learning model. |
| Coffee under Pressure – CIAT | Inform and educate coffee producers on the effects of climate change on coffee production | Local workshops to raise awareness of climate change issues and discussion of adaptation strategies | Good balance between push and pull with a strong emphasis on dialogue and discussion. 2/3 on the Linear/Looped scorecard | A key way into the adaptation and climate change discussion is through the channel of talking about coffee. Communities and farmers are only really interested in the coffee situation so discussion has to come from that direction first. What can we learn here for the design and implementation of other projects? |
| Communicating Carbon – World Agroforestry Centre/CCAFS | Behaviour change and increased Free Prior Informed Consent (FPIC) between communities and carbon sequestration practitioners | Workshop-style approach strengthening relationships between key stakeholders for FPIC | Good balance between push and pull with a strong emphasis on dialogue and discussion. 2/3 on the Linear/Looped scorecard | Some interesting lessons learned here on how to communicate and share information with communities. Good briefing produced by ICRAF on this and FPIC. |
| Index Based Livestock Insurance, ILRI | Forward learning/adaptation to climate change – not a communications project per se | Linking private sector and farmers with weather prediction to facilitate insurance for bad years | Essentially a push project – weather data prompts action to take out insurance. 1/3 on Linear/Looped scorecard | Interesting to see whether different communication methodologies have been needed to build trust in this new kind of relationship and whether anything can be learned here or is it a straightforward mechanism once established. Interesting use of games to share |

| | | | | |
|---|---|---|---|---|
| | | | | ideas about new concept. |
| HEDON, Practical Action, EWB, IIED, GVEP, ECO, Shell | Informing on solutions for energy and mitigation, encouraging behaviour change | Website discussion topics, posting articles, home for magazine | Mostly a "push" activity. Occasionally some engagement activities 1/3 on Linear/Looped scorecard | Raises familiar questions about the purpose and to what extent it is a supply or demand driven project. How can a website change behaviour? Even the engagement activities are around information already there rather than ideas coming from community. What is the difference between an information website and a learning network? |
| Regional Socio-economic Scenarios, Oxford University and CCAFS | Initially to capture interactions of key socio-economic uncertainties with climate change effects at the regional level. | Building scenarios with practitioners to discuss options | Top down start but then a high degree of participation and shared learning. 2/3 on Linear/looped scorecard | Interesting questions here about how to design projects that respond to local needs but need to anticipate or gather data that will support those needs. How does scientific data sit with local indigenous knowledge? |
| Climate Analogues and Farms of the Future, CIAT and CCAFS | To provide a way for farmers to anticipate what might happen in the future and prepare to adapt | A modelling tool that takes experience from other regions to demonstrate what a new region might look like a few years hence | Started as a top down information sharing tool, a new phase is looking at a more learning style. 2/3 on Linear/looped scorecard | This project offers some very interesting opportunities for exploring social learning. The models provide a good basis for discussion and shared development of ideas. |
| Maarifa Knowledge Centres, ALIN/ILRI | Facilitate the exchange of ideas, experiences, and knowledge among communities to enhance learning for improved socio-economic empowerment | ICT equipped knowledge centres offering training and information. Community learning shared on global platform OKN | Clearly a strong engagement activity with lots of donor support. 2/3 on Linear/looped scorecard | Interesting relationship between building capacity and hoped-for shared social learning. Is the social learning on issues deliberate or incidental? OKN web platform carries news and information from communities but who is it speaking to in reality and what measure of looped learning is available? |
| Climate Airwaves, Ghana Community Radio Network and IDS | Build capacity of community radio broadcasters to investigate and share community experience | A methodology for capacity building, partnership development and dialogue aimed at | This approach uses a combination of face-to-face and radio platforms to facilitate dialogue. Strong emphasis on shared learning and engagement across stakeholders (research, | These forms of highly intensive and localised communication models appear to be very effective, but how are they best brought to scale? Is there a way of coordinating multiple initiatives globally without it becoming disjointed or overly resource- |

| | | | | |
|---|---|---|---|---|
| | of adapting to climate change | knowledge sharing and advocacy. | community, policy). 3/3 on Linear/Looped scale. | intensive? |
| ELLA (Evidence and Lessons from Latin America) | Aims to enable researchers, practitioners and policy makers from around the world to tap into knowledge about development policy evidence and lessons emerging from Latin America. | An online knowledge sharing and learning platform on selected economic, environmental and governance issues... | ELLA essentially a web based knowledge and learning platform but the ESPA Learning Alliances designed to engage in a shared process of learning. 2/3 on the looped-linear scale | These are learning alliances at scale. How does learning take place over such a wide ranging global interests and agendas? Latin America learning with Asia, Africa learning with Latin America and so on. |
| Africa Adapt | Knowledge sharing online and offline for climate change adaptation in Africa | Online platform and discussion groups paired with offline gatherings called “meet and greets” and small funds for knowledge sharing innovation. | A combination of multiple platforms for engagement and knowledge sharing in English and French. Not a clear distinction between what is user-generated and what is produced by the network partners online, and not always clear the link between online and offline activities. 2/3 on the linear/looped scale. | How do you ensure that effective bridges are built between communities of practice engaging through different platforms? What feedback loops can carry online contributions offline, and vice-versa, particularly when each approach is engaging different types of stakeholders? How to address the deep language divides in Africa to enable communication and sharing? |

# 3.0 Key themes emerging for CCAFS

Based upon the stakeholder consultation, review of literature, and analysis of cases inside and outside of the CGIAR we have suggested a number of areas of relevance to a CCAFS climate change communication and social learning strategy which could feed into strategic discussions on how to use these approaches to support decision making at community scale in the global South. Where possible we have made reference to the analysis boxes from Section 2.0, which support these points.

| Summary of key themes | |
|---|---|
| 1. | Need to bridge initiatives and scales: What role is there for CCAFS as an intermediary and broker of relationships and knowledge? |
| 2. | Systematic support to small-scale initiatives: Lots of good work is already happening on a shoestring, and with repeated rounds of piloting. How do we harness the power of CCAFS to support sustainable local initiatives? |
| 3. | Tying timely information provision to endogenous processes – who's doing this, and how? Can do we respond to current shorter-term needs while strengthening preparedness for future climate change and uncertainty? |
| 4. | Social differentiation – approaches are not reflecting current theory. How do we analyse, respond to, and build demand at community level recognising language, gender, age, culture and conflict? |
| 5. | Methodological innovation – are we using existing tools better? Are we sharing our innovations? |
| 6. | Culture of institutional learning – where is it thriving and how do we support it? Can we bring scientists - not just the science – closer to the communities and really strengthen the culture of listening and learning together? Do CCAFS incentive structures currently catalyse or discourage this? |
| 7. | Emphasis on short term returns makes prioritising and investment in social learning difficult. |
| 8. | Across all of these... do we have the right types of partnerships/partners to make all of this happen? |

1. There is recognition among a broad range of stakeholders on the need to move our agenda from beyond the simple distribution and uptake of information in the South (e.g. forecasts, seed varieties, etc.) toward process/exchange-oriented modes of engagement (e.g. social learning; participatory technology development; resilience thinking, etc.). Analysis of the initiatives surveyed during this research suggests that there is a body of experience of process orientated adaptation practice to draw on (Box 4). Which of this range of needs and resources are the most appropriate starting points for CCAFS engagement?
2. There is widespread agreement among respondents on the CCAFS priorities (farmers, innovation at local scale, etc.) and a body of initiatives exist addressing these priorities, but mostly at small scale (both in terms of geographical scale and in the scope of the initiative). On the other hand, platforms for knowledge exchange are less prevalent at that scale (and are instead more prevalent online and for academic/professional audiences)

(Box 1, Box 5). These two points raise some important questions: How can we best invest in small-scale initiatives that match with CCAFS aims without distorting or undermining them? Could this be addressed instead through cross-scalar, cross-stakeholder approaches aimed at supporting these initiatives from one step removed (for example, through intermediary organisations)? This type of approach is supported by/supportive of social learning theories and of resilience building needing cross-scale interaction. Finally, if such an approach were pursued, what is needed to provide cross-scalar coordination and mobilisation?

3. There seems to be growing consensus that the information-to-social change continuum (Table 1) is not necessarily additive or sequentially dependant. Activities aiming at building capacities or shaping behavioural/social norms do not appear to be dependent on first achieving information dissemination aims. Thus, it may be more important to equip people with the means to ask the right questions rather than having them know all the answers. How should the CCAFS team identify the most appropriate communication aims for a given issue or audience?
4. The overwhelming majority of current approaches to communication remain more-or-less linear and didactic in nature, which represents an opportunity and a challenge for CCAFS. As noted above, however, there is considerable evidence that supporting communication approaches informed by social learning would benefit from CCAFS partners using similar approaches internally. What are the opportunities and barriers to achieving this?
5. Barriers to uptake are widely cited to being more of a 'supply-side' issue than a 'demand-side' issue (i.e. relevance; appropriateness; timing; clarity of messaging as opposed to literacy and access). The dearth of initiatives operating in local languages (noted in box 2) is just one indicator to support this view. This may represent a niche opportunity for CCAFS engagement, instead of investing heavily in capacity building of rural populations on uptake. It may also require looking internally (at the CGIAR architecture) as well as externally for opportunities to influence change.
6. Respondents suggest that among information dissemination, knowledge management and communication strategies, the area in greatest need for improvement is communication strategies. How then might the development and deployment of appropriate communication strategies be mainstreamed into CCAFS practice and outside actors?
7. Respondents emphasised the need to strike a balance between building capacity for better using existing knowledge and strategies for communication and supporting new innovations. This said, many of the most commonly cited examples of good practice appear to have been based upon older formats such as radio, face to face facilitation, and "traditional" forms such as song, dance and theatre. Thus it becomes important to differentiate between technological and methodological innovation. While community-

scale initiatives operate using a range of technological platforms (Box 1), some argue that emphasis on developing appropriate facilitation strategies has not kept pace. Robert Chambers says "We need many, many more creative participatory facilitators. Without them, much of what we hope for will not happen. Who, where, in what ways, needs to do what to generate and support them? What needs to change?" (Chambers, pers. comm. 2012) What is the best approach to capturing and supporting these relevantly?

8. It is important to recognise how power, knowledge and voice will influence multi-stakeholder dialogues where different types of experience and practice are being brought together. This has been cited as a key challenge in social learning literature, as well as in multi-disciplinary/multi-scale partnerships on climate change where Western, scientific, or institutional knowledge or voices are seen to take precedence over local knowledge. What strategies can be adopted to address this dynamic in encouraging two-way exchange between scientists and farmers, for example, so that both sides are able to learn and share and to co-create knowledge that supports more outcome-oriented research for development?

# Conclusions

This report, and a subsequent workshop of communications and social learning experts in Addis Ababa organised by CCAFS as a follow-up[4] provides a backdrop to an ongoing, vibrant and dynamic discussion of new strategic directions for CCAFS Integration for Decision Making (Theme 4). It therefore aims to summarise some robust background into communications theory and social learning theory and how we understand their differences.

We have also had the benefit of feedback during this scoping exercise from a number of different communications experts and researchers working inside the CGIAR and amongst the wider development and research communications community[5]. This has allowed us to share insights from both interviews and from survey results that help to tease out a range of key issues that we suggest are relevant for CCAFS to consider in moving forward. These insights and further discussion at the workshop have enabled us to put forward some key recommendations for CCAFS' role in promoting social learning.

[4] Communication and social learning: supporting local decision making on climate change, agriculture and food security; Addis Ababa 8-10 May 2012 http://commsl4climate.wikispaces.com

[5] See: http://commsl4climate.wikispaces.com/people

The set of recommendations below is drawn from the wealth of information in this report and the themes highlighted in section 3.0 as well as a review of the Addis workshop outcomes by key stakeholders. While the CGIAR is working at a global scale, CCAFS Theme 4 work on social learning is focused on working with communities at local levels and these recommendations reflect this focus.

### An opportunity for leadership

It is clear that CCAFS has an opportunity to demonstrate leadership in communications and social learning to promote local engagement and outcome-oriented research for development. They have convening power, resources and a great network of global, national and local stakeholders with whom they work. They also have the strategic framework in their Theme 4 to focus those resources on a social learning methodology. But the challenges are considerable and demonstrating real leadership will require attention on some big internal changes to ways of working alongside the ways in which CCAFS works with its key stakeholders.

Demonstrating leadership must also recognise the careful balance needed in CCAFS' role as a provider of information on a global scale and a promoter and co-learner in the development of new knowledge at community level. At the heart of a social learning approach is the question of 'power' – who has it and how is it used. A true social learning approach requires behaviour change and a new style of working that takes time to learn together. It is not an application of theory so CCAFS will need to continually challenge itself on 'who is doing the learning?' This shifts the balance of who holds valid knowledge, who learns, and who changes as a result of the learning in ways that can often be challenging to traditional institutional hierarchies, and to researchers who are expected to be the authorities on their areas of expertise.

With leadership will come the need to work hard internally to align this new strategic approach adopted by CCAFS Theme 4 with the rest of CCAFS. The recommendation here is to work with those researchers who already champion this approach and bring them together into a community of practice with others inside and outside the CGIAR to build confidence and interest. Developing new proposals, perhaps using a social learning style methodology, to initiate projects emphasising a new way of working could encourage a greater number of CGIAR teams to get involved.

CCAFS is well placed to show leadership by encouraging and supporting a range of activities that promote a social learning methodology for communicating climate change and adaptation. During the Addis workshop, five key 'change areas', where support could be given, were identified that were felt to underpin any fundamental move towards new ways of learning – ensuring an accessible and growing body of evidence that *documents best practice* for social learning across local communities, promoting *social learning within CCAFS*, identifying and providing appropriate support where *endogenous (or locally-driven) social learning* is already taking place, understanding the implications of *social differentiation* and how the different perceptions of *timescales* create different contexts for taking action. For more detail on these 'change areas' please visit the workshop wiki http://commsl4climate.wikispaces.com

### Social differentiation

We know the theory. We get the logic that recognises the importance of culture, gender, generation, language and context for successful communication and learning but we rarely follow through. True social learning is impossible without ensuring there is sufficient time, enough resources and the right partnerships to practice listening, communication and learning methodologies at local community level whilst recognising that communities themselves are rarely homogenous. There is a vast pool of knowledge at local level, knowledge that can make the difference for the survival of many of the world's most vulnerable communities but without good participatory facilitation and without truly engaging in ways that recognise how communities work together this will remain hidden. Organisations like CCAFS can really help to support a better-resourced environment for building a co-constructed knowledge base, and have real development impact with research that is directly informed by local contexts and needs.

### Time and scale

Context is key for successful social learning. This report reminds us that real social learning is about working together to create and share information, interpreting that information in a particular context and then acting on that information to generate new knowledge and changed behaviour. That kind of change – for the individuals involved – can only really happen in very particular localised contexts. So how do we take that to scale? How do we take the learning from a community fighting an immediate crisis and share the knowledge with

those looking across a fifty-year horizon? CCAFS is well placed to be an interpreter of scale – by helping to bring together those working on the bigger picture over a longer timescale with those working with the daily realities of a changing environment. CCAFS's Climate Analogues initiative provides a good example and a deliberate strategy to develop closer links between these different groups and should be encouraged.

Documenting new ways of working, promoting social learning methodologies, developing communication strategies that balance new innovation with older but successful tried and tested methodologies can be promoted as a way to ensure learning across all stakeholder groups.

### Working with others

CCAFS cannot and should not develop its communications and social learning work in isolation. One of the most successful ways of taking learning to scale will be through forging new partnerships, continuing to support and strengthen current relationships that work and building a community of practice. At the Addis workshop, Manuel Fleury, Knowledge Management Advisor at the Swiss Agency for Development and Cooperation (SDC) said there is need "to scale the practice not the policy." This is a powerful reminder that CCAFS partnerships – whether within the CGIAR, or outside – must *practice* a social learning methodology and not just ask others to apply the theory.

Key partnerships at global, national and local levels will be critical to both implementing true social learning at local level, as well as influencing and advocating for a change in approach throughout the global community and with peers.

CCAFS needs to extend its working relationships to include - or provide support for - more implementing partners at local level, communications partners and infomediaries, as well as those working with different gender groups, different generations and across disciplines and sectors. CCAFS also needs to encourage colleagues within the CGIAR to allow time and resources to forge new links with different partners and to incorporate project partnerships that reflect the social differentiation that would enhance learning. CGIAR incentive structures need to be aligned with these needs and recognise that performance must be measured on more than academic output alone if researchers are to invest time into building these forms of partnership.

These recommendations build on CCAFS' own reflections of what their current experience tells them about where they can add value, as well as the reflections and expertise shared by a number of different partners and communications and social learning specialists. While it is acknowledged that to change the ways of working amongst internal and external stakeholders is not the sole remit of the CCAFS team there is a shared ambition that puts CCAFS firmly in the driving seat for helping to ensure that communications for climate change adaptation is built on the knowledge and evidence from local communities, as well global scientific research.

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