Acacia Research and Learning Forum

Dakar, Senegal. October 4-8, 2009

Narrative Report

Prepared for the International Development Research Centre

by Araba Sey and Aaron Martin with Chaitali Sinha

February 2010

Networks of people make the world a more coherent community. We are part of the African "networked society" and through our research support contribute to strengthening not only people networks, but virtual and infrastructure networks. – Acacia Team

About the Authors

Araba Sey is a Research Associate with the Technology & Social Change Group at the Information School, University of Washington where she manages a project investigating the impacts of public access to ICTs. Her primary research interests are in the social and economic implications of ICTs in developing countries, in particular the appropriation of mobile phones in African countries from industry and user perspectives. She holds a PhD in Communication from the University of Southern California. Araba is co-author of "Mobile Communication and Society: A Global Perspective" (2006).

Aaron Martin is a late-stage PhD candidate in the Information Systems and Innovation Group at the London School of Economics and Political Science. His research interests lie in the area of information technology policy, including surveillance and identity policies. He is particularly interested in the unintended surveillance and privacy consequences of ICT4D projects.

Chaitali Sinha is a Program Officer at Canada's International Development Research Centre (IDRC). Her general research interest involves examining how ICTs affect individuals and communities in developing countries. In particular, her focus is on health information systems, evaluation research, and gender studies. Chaitali is a member of IDRC's Acacia program initiative and has provided original content and guidance during the writing of this report.

Executive Summary

After twelve years of research capacity development, network building, and contributing to policy dialogue and scholarly publications, the Acacia team convened approximately 147 of its research partners for the Acacia Research and Learning Forum in Dakar, Senegal from October 4-8, 2009. The Forum had three major objectives:

i) To share, discuss, and document outcomes and lessons from different Acacia-supported projects;
ii) To provide capacity development and networking opportunities; and
iii) To explore future research priorities in ICT4D in Africa.

Participants in attendance represented 32 different countries, 13 African research networks, multiple project partners, 6 donor partners, 12 documentation experts and 19 IDRC representatives.

The purpose of this narrative is to capture and analyse elements of the Forum proceedings, placing them in the context of Acacia's goals and Theory of Change. Acacia team members worked with the authors to articulate the program's implicit Theory of Change as follows: Acacia's Theory of Change proposes that **investment in locally led, demand-driven ICT4D research in Africa through appropriate programming modalities and mechanisms leads to changes in the African ICT landscape, from policy to practice and people.**

Within the context of this Theory of Change, the central question used to guide the narrative was "To what extent have Acacia-funded research and researchers influenced the African Information Society?" Based on their observation of the Forum proceedings, conversations with Forum participants, and consideration of relevant Acacia documents, the authors conclude that Acacia is experiencing both triumphs and tensions in its efforts to transform the information society in Africa. This was evident in the highlights of the Forum, as well as questions and concerns that emerged about the nature of impact evaluation in Acacia network partners' work.

The major triumphs (or highlights) of the Forum, which also reflected successes of Acacia's programming modalities, were:

• The participatory sharing and learning format of the Forum,
• The networking opportunities the Forum afforded, and
• The discussions throughout the Forum that provided participants with valuable insights and clarifications on outcome evaluation.

Alongside these triumphs, there were multiple tensions illustrating the challenges of working towards impact in the ICT for development field. Major areas of tension included:

- The possible conflation of the measures required for evaluating the results of development projects as against development research projects, both of which Acacia funds;
- The challenge of conducting research that is both scientifically rigorous and of practical relevance to the communities Acacia seeks to help;
- Uncertainties around the identification of project outputs, outcomes and impacts; and
- Uncertainties around the perceived requirement to demonstrate project contributions to policy dialogue and/or policy influence.

The substance of Acacia's impact, measured in terms of its stated Theory of Change, will rest in large part on continued facilitation of the participatory networked approach to learning and project implementation, and resolution of the issues that pose challenges in the outcome evaluation process. In particular, it will require the articulation and communication of a theory of change that provides network partners with clarity on what constitutes change in the Acacia program context and (depending on how broad Acacia's notion of change is) where each network partner's work fits in that vision.

Table of Contents

List of Acronyms

ARLF	Acacia Research and Learning Forum
AVOIR	African Virtual Open Initiatives and Resources
CA	Connectivity Africa
CIDA	Canadian International Development Agency
DFID	Department for International Development
FOSS	Free and Open Source Software
ICTs	Information and Communication Technologies
ICT4D or ICTD	Information and Communication Technologies for Development
IDRC	International Development Research Centre
GRACE	Gender Research in Africa into ICTs for Empowerment
MIFOS	Microfinance Open Source
NREN	National Research and Education Networks
OASIS	Open Architecture, Standards & Information Systems for Healthcare in Africa
OECD	Organisation for Economic Co-operation and Development
PAREN	Promoting African Research and Education Networking
REN	Research and Education Networks
RIA	Research ICT Africa
UNECA	United Nations Economic Commission for Africa

Chapter 1: Introduction

1.1: Introduction

"Acacia is celebrating its strong history and proven results from its support of research on information and communication technologies (ICTs) that improve livelihood opportunities, enhance social service delivery, and empower citizens while building the capacity of African researchers and research networks" (Heloise Emdon, Acacia Team Leader)

After twelve years of research capacity development, network building, and contributing to policy dialogue and scholarly publications, the Acacia program looks back on its achievements to date and forward to the future of the information society in Africa. As part of this reflective process, Acacia convened approximately 150 of its research partners for the Acacia Research and Learning Forum (ARLF) in Dakar, Senegal from October 4-8, 2009.

The purpose of this narrative is to capture and analyse elements of the ARLF (henceforth also referred to as the Forum) proceedings, placing them in the context of Acacia's goals and Theory of Change. The central question used to guide this inquiry is "To what extent have Acacia-funded research and researchers influenced the African Information Society?" This report is not an evaluation of Acacia, nor of the Forum; it is a piece of reflective writing about the Forum as it reflects Acacia and its Theory of Change. The goal of this report is to draw out the highlights of the Forum, as well as questions and concerns emerging from the discussions about the nature of impact evaluation in Acacia partners' work specifically, and the Information and Communication Technologies for Development (ICT4D)[1] field in general. These reflections will feed into the larger story of the history of Acacia and its progress so far in advancing human welfare in its areas of operation.

The Acacia program is a research initiative within Canada's International Development Research Centre (IDRC). Acacia is an integrated program of research and demonstration projects that focuses on appropriate applications and technologies, infrastructure, policy, and governance. The roots of Acacia are grounded in locally relevant and appropriate research carried out by African researchers. Thus the Forum was inspired by, and designed around the grounded experiences of, these African researchers, which will inform the future programming of ICT4D in IDRC.

---

[1] ICT4D is a term that has come to represent both the field of research that investigates the social, technical and economic effects of information and communication technologies (ICTs) in developing countries, and the practical application of ICTs in directed efforts to bring about the aforementioned effects. The acronym ICTD is often used interchangeably with ICT4D.

1.2: The Acacia Research and Learning Forum

The ARLF brought together research partners working on ICT4D projects as well as several partner organisations that the Acacia program has formal and informal links with (including the UK Department for International Development (DfiD), the Gates Foundation, Organisation for Economic Co-operation and Development (OECD), the United Nations Economic Commission for Africa (UNECA), and International Fund for Agricultural Development (IFAD), and the Shuttleworth Foundation). The ARLF was strategically timed to form part of the mid-term review of Acacia's current five-year program cycle, which began in 2006. Moreover, the Forum served as an opportunity to share and reflect more broadly on the twelve-year legacy of Acacia. This meeting in Dakar marked the first time that the 13 research networks and many individual and smaller network partners were brought together to encourage cross-network and thematic fertilisation. In all, 147 participants were in attendance – representing 32 different countries, 13 African research networks, multiple project partners, 6 donor partners, 12 documentation experts and 19 IDRC representatives.

The Forum was designed to take stock of the program's achievements and outcomes in such areas as policy influence, quality of research, and capacity development. It was also designed to help network researchers build capacity in communication for policy influence, ICT4D social science research design and methodology and resource mobilization, primarily through the facilitation of day-long tutorials designed around these themes. Thirdly, the Forum served as a platform for research partners to generate and explore new research ideas based on their intimate understanding of the ICT and development landscapes in African countries. To get a deeper sense of what the Acacia Research and Learning Forum represents for the Acacia program, it is useful to take a quick look back at the program's evolution in action and reflection.

1.3: Origins and Evolution of Acacia

Acacia was launched by the International Development Research Centre (IDRC) on April 1st 1997. The initial phase, from 1997 to 2000 had two overarching objectives: i) to demonstrate how ICTs can enable communities to solve their development problems in ways that build firmly on local goals, cultures, strengths, and processes; and ii) to build a body of knowledge capable of identifying the policies, technologies, approaches, and methodologies instrumental in promoting the affordable and effective use of ICTs by marginalized communities, such as rural and underserved communities as well as women. The findings from this exploratory phase revealed the clear need for a dedicated research program like Acacia.

This led to the next phase (2001-2005), which was guided by three overarching objectives: i) to discover and demonstrate how disadvantaged sub-Saharan African communities, especially their women and youth, can use ICTs in solving local development problems; ii) to learn from Acacia's research and experience and to disseminate this knowledge widely; and iii) to foster

international interest and involvement in using ICTs to support rural and disadvantaged community development. The projects funded in this phase represented targeted and informed studies. Through the process of examining, observing, analyzing and learning, the different projects contributed to a growing cadre of strong African researchers in the nascent field of ICT for Development (ICT4D). It was these researchers and incipient body of research findings that dovetailed into the current phase of Acacia funding.

The current Acacia program (2006-2011) supports research according to the following objectives: [2]

- Fostering ongoing, robust policy dialogue among: ICT4D researchers; policy-makers; and other key policy-related bodies
- Catalyzing thriving regional research networks that: strengthen weak institutions through mentoring relationships; serve as a forum for knowledge diffusion; and are a vehicle for parallel funding activities
- Increasing research capacity in ICT4D through: improved research methodologies and practices; increased numbers of ICT4D researchers; and more research institutions with a specific ICT4D focus
- Stimulating social and technical innovation in ICTs, including: mobile telephony; wireless broadband, alternative, innovative telecom and IT policy models for Africa; and alternative intellectual property regimes
- Contributing to a formal body of knowledge in ICT4D as evidenced by research findings being: cited and/or published in peer-reviewed, third-party publications; and incorporated into university curricula
- Applying meaningful gender analysis to: contribute to a more sophisticated understanding of women's access and usage of ICTs in Africa; reduce the magnitude and evolution of the observed gender gap; and change gender relations in access and patterns of use, ICT literacy, education and skills, and ICT employment.

The responsive nature of Acacia's mandate is illustrated in the changing nature of its program objectives. When the program first began in 1997, the projects were geared toward exploring grounded and appropriate research issues and building a body of knowledge. The subsequent phase that began in 2001 shifted its focus to targeted interventions and a growing emphasis on knowledge translation to engage relevant target audiences. This brings us to the current program cycle, in which the programming is carried out in large part through multi-country research networks. There are common threads of strengthening research capacity, building a body of knowledge and balancing social and technical innovation with meaningful social and

---

[2] The objectives of the Acacia program as listed above are modified slightly from those articulated in the 2006-2011 Acacia Prospectus. Early on in the prospectus programming cycle the cross-cutting focus on gender - which is clearly conveyed in the prospectus document as a critical area of inquiry - was written out as an explicit objective for the program. The objective related to contributing to a formal body of knowledge in the field was added at the middle of the programming cycle because the Acacia team felt this focus on field building that many projects were fulfilling needed to be foreground through a formal objective. This type of iterative refinement through reflection and learning is symbolic of how Acacia works and how the team encourages its research partners to do the same.

gender analysis. It is the convergence of these threads, and the emergence of new ones, that embodies the ethos and approach of the Acacia Research and Learning Forum.

1.4: Forum Format

The ARLF served as a platform for research partners to collaboratively review their research activities, and explore new ideas to advance the ICT4D agenda in Africa. The proceedings were conducted using a combination of discussion-based, interactive, and training formats. This approach was deliberate as it required the minimum of preparation from the research partners, and instead focused on actively engaging them to discuss their research, share with and learn from others, articulate research outcomes, participate in training sessions, and – in general – to take the time to convert their deep tacit knowledge into explicit narratives with a focus on the 'D' (Development) in ICT4D. The Forum represented and facilitated a space where everyone was encouraged to speak, listen and learn, starting with a meeting of representatives of each of the 13 research networks to discuss results of the on-going participatory network evaluation. This was followed by four days of activity for all forum participants around a range of topics:

Day One:
- ICT Policy and Regulation in Africa (Policy and Regulation Chat Show)
- Successes and Challenges in Facilitating Access to ICTs (Lowering the Barriers to Participation in the Information Society)
- The Role of the Public and Private Sectors in Providing Equitable Access to ICTs (The Great Debate)

Day Two:
- Findings of the Network Evaluation Study (Reflecting on Research Outcomes)
- Project Outcomes (Contribution of ICT4D Research Projects to Africa's Development)
- Innovation (Innovation in the Field of ICT4D: What are we Talking About?)
- The Networked Society (The Implications of Networked Societies)

Day Three:
- Research Ideas (Stimulating Equality across Networked Societies: What are the Research Issues and Ideas?)

Day Four:
- Research Methodology (Tutorial: Strengthening Theory and Methodology for ICT4D Research)
- Communications (Tutorial: Communication Research Results for Influencing Policy and Practice)
- Fundraising (Tutorial: Building Sustainable Projects: Alternative Fundraising Methods)

In parallel to these face-to-face meetings, the Forum also hosted a web site (http://www.acaciaforum.net) that served as a networking platform for forum participants, a space for coverage of forum activities (in French and English) by designated bloggers, as well as

a repository for participants to post resources and documents related to the Forum topics. The website opened up forum proceedings to a much wider audience, and is an important tool to keep the energy of the Forum alive long after the physical meetings.

The outcome of these combined online and off-line approaches was a heightened learning experience, and generation of momentum to action, as one forum participant describes:

"The Acacia forum is different. Its format calls for intense interaction throughout all the sessions. This implies that informal exchanges happen throughout the day. The fact as well of having at times the whole group interacting and at other times, small groups on precise themes of interest gives the impression to participants of being under an impressive brainstorming. In this brainstorming, ideas fly from concrete actions in precise topics to global problems that affect every theme and vice versa. It is possible to meet very different people that work in very different issues. And at the same time, the flow of thinking moves energetically in the same direction. That of ultimately aiming at changing the way things are as we know them. The belief that things can be different if people work hard enough and in a way that can make it happen. The thought that ideas can change the world if they are endorsed by the necessary people at a precise time. … And then we get to this magnificent result on achieving the development of research that is adequate in its content and adequately explained so as to bring policy change. And then it happens. Abstract ideas driving political decisions. Capacity building driving change in Africa. That is what I learned from the Acacia forum, from the Acacia members. A rethinking on whether there is still something that we haven't tried, something that we have not seen, is the path we are following actually the one we want to stick to? Not taking things for granted. Food for thought and amazing amount of energy and no boundaries, no preconceptions." (Laura Recuero Virto, OECD, in an email communication with authors after the Forum).

The above statement typifies participants' sentiments by the end of the Forum. Most considered the Forum to have been both educational and stimulating on multiple levels. The post-workshop evaluation showed that participants thought the Forum had largely succeeded in meeting its three goals[3], in particular the objective of supporting networking amongst partners. Based on the evaluation forms filled out by the participants at the end of the Forum, the top three aspects of the Forum that participants liked were the participatory conference approach, networking opportunities and the interactivity of sessions. Discussions of the

---

[3] The Forum objectives were i) to share, discuss, and document outcomes and lessons from different Acacia-supported projects; ii) to provide capacity development and networking opportunities; and iii) to explore future research priorities in ICT4D in Africa.

approaches, techniques and outcomes of the Forum's design are found in chapters Three to Six of the report.

1.5: Structure of the Report

The structure of this report follows the general logic of the Acacia Theory of Change, using the Forum as the entry point to discuss change and as a lens to reflect on past work. Recognizing that change is something that can be effectively communicated through stories, each of the sections of the report will contain one or more stories to complement the content. The report has seven sections: Chapter One has presented the background and aims of Acacia and the Forum; Chapter Two describes Acacia's Theory of Change – the remaining chapters draw out certain elements of the Forum as they relate to different aspects of the Theory of Change; Chapter Three focuses on the first element of Acacia's Theory of Change – supporting relevant local research; Chapter Four discusses change as the expected result of Acacia research; Chapter Five highlights issues around learning and networking; Chapter Six moves to the next step in the change process – communicating for change; and finally, Chapter Seven outlines the major themes that ran through the forum discussions, reflecting on the Forum in the context of the Theory of Change and Acacia's ultimate vision of influencing the information society in Africa.

While this narrative provides a high level overview of the Forum proceedings, it is not a forum report; deeper details of individual sessions can be accessed on the Forum website (http://www.acaciaforum.net).

Chapter 2: Acacia Theory of Change

2.1: Introduction

The central question of the Forum is "To what extent have Acacia-funded research and researchers influenced the African Information Society?" This chapter sets the foundations for examining this question by providing a Theory of Change for Acacia's research support. The Theory of Change is discussed as it relates to the Forum, and then the chapter closes with an overview of some of the tensions and triumphs that surfaced throughout the Forum. These are unpacked and discussed in more detail in the pages that follow.

The Acacia Tree

The Acacia program's personality and philosophy can be likened to the Acacia tree. The Acacia tree is known for its strength, resilience and ability to thrive in challenging environments.

- Acacia Tree: Symbol of steadfastness and reliability. It represents the rigor, relevance and reliability of Acacia research.

- Strong roots: Local understanding and supporting of local researchers.

- Trunk and Branches: Nurturing of the research modality and implementation.

- Fruit: Research findings, process lessons, facilitating engagement in dialogue.

As the Acacia tree grows, it adapts and changes in response to its environment. The Acacia program is similar in its approach to supporting research on the African information society – the program strives to bring about change, while being itself responsive to change. In fact, understanding the nature and extent of change within Acacia is central to formulating a theory of change.

2.2: What is Acacia's Theory of Change?

Managing change requires a firm understanding of how change happens and how it can (and cannot) be manipulated. Furthermore, deliberately taking an action in order to bring about change implies that there is a specific path from the action to the required change – it implies a theory of change or, more simply, a general storyline for change. This notion of change lies at the core of Acacia's programming support. Since the Forum was a space to reflect and synthesize outcomes and the various intended and unintended trajectories they followed, it provides an opportune moment to connect with a theory of change.

A Theory of Change (TOC), as discussed in this piece, is not intended to be a blueprint or master plan that is followed rigidly by the Acacia program; neither is it a formula into which predetermined variables are added, observed and then assessed. The role of a TOC here is to frame a discussion about what outcomes are intended from research funded by the Acacia program. Although there is an implied sequence in how the TOC is articulated, it is important to note that the authors and the Acacia team recognize and embrace the complexity of social change and rely on this TOC not only as a means of planning for change, but also a framework for assessing change – what change took place, why it unfolded the way it did, how it happened, and who was involved in the change process. There is often no single theory of change for a program. For the case of Acacia, the team members worked with the authors to articulate the implicit theory of change that guides the program's work.

Acacia's Theory of Change proposes that **investment in locally led, demand-driven ICT4D research in Africa through appropriate programming modalities and mechanisms leads to changes in the African ICT landscape, from policy to practice and people.** The change process involves:

- understanding the local context in which the research question is grounded

- supporting local researchers to design and carry out relevant and rigorous research

- nurturing the development of appropriate programming structures and modalities to build capacity and implement the research

- learning from the research findings and process

- facilitating the engagement in dialogue based on the research results, and

- capturing and communicating contributions made by African researchers to a variety of change processes, both anticipated and unanticipated.

Practically, the first step requires examining the context of a situation or location and understanding the landscape of resources, limitations and need. This provides the basis for supporting local researchers to study the areas identified. Findings from the research and the research process provide learning tools for advocacy, enabling researchers to engage in policy dialogue and share lessons with other research partners. From engaging in research and sharing the knowledge acquired, a number of changes may emerge, of which those highlighted by Acacia are increased local research capacity and policy change. Strengthened research capacity leads to strong and credible research, and coupled with improved communication capabilities, increased ability to influence relevant policy. Change in practices and even in policy leads to change in the lives of people who are affected by these practices and/or policies. Thus by investing, at a macro level, in research on ICT for development issues, Acacia contributes to changes in individual lives, at the micro-level, while bringing about system-wide changes.

By ensuring that all research findings are made available in the public domain, and disseminating the processes and findings via people and open access to digital content, Acacia has created a local and global public good.

2.3: Assumptions of Acacia's Theory of Change

As important as it is to articulate a theory of change and its different interdependent components, it is equally – if not more important – to articulate the assumptions that the TOC is based upon. It is seldom possible to provide an exhaustive list of assumptions for a given TOC. As such, for the Acacia program Theory of Change, a few major assumptions are listed below.

- Investing in the development of rigorous and relevant ICT4D research produces knowledge that can generate development outcomes for individuals and communities.
- The knowledge produced by ICT research is often difficult to attribute to a particular research activity.
- Building research and communication capacity is closely linked and is integral to achieving the desired change articulated in a theory of change. These capabilities do not always coexist within the same researcher or research organization.
- Appropriate policy change can take a significant amount of time to take place, and even longer to see the social change that results from the policy change.
- "Relevant" and "rigorous" research is research that is both scientifically sound and practically applicable to the lives of people who can benefit from ICTs.
- There are different project types within Acacia's portfolio (pilot/demonstration projects, competitive grants, multi-country research networks) which run on different project life cycles. The TOC applies to each of these projects in different ways.
- The six outcome objectives provided in the Acacia 2006-2011 Prospectus form the foundation of the changes being mapped.

These, amongst other assumptions, form the backdrop to Acacia's thinking around ICT4D research and substantive social, technical and economic change in developing countries.

2.4: The ARLF and Acacia's Theory of Change

Although the Forum was not expressly structured to delve into Acacia's Theory of Change, the conversations that happened there did in essence speak to the TOC in so far as participants were trying to ascertain the extent to which investment in their work had generated the expected results – changes in the African ICT landscape. Furthermore, in connecting with other research partners, thinking about future research areas, and learning how to communicate research effectively, for example, participants were essentially operationalizing the TOC – putting into practice some of the steps that the TOC proposes could lead to socio-economic and technical change. In fact the Forum could be considered both a manifestation of the TOC in action, and a space in which the TOC was assessed.

2.5: Implications of Acacia's Theory of Change

The Theory of Change outlined above covers a wide range of expectations. Its components allow for the emergence and recognition of multiple levels of outcomes and provide spaces for valuable types of participatory engagement and learning. On the other hand, this broad scope complicates project assessments in terms of what to measure, when and how. A second complication is one associated with most ICT projects – linking effects to particular ICT interventions. These realities formed an underlying current of triumphs and tensions throughout most of the forum discussions, as participants simultaneously expressed appreciation of the exposure to the broad range of successes experienced by their colleagues, and uncertainty about how to measure their own research and project outcomes. Chapter Seven discusses this in more detail.

Chapter 3: Supporting Research

3.1: Introduction

Acacia's Theory of Change, as articulated in the previous chapter, involves 'appropriate programming modalities and mechanisms' toward a desired change. In line with this, Acacia's support for research involves more than just providing funding; research partners have access to a broader network of human and material resources, aimed at promoting both the quantity and quality of research. By bringing together research partners from around the African continent to share, deliberate and reflect on their experiences within the program, the Forum demonstrated Acacia's mission "to support research on ICTs that improve livelihood opportunities, enhance social service delivery, and empower citizens while building the capacity of African researchers and research networks" (Acacia Prospectus 2006-2011, p. 1). A central assumption of Acacia's Theory of Change is that investing in the development of rigorous and relevant ICT4D research produces knowledge that can generate the outcomes identified in the above mission statement, while recognizing that it is often difficult to attribute outcomes to any particular research activity. In this chapter, we discuss how the Forum reflected four components of Acacia's research support – research networks, capacity building, focus on development-oriented research, and approaches to evaluating funded research.

3.2: Networks as a Programming Modality

Listening to Research Priorities: During the ARLF, a new research network initiative was born. Participants in a discussion group on sustainable e-waste management in Africa proposed the creation of the E-Clean Africa research network to investigate, generate and promote evidence-based solutions to the growing e-waste problem in sub-Saharan African countries. Primarily comprising researchers from tertiary institutions in Uganda, Kenya, Mozambique, Tanzania, Mali, Benin, Senegal, Cote d'Ivoire and Nigeria, the group expects to draw on existing collaborative relationships amongst Research and Education Networks (RENS) members. This development illustrates the value of networks as a programming modality that brings together researchers and practitioners who can leverage their relative strengths to work towards mutually beneficial goals. Furthermore, this would probably not have occurred without the ARLF serving as a venue that enabled the crucial face-to-face interaction often essential to effective network development, even in this digital age.

The second phase of Acacia (2001-2005) saw the program shift from supporting proof-of-concept country-based projects to a regional network programming approach. The goal of this

programming modality is to build networks of researchers around similar research topics. This was in recognition of the need for a stronger ICT4D research community populated by an adequate representation of African researchers.

The Acacia approach to its network programming modality is a multi-country, multi-partner, strategy. It supports social arrangements of research organizations and researchers linked together around research on ICTs, working jointly, but allowing members to maintain their autonomy as participants. The Approach is aimed at improving the efficiency and effectiveness of Acacia support for research on ICTs that improve livelihood opportunities, enhance social service delivery, and empower citizens while building research and administrative capacities of African researchers and research project hosting institutions.

The lion's share of Acacia's funding for the current programming cycle has gone toward supporting regional thematic research networks. As such, a formative participatory evaluation study was designed – led by Ricardo Wilson-Grau – to learn from 13 of Acacia's research networks. This study examined the outcomes of the networks vis-à-vis Acacia's program objectives. The evaluation was developmental in nature, and was therefore carried out in phases to incorporate feedback. The Acacia Research and Learning Forum represented a milestone in the process, whereby the network leaders and Acacia team participated in a full-day reflection on outcomes. The 13 research networks presented and discussed the outcomes emerging from their projects in relation to the six Acacia objectives – sustained policy dialogue, thriving research networks, increasing research capacity in ICT4D, social and technical innovation, contribution to formal body of knowledge, and meaningful gender research. The process and some initial findings from the study were shared by Ricardo during a forum plenary session.

3.3: Capacity-building: Acacia's Approach to Supporting Research

The ICT4D field is a relatively new multidisciplinary field[4] and currently lacks clear theoretical and methodological grounding (Heeks, 2006).[5] Researchers in this area generally borrow from several disciplines that cut across the field – economics, political science, sociology, engineering, and so on. Furthermore, conducting large scale ICT4D research programs in Africa has additional challenges for several reasons, of which a significant one is the relatively limited research capacity of researchers and research institutions. Researchers are isolated in their various countries and contexts, there are few comprehensive disciplinary research agendas, and levels of expertise in ICT4D issues vary across the continent. The absence of a system of peers and mentors weakens the ability to advance a common research agenda. Acacia's shift from a country-based approach to a regional network approach is intended to address this gap by facilitating mentoring and learning opportunities, and building both research capacity and communities of practice consisting of researchers in ICT4D with stronger peer-to-peer interaction. Research capacity building is one of the six objectives of Acacia in its second phase.

---

[4] Although upon closer examination it becomes clear that ICT4D actually has its roots in a long history of development communication.

[5] Heeks, R. (2006). Theorizing ICT4D research. *Information Technologies and International Development, 3*(3), 1-4.

Building research capacity involves enhancing researchers' methodological skills, and knowledge, promoting increased collaboration amongst ICT4D researchers in Africa, as well as equipping them with the tools to effectively and confidently communicate the results of their work directly to policymakers, through popular media, and in dialogue with peers. From Acacia's perspective, the focus of capacity-building efforts is driven by context, and evolves based on the maturity of the research or development issue, the skill set of the researchers, and absorptive capacity of the organisations, amongst other things.

As a learning event, the Forum in itself was a capacity-building arena, embodied in the sharing and networking that occurred, in addition to an open-space day for research agenda-setting. Further advancements were made in the context of the Forum, with a full day set aside for tutorials on research theory and methodology,[6] communicating research results,[7] and fundraising techniques[8]. These three tutorial topics underscore Acacia's capacity-building approach – good research requires strong theoretical and methodological foundations, good research needs to be communicated effectively in order to have real life influence, and the entire research for development agenda cannot be sustained without access to adequate funding that will sustain the field of knowledge about how ICTs could contribute to economic and social development.

3.4: Supporting Research for Development

The Acacia program supports social scientists, engineers, and development practitioners in their quest to examine and learn about the role of ICTs within the African lives and livelihoods. From 2004 to 2007 Acacia's research program was complemented by a sister program that focused on innovative projects to support ICT access and application development. This program was called Connectivity Africa (CA). Funded by the Canadian International Development Agency (CIDA), and in partnership with Industry Canada, CA was twinned with Acacia. Its programming complemented Acacia's research orientation with more technology-focused R&D for ICTs in development. The resulting mix of projects that received both Acacia and Connectivity Africa funding allowed for the support of direct implementation of ICTs for development, as well as applied research around the interventions. The implication of this is that there will be different goals attached to different projects – research oriented programs might have learning goals while technology or applied programs might have other objectives focused on feasibility and effectiveness of technological solutions. All projects, however, have a common target of using technological applications or knowledge about technology to inform and advance socio-economic development. Given the timing of the CA funding, which overlaps with the 2006-2011 Acacia Prospectus cycle, participants at the Forum represented a wide

---

[6] Tutorial Option 1: Strengthening theory and methodology for ICT4D research. Toolkit available at http://acaciaforum.net/pg/pages/view/3037/.
[7] Tutorial Option 2: Communicating research results for influencing policy and practice. Toolkit available at http://acaciaforum.net/pg/pages/view/3053/.
[8] Tutorial Option 3: Building sustainable projects: Alternative fundraising methods. Toolkit available at http://acaciaforum.net/pg/pages/view/3050/.

range of, and varied entry points into, ICT-related research topics – agriculture, education, gender, intellectual property, language, governance, health, entrepreneurship, infrastructure and regulation, and open source ICTs – attesting to Acacia's objective of supporting research that has the potential to change lives.

3.5: Evaluating Supported Research

As Acacia's Theory of Change outlines, there is an expectation of some result following the program's provision of support for researchers. This result is not limited to research outcomes such as publication of research findings, since the Theory of Change links researchers' activities to changes in the social, economic and political circumstances of people and communities. As a learning organization, IDRC encourages its programs to undertake evaluation of projects, programs and processes. In the case of Acacia, evaluations have been carried out on the basis of utility. This is at the core of the utilization-focused evaluation approach, which places the intent of an evaluation – according to the intended users and their intended uses – at the core of any evaluation that is conducted. This guides the evaluations conducted of specific projects, specific activities (such as the Forum or other networking and learning activities), specific programming modalities, and of the Acacia program as a whole. The evaluation of Acacia's network programming modality, described in Section 3.2, is an example of a utilization-focused evaluation in action.

A session during the Forum – led by Ricardo Wilson-Grau – was focused on evaluation in research for development projects. This included rich discussions about outcomes and how they related to other aspects of a research project. A small interactive group exercise was conducted to facilitate researchers working together to identify outcomes within their own work, discuss them and articulate them to demonstrate how their work has influenced development in Africa. Outcomes identified in some groups included: increased capacity in research writing by researchers in the Gender Research in Africa into ICTs for Empowerment (GRACE) network, thinking beyond observable outcomes when writing research reports, and the implementation of a digital health management information system in Uganda. In trying to frame a project outcome in one sentence as required by this exercise, participants acknowledged the difficulties they faced in trying to distinguish outputs from outcomes. It was suggested that this could be partly a timing issue, with projects currently more focused on internal capacity building outcomes. Nevertheless, as Heloise Emdon (Acacia Team Leader) later noted, the session had generated a lot of '*aha*' moments for different program leaders. As a result of these activities, she believed that describing outcomes would now be easier when writing technical reports.

Chapter 4: Change

4:1: Introduction

At its core, Acacia's mission is to bring about change through the knowledge produced by research into the social, technical and economic effects of ICTs, following the framework expressed in its Theory of Change. The TOC anticipates a chain of events, though not necessarily linear, from investing in ICT4D research to the advancement of the information society in Africa. Yet change, especially ICT-related change, is particularly difficult to measure and even more difficult to associate with a specific research intervention. Nevertheless, for any investment in ICT4D research or development projects, there is an imperative to demonstrate the benefits. A primary feature of the Forum was to listen to and reflect on how research partners have followed some of the pathways that define Acacia's Theory of Change.

4.2: Measuring Change – Outputs and Outcomes

There are many approaches one can take to measure change, one of which is the Outcome Mapping approach, discussed at the Forum. Under this approach, outputs are defined as changes caused directly by the research project's efforts (e.g. products, services and processes generated through the project's work), whereas outcomes would be seen as the intended or unintended changes undergone by the social actors that a research project influenced (e.g. changes in perceptions, actions or behaviours). Outcomes are much broader in scope and can have further reaching consequences than outputs. While outputs are relatively easier to measure, Acacia's approach is to identify project outcomes, defined as "changes in the behaviour, relationships, activities, or actions of the people, groups, and organizations with whom a program works directly… [which] can be logically linked to a program's activities, although they are not necessarily directly caused by them" (Earl, Carden & Smutylo 2001)[9].

However, Ricardo Wilson-Grau explained in his presentation of the outcome mapping approach to evaluation that the achievement of results is not a linear process, and different types of results can be identified during a project's timeline, some of which would be directly associated with the project, others less directly. Realizing the six Acacia objectives is therefore challenging because achieving them does not follow the conventional logic of effects flowing in a linear pattern from inputs to impacts. Hence Acacia's focus on activities that can be found upstream from impact – those activities (outcomes) that can contribute to impacts. Even so, outcomes are also difficult to identify – participants noted that it was sometimes difficult to find the terminology to articulate an outcome as distinct from an output – it often comes down to the intent of the evaluation and how the intended users would use the outcomes that surface from the study. Furthermore, identifying the significance of an outcome (as is required in the

---

[9] Earl, S., Carden, F., & Smutylo, T. (2001*). Outcome mapping: Building learning and reflection into development programs*. Ottawa, ON: IDRC. Available at http://www.idrc.ca/en/ev-28377-201-1-DO_TOPIC.html.

evaluation process) was difficult. A third principal challenge in measuring outcomes is that they are easier to pinpoint for local projects whereas nation-oriented targets such as influencing policy or culture are trickier.

Notwithstanding these challenges, forum participants presented a broad range of outcomes – from the creation of a map of connectivity in Africa that led the IDRC to fund the creation of Connectivity Africa (contribution to the social and technical innovation objective); through the development of a doctoral program in ICT4D at the University of Nairobi (contribution to the capacity building objective); to the role of program officers as facilitators of network connections (contribution to the policy dialogue objective). Measures for some objectives were considered more problematic than others – in particular finding a way to measure achievement of the objective of fostering sustained policy dialogue was considered a difficult task. The limited demonstration of gender-related outcomes led some participants to wonder whether this could be a result of limited understanding of what constitutes gender transformation. A third area that generated some questioning related to the objective of contributing to a formal body of knowledge – participants argued that contribution to informal knowledge should be given just as much importance.

An important consideration that came to the fore was the need for definitions of outcomes to reflect the different phases of projects. This was highlighted by Alison Gillwald, Research Director of the oldest Acacia Network (Research ICT Africa), who described how as she reflected on outcomes in an assessment of Acacia objectives she noticed that the existing indicators were different from what she now considers important. To her, the indicators established for the program focused on tangible outcomes, thus overlooking other less tangible types of outcomes. For example, impact on policymakers is considered intangible and perhaps did not feature as an indicator for this reason; but with the passage of time, some results are now being observed in this area. Participants also stressed the necessary lag time between beginning an intervention and seeing a policy influence outcome, especially in a relatively new field such as that of ICT4D and with a program pipeline such as Acacia's that is structured in two to three year phases, with limitations on the size of grant funds available during each phase. Expecting policy influence in the early stages is unrealistic since some Acacia networks are still at the discovery stage. In addition, participants acknowledged that the existence of different project types and timelines means that there should be different yardsticks for reporting outcomes – some projects may take a while to demonstrate policy influence while other projects may start affecting policy at an early stage.

4.3: Translating Lessons into Action: Using Research Findings to bring about Change

It is often the case that scientific research studies end up having limited real world influence because their findings do not travel beyond the research report stage. Acacia, however, is committed to seeing research used. While the program's most direct intervention is through funding research programs, the incorporation of action research, and the critical goal of

contributing to human development, means that there is an expectation that the research Acacia funds will ultimately gain some uptake and exert influence in the relevant quarters.

Research as a Change Agent: A research project by the Gender Research in Africa into ICTs for Empowerment (GRACE) network partner in Zimbabwe found that the first-come, first-served policy for use of library computers at the University of Zimbabwe was not providing equitable access to female users as intended. What was perceived to be an equitable policy was in fact far from it. The findings demonstrated males tended to crowd out or intimidate females who were earlier in the queue. The GRACE network's research made this situation visible by initiating dialogue with a variety of pertinent actors among the leadership at the university. The primary focus of these interactions was the GRACE network's evidence-based message that the first-come, first-served policy, which was perceived to be gender-neutral, was in fact gendered in a way that disadvantaged female students.

Thus, a significant policy-relevant outcome of this research was it made explicit and brought understanding of the unintended effects of the first-come-first-serve approach. The researchers helped provide insight into the perspectives and actual experiences of the women trying to access the computers. In addition, the GRACE network explored options for resolving the situation and made recommendations for possible solutions, such as establishing a separate lab or at least dedicated computers for female students. As a result, members of the University Leadership have agreed to allow the installation of computers in the hallways of the female residences on campus. This dialogue is ongoing, as the network continues to push for substantive change that would result in equitable computer access for female students.

The example from Zimbabwe mentioned above illustrates the power of translating research into action through carefully crafted and targeted communication strategies. It illustrates the challenges of attempting to influence or change policy, and the important interim steps of changing perceptions and practice that can contribute to policy change. The imperative to translate research findings and lessons into action was a leading driver to the communicating for influence tutorial. Acacia's work recognizes the research cycle remains incomplete unless the findings are communicated to particular target audiences, using appropriate and varied tools and techniques.

Chapter 5: Learning and Networking

5.1: Introduction

Learning and networking are essential within the framework of Acacia's Theory of Change. The strong network of researchers envisioned in Chapter Three is catalyzed by the free flow of communication which allows individuals and/or organisations to tap into the experiences of other researchers. This type of interaction was evident during the Forum.

Research is inherently a learning process and ICT4D research especially so with its social change underpinnings. Learning can come from a variety of sources and can occur within projects, across projects and across the ICT4D field. For a field that is still in relative infancy, it is important for ICT4D research to develop strong foundations based on previous research and shared experiences. Such an outcome is best achieved through openness to learning and active linkages between researchers working on similar or related ICT4D topics.

Whereas research is often executed with particular goals in mind, it is critical to be open to different discoveries, expected or unexpected, and to identify both intended and unintended outcomes. Again, reaching for these goals requires enabling communication and information sharing in ways that allow some measure of freedom for people involved to dictate their own priorities and/or to follow unplanned conversation threads, all without losing sight of the more deliberate objectives associated with an activity.

5.2: Participatory and Interactive Learning at the ARLF

Proceedings at the ARLF were deliberately designed to embody learning and networking using a variety of knowledge sharing techniques. Formal presentations were combined with informal and interactive formats thereby accommodating learning styles for diverse participants. Sessions included icebreakers, a chat show, the world café format, a debate, speed geeking, a fish bowl process and an open space section. As the forum facilitator observed in her reflections on the Forum (Hewlitt, 2010),[10] none of the techniques used were new, being well-tested methodologies with sizable communities around them. They do not however often find expression in gatherings of academic researchers. Hence for a large proportion of participants the Forum represented a refreshing change from traditional academic conferences. In addition, a web-based social networking space was provided to enable participants to connect, engage and share with each other before, during and after the Forum.

Above all, the Forum was exemplary in providing dedicated times during which deliberations were guided by the interests and needs of participants. The Open Space sessions, (which can be defined as a structured process that empowers participants to suggest and take ownership of

---

[10] Hewlitt, A. (2010). *Making large scale events more effective: A facilitator's reflections.* A report for Acacia, IDRC.

research agenda items) were the most-liked sessions at the Forum (Participants' Evaluation report).[11] During these sessions participants generated topics for discussion based on personal interest. Over 20 topics emerged (from language, to gender, to natural resource management), all of which were given opportunity for participants to congregate and discuss. A second activity (using the fish bowl format) had a set of discussants deliberating on the implications of networked societies, with participants in the audience periodically taking turns to join the conversation with questions of their own.

Opening up Possibilities to Collaborate: Groundbreaking collaboration in the field of health information systems (HIS) in Africa was hatched during the close and frequent interactions at the ARLF. It was in this fertile intellectual space that researchers from different HIS projects mapped out an integrated system for Sierra Leone. Research on HIS strengthening in Africa involves many elements working concurrently at different levels of health administration. The Open Architectures Standards and Information Systems (OASIS) project is a network of networks that supports research on open, robust and interoperable electronic medical records across over 10 African countries. The OASIS group had worked in the past with the Health Information Systems Program (HISP), however they had not yet developed a joint research idea around which to collaborate. The ARLF brought together these groups, among others, and the result of the formal and informal interactions is a proposed groundbreaking architecture to provide integrated health services at each level of the health system (national, regional, facility and community) in Sierra Leone. The architecture has since been written up as a research paper and submitted to a peer-reviewed conference.

The ingredients – their mutual interests, experiences and knowledge – came together to ferment in the 'agar' – the ARLF interactive design, open environment and innovative activities – to result in a trail-blazing idea in the field of Open Health Information Systems.

The assortment of sessions – each planned meticulously with the Acacia team to discuss the pertinent issues in an engaging way, and with sufficient time and space to invite participation through face-to-face and online interaction from the other participants – was successful in continually stimulating the Forum participants and encouraging them to think innovatively. The small group sessions were ideal for brainstorming ideas for current and future research projects. This is precisely what contributed to the project idea for Health Information Systems in Sierra Leone, described in the preceding Forum story.

5.3: Openness through Learning and Networking

The Forum design around open learning and networking channels is symbolic of how many Acacia projects are conceived, developed and executed. Whether this relates to the inclusive and informed way in which research is designed, or the deliberate emphasis on ongoing networking and learning activities, Acacia's experience in the multidisciplinary field of ICT4D has

---

[11] However, the Open Space sessions also received some negative comments related to its unstructured nature.

taught the team to seek out opportunities to leverage the 'wisdom of crowds' within the different projects. The use of Free and Open Source Software and Standards (FOSS) represents a cross-cutting example of openness in project networking, learning and design.

IDRC is a publicly funded institution that is mandated to support research and informed by a strong organizational culture of learning. Acacia, as part of IDRC, has embodied this philosophy through its active support of FOSS-based projects. This extends to projects working in the fields of healthcare delivery and management, educational software development, microfinance, and localization efforts – just to name a few. These projects not only use FOSS tools to build solutions, they adhere to the networking and community development aspects of the open source movement to leverage local and international expertise to build and nurture African capacities to design and realize affordable and appropriate solutions to their development needs. In many ways, the social networks and working arrangements that tend to be developed around open source communities are similar to the collaborative, participatory and open attributes of the Acacia Research and Learning Forum, and the Acacia program as a whole.

5.4: Openness and Innovation in the African ICT4D Environment

As one of Acacia's outcome objectives is to advance social and technical innovation, the topic of innovation featured prominently throughout the Forum. First, network representatives shared some of the ways in which their projects are contributing to innovation in ICT4D in the African context – for example using handheld PDAs and cell phones to solve internet access barriers, and experimenting with open source software which has enabled diffusion of knowledge and enhanced capacity for software developers, implementers and users. They noted on-going efforts to demonstrate progress with alternative internet access technologies such as wi-fi and narrowband solutions.

In a broader discussion on "Innovation in the Field of ICTD", Laurent Elder (Program Leader, Pan Asia Networking program) explained that IDRC's interest in openness derives from its goal to create inclusive knowledge and information networked societies. This is based on the belief that open social arrangements help to bridge divides and in so doing facilitate equity within knowledge societies. Two forum sessions delved deeply into this issue – "Innovation in the Field of ICTD" and "Implications of Networked Societies." In these discussions panelists highlighted the link between innovation and openness – they noted that innovation is critical because without it nothing ever changes, however most of the people who make use of innovations are not the initiators of the product. Thus openness is required to enable the use of science and technology for collective advancement. The relevance of this for the ICT4D arena is that,

1) Innovations are about improving practices,

2) Ideas and innovations emerge through use,

3) Collaborative systems are needed to facilitate innovation because people with different knowledge, skills and resources are needed to make viable innovations, and

4) ICTs can play a role in facilitating openness and knowledge-sharing, as well as in improving practices.

Nevertheless, panelists noted that openness is not a free-for-all – it requires matching rights and responsibilities.

To make the quest for ICT4D innovation in Africa attainable, panelists further argued for the need to find less expensive ways of innovating, to drop the barriers to entry for the use of science in innovation, and in particular to take advantage of low-hanging fruit, that is, to leverage the resources that already exist in communities. This means thinking creatively about how to stimulate innovation at the local level and not necessarily looking to participate in wider (e.g. global) or higher-level (e.g. biotech) innovation processes. The panelists linked this to the value of traditional knowledge, noting the false tension that is often created when traditional knowledge is set against science and technology.

At the same time, there was recognition of the dangers of over-reliance on technology. For example, questions were raised about how to bring scientific knowledge to the table while respecting and preserving the sense of place. Others wondered about the growth of surveillance as a form of control, or unintended deepening of the digital divide. Suggestions put forward to address these concerns included paying more attention to creating systems that will not destroy society, and developing an ethical charter that would require innovations to respect human dignity and the environment. These concerns are however, not to be taken as scaremongering but rather as a realistic appreciation that ICTs, like other technologies, constitute a double-edged sword. Therefore, even as Acacia works to promote openness and innovation through ICTs, sight should not be lost of potential pitfalls.

Chapter 6: Communicating Research for Change

6.1: Introduction

One of Acacia's main objectives is to support relevant ICT4D research that can be communicated to the public, the media, policy makers, and other parties in order to effect positive social, economic, political, and cultural change, and spur technical and social innovation in Africa. To this end, Acacia works with its research partners to strengthen their capacity to communicate important lessons, outcomes, and findings from their research undertakings. The Acacia Research and Learning Forum (ARLF) 2009 provided an excellent opportunity for the various research networks to come together to share tales about their experiences in communicating research for positive change throughout the African continent. The networks learned valuable lessons about the most effective ways of communicating research, what it means to facilitate and sustain meaningful dialogue with stakeholders, and the importance of strategic communications.

6.2: Communicating Outcomes at the ARLF

Acacia is firmly committed to seeing the research it supports communicated as widely as possible so that it can have the greatest possible influence on African development. Recognizing that change does not happen unless knowledge is appropriately packaged and disseminated, Acacia places a strong emphasis on knowledge sharing among the research partners. Additionally, it encourages the research networks to communicate their messages beyond the ICT4D community, taking the ICT4D message to a wider array of groups and stakeholders.

To instill a greater appreciation of the importance of communicating research, the organizers of the ARLF 2009 used a number of methodologies at the meetings to encourage participants to communicate their research activities to fellow researchers. One such method known as 'speed geeking' was used to have researchers explain the contributions of their research projects to Africa's development. The speed geeking method permitted groups of participants to gain quick exposure to a wealth and diversity of ICT4D research within a fixed period of time. Each presenter gave his or her presentation many times, in a safe and comfortable environment, with audiences rotating among the presentations at the end of each speed round. The presentations were intended to be focused summaries of Acacia's research projects, especially those projects that were not part of the networks, such as MIFOS, Drumnet, Cybersecurity, and ICTs and Youth, however several networks were also invited to share their innovations as well. The presentations were made by representatives with deep, practical experience in the topic area. The recurring nature of the presentations helped presenters improve their oral presentation skills, refining their message round after round.

The topic areas covered during the speed geeking rounds included ICT and gender, the digital commons, localization, education, governance, health, social and economic development,

infrastructure policy and indicators, small-scale agriculture and new learning environments and practices.

> **Learning through Articulating:** The Forum gave Khadija Shamte (of the MIFOS project) an opportunity to articulate the outcomes of her research on micro-finance and mobile phones. As she articulated what she thought were outcomes, namely the pent-up demand for mobile money in the micro-finance sector, she realised that her baseline study had already achieved insights. As her research is about developing an open source management information system based on Grameen Technology Center's MIFOS software, she was told by key informants during her research at the Kenyan and Tanzanian central banks that they would in futurerequire micro-lenders to have electronic management information systems for licenses to lend, which they were not aware of before her research. Thus, this project was already demonstrating policy influence at the early stages of the research. The technical solutions have not been as easy to retrofit into a broadband-deprived African environment.

Following these thematic presentations, participants were invited to form groups and create corresponding key messages that could be communicated beyond the ICT4D community to demonstrate how Acacia's research has made a difference in Africa's development. The twinning of these two activities was deliberate as the Acacia team strongly believes that research findings that are not communicated appropriately to different target audiences have not completed the life cycle of research for social change. Each group was asked to develop a message to be communicated using a medium of their choice. The session closed with advice on how best to package these communications so that they achieve the greatest impact. This advice emphasized using accessible, direct, and catchy language to attract and keep audiences and leveraging different forms of media (especially new media such as the Internet and social networking technologies such as Twitter) to diffuse these important messages to greater publics. One among the many creative messages that were created is the following jingle prepared by the Promoting African Research and Education Networking (PAREN) research network:

We the African Researchers and Educators
We shall connect, no barriers
We shall research, no limitations
We shall educate, all learn
And for our people, better lives

6.3: Role of Empirical Evidence

Empirical evidence is possibly the single most important tool for convincing policymakers to rethink old policy or institute new ones. When it comes to effecting change through communications, nothing beats solid evidence.

> **Triggering Policy Change:** At the Forum, the Research ICT Africa (RIA) network shared some of their experiences in policy engagement. One experience in particular provides an excellent example of how the Acacia partners can communicate their research to improve the status quo in Africa. The RIA researchers conducted two ICT household surveys in Namibia to benchmark the country's mobile telephony market against Botswana's and South Africa's, two of the country's close neighbours. They then presented their results to the Namibian government, convincing regulators to open the mobile telephony market to a second service provider. An inter-connection benchmarking study for Namibia was later leveraged to convince South African authorities to review the competitiveness of the South African mobile telephony market. This not only shows that sound, rigorous ICT4D research can be imparted to policy makers to improve the day-to-day lives of people, but also that very real regional rivalries can be a trigger for policy change in Africa.

6.4: Facilitating and Sustaining Dialogue

Part of this commitment to communicating research involves engaging with the policy process. Acacia believes that such dialogue is a very important part of the research networks' activities and as such it is one of its evaluation criteria. However, dialogue is not limited to communicating at the policy level; the ICT4D agenda also benefits when researchers engage with peers, the media, and the communities in which they work.

One of the interesting points related to policy engagement that emerged at the Forum was that most of the networks have touched upon policy issues during their research, even if they were not originally expressed as objectives. That is to say that sometimes policy dialogue is planned, other times it is not; but nonetheless it almost always happens due to the commitment from the Acacia Program Officers working with the researchers. The nature of actors involved in the policy dialogue is dependent on the focus of the research, the different constituencies involved and the policy windows that are open during the course of a given project, as well as the general awareness of the Acacia Program and partners, cultivated through the iterative, reflective and grounded approach they follow.

Many of the networks rely on building national champions to achieve policy influence. As was discussed earlier, policies can sometimes spread within a region because of regional rivalries. Policy dialogue requires a flexible approach with multiple entry points into the engagement process. Indeed, policy development is not linear. Partners explained that not everything can be planned for and most policy changes tend to be opportunistic because research partners are pro-active and able to make the most of situations. Acacia Program Officers can play an important role in facilitating the network connections and strategic communications practices that often lead to policy engagement.

There is also dialogue that influences practice. For instance, the AVOIR project, OASIS or other open source based projects have conducted research that have influenced the ways in which people in Africa approach certain ICT for development priorities. Several universities in Africa have adopted open source software (OSS) policies and incorporated OSS curriculum for software engineering studies. OASIS is seeing some national ministries of health and several donor and multi-lateral organisations endorsing and adopting open source and open standards for developing their health information systems.

6.5: Strategic Communications

An important part of the policy engagement process is being prepared with compelling research findings that are crafted in an accessible and direct manner, and connecting with the media at opportune moments to raise the profile of the issues at stake. The media also have an important role in raising public awareness and motivating policy makers to act. Many of Acacia's partners have good relationships with the media in their locales and have achieved certain successes in getting their messages out there. However, at the Forum others expressed frustration with this aspect of the engagement process. Relying on the so-called old media, including print journalism and television, to report stories about important research milestones can be a trying experience. For example, one participant noted that the media focus a lot on politicians and tend to neglect other actors such as development research groups. For this reason and others, the ARLF stressed to participants the advantages of adopting new media tools and forming online social networks to communicate their messages strategically. While not accessible to all, social networking can spill over into arenas that will catch public and political attention.

For example, the Forum had a dedicated online space[12] where participants were able to connect with each other in advance of the meetings, share relevant information and resources, join groups, network socially, and publish web logs, among other activities. The site also allowed the Forum and its participants to communicate the goings-on in Dakar to a much wider audience, including many interested parties abroad. The incorporation of social networking tools such as Twitter into the Forum web site gave the Forum an interactive dimension, with people across the globe following the events in real-time. Additionally, with the video content and recorded interviews of both speakers and participants, captured and edited by the Senegalese *bloggeurs and bloggeuses* (male and female bloggers) and African Commons group, the Forum was able to share important daily highlights with the online audience. Combined, the use of these different tools demonstrated to research partners how new media can help advocates gain a strategic advantage in the marketplace of ideas.

The Forum organizers were also wise to involve representatives from specialist news outlets such as Intellectual Property Watch. Their inclusion in the program not only brought increased media exposure and networking opportunities, it also provided a lesson in how to engage with

---

[12] http://www.acaciaforum.net/

the media strategically. The specialist media are often more likely to pick up on ICT4D stories than the more generalist media, such as national broadsheets, and so developing good relationships with these journalists is important.

The Forum also featured a special tutorial on how to communicate research results for influence. Speakers explained to participants that strategic communication is more than simply dissemination. It requires strategic engagement. One exercise involved crafting communication messages based on various scenarios. The messages were tailored depending on the intended audience. In another session at the tutorial, participants were advised to create a media typology in their home countries whereby they can identify particular journalists or media houses that might be interested in their stories.

The ability to communicate research results strategically to effect change in policy or practice is an important skill into which the Forum provided some insights and targeted training. However another aspect of communicating for change worth mentioning is the communication amongst Acacia network partners. This level of communication (as discussed in Section Five in the context of learning and networking) can also lead to change in policy and practice related to the conduct of development projects and development research. The step that the Forum took to facilitate communication between Anglophone and Francophone forum participants was particularly significant – not only through provision of skilled interpreters throughout the Forum, and using 'whisper translation' in some sessions, but also by having both English and French-speaking journalists on site to blog about the Forum. Thus Acacia demonstrated a commitment to both external and internal communication as the bedrock of sustainable change.

Chapter 7: Reflections and Conclusion

7.1: Introduction

This narrative report has presented a tour of the Acacia Research and Learning Forum through the lens of the program's Theory of Change. Out of the diversity of topics that were discussed during the five days of the Forum, a number of themes were prominent, some related to happenings at the Forum, some of direct relevance to the Theory of Change, and other more pertinent to the general conduct of ICT4D research and development in Africa. This chapter lays out some of the highlights of the Forum, as well as other significant themes.

7.2: Highlights of the Forum

Three features of the Forum received significant appreciation from participants:

Participatory Sharing and Learning

The structure of the Forum was reflective of the Acacia program's approach to change – harnessing human interaction as the foundation for discovery, growth, and influence. Participants were especially taken by the interactive thread that characterized all sessions, even those that had formal presentations as the main component. This format was a novelty to a large proportion of those present, not only as a new way of sharing knowledge, but also as an effective source of enlightenment; "mind-opening" through conversations and presentations that provoked and challenged existing notions and preconceptions.

Networking

The opportunity to meet and interact with old and new colleagues was another highlight of the Forum, reinforcing Acacia's network approach to research capacity building. There was an abundance of formal and informal spaces for interpersonal and professional exchanges. As one participant observed, the Acacia network itself is an outcome of the Acacia program.

Insights on outcome evaluation

Acacia's network evaluation process required network partners to provide assessments of the results their research and related activities have generated so far. Thus, by the time of the Forum, Acacia partners had already put a lot of thought into outcome evaluation, and had submitted reports to Acacia. Forum participants still found it enlightening to share conceptual information about research and project evaluation, as well as the specific outcomes associated with different research projects.

7.3: Tensions

Another thread that permeated the Forum took the form of certain oppositions inherent in the work of Acacia network partners. The Forum was characterized by multiple tensions – for example, development projects v. development research, development outcomes v. development research outcomes, rigorous v. relevant research, policy influence v. policy dialogue; outputs v. outcomes.

Research projects and development projects
First, it was clearly acknowledged that improving human development is a major goal of the Acacia research initiative. The research Acacia funds aims to better understand how information and communication technologies can improve life opportunities, social service delivery, and empowerment in Africa. At the same time, Acacia's direct interventions usually take the form of research projects designed to generate knowledge on the role of ICTs in development. Invariably, the line separating development projects and development research can be blurred. This blurriness was apparent at the Forum, where there were lingering questions about whether the ultimate goal of Acacia research partners' activities is to produce strong research evidence, bring about policy change (or change in practice) by effectively engaging in policy dialogue based on research evidence, or to bring about change in development indicators of the communities they are working in. Acacia's Theory of Change assumes that improved development outcomes should follow from strengthened research capacities, but the path between the two is seldom straightforward.

Relevant and Rigorous Research
There are ongoing debates in the academic research community about this tension between *relevant* and *rigorous* research. A fair number of Acacia network partners face the unique challenge of being involved in projects that have both scientific research and practical human development objectives. The extent to which emphasis is placed on research capacity building versus influencing practice and downstream change represents a fascinating, but not oppositional, tension within Acacia's research support program. This problem is not insurmountable, but highlights the need for clarity on which set of outcomes are paramount for Acacia research partners and which are more indirect – in other words, clear delineation of what indicators partners will be assessed by, and appropriate valuation of actual results based on the existence of these dual goals. For example, in its assessment criteria Acacia values contributions to *formal* bodies of knowledge. Forum participants noted that this emphasis on formal knowledge might undermine valuable contributions to informal bodies of knowledge that might positively impact on human development in the region.

Likewise, as one of the Forum participants noted, there is an important difference between development research and development projects that have an evaluation component. Not all development research lends itself to metrics-based formal evaluations. On the other hand, development work that is easy to evaluate through these metrics might not result in high quality research outcomes.

Outputs, Outcomes and Impacts
A related discussion topic during the Forum concerned the relationship between outputs, outcomes and impacts of ICT interventions. The Theory of Change recognizes the complexity of trying to identify impacts. Acacia, and the rest of IDRC, encourage researchers to articulate, observe and report on outcomes within a project. However, measuring outcomes for project evaluation can be difficult, as the relationships between outputs, outcomes, and different actors and factors are highly nuanced and require careful thought with regards to the nature, extent and significance of a given change.

Participants' takeaways from the outcomes evaluation process included: learning how to formulate meaningful outcomes; learning how to articulate describe projects in simple language, and observing common themes across projects, such as collaboration between academics and NGOs.

Policy Dialogue and Policy Influence
The challenge of providing evidence of policy influence or evidence of policy dialogue/engagement was an issue that emerged in several conversations. An associated challenge was that of effectively communicating for policy influence. Some participants were concerned that their mandate was to influence policy; however, one point of clarification was that the goal should be to sustain policy dialogue, which may in the long-term lead to policy change. Even so, some uncertainties were evident in the minds of participants about how policy dialogue efforts could be measured. It is noteworthy that one of the major conclusions on this issue was that evidence of policy influence generally requires long timelines and should not be an early expectation of network partners.

7.4: The ICT4D landscape in Africa

The Forum had an underlying goal to identify the extent to which Acacia research has contributed to the information society in Africa. Overall, based on the outcomes evaluation reports, the prognosis appears good, although challenges remain. Depending on the basis for assessment, the level of achievement likely differs. It was observed, for example, that access infrastructure (terrestrial broadband, wireless broadband, etc.) is still a major issue for African countries, and hence continued attention to such issues is critical, including ideas about the role of the public and private sectors in leading ICT service provision efforts. Questions were raised about how to incorporate innovation and openness into the ICT4D research program in Africa. Yet another topic that received significant airtime was the case of language as a cross-cutting development-related issue that is sometimes underappreciated. On the other hand, the display of various project outcomes, and the observation that some research has already made an impact at the policy level, suggests that Acacia research is reaching the point of demonstrable contributions to the ICT4D landscape in Africa.

7.5: Conclusion

The Theory of Change articulated early in this report, and revisited throughout, was that **investment in locally led, demand-driven ICT4D research in Africa through appropriate programming modalities and mechanisms leads to changes in the African ICT landscape, from policy to practice and people.** The Acacia Research and Learning Forum showcased different elements of this TOC and how the triumphs and tensions reside within each of them. There are three parts to Acacia's mission: 1) support research on ICTs, 2) improve livelihood opportunities, enhance social service delivery, and empower citizens, and 3) build the capacity of African researchers and research networks. What does it mean to support research in this manner and with these objectives? This mission generates the tensions we observed during the forum discussions because it incorporates both development and research outcomes, and perhaps places them on an equal footing within Acacia's Theory of Change.

The tensions network partners discussed during the workshop indicate an immediate need for clarity on what their place is within Acacia's Theory of Change, particularly which levels and types of outputs, outcomes, and impacts they are expected to contribute to. Additionally partners would benefit from clear definitions of what constitutes a contribution or outcome, and how it will be identified within Acacia's evaluation framework. While the practice of having partners self-assess and report on the outcomes of their projects is consistent with Acacia's philosophy, partners may still be feeling some confusion about the extent to which they are producing results and what they should count as an outcome. It is noteworthy that the Forum helped to illuminate this uncertainty. However, it is still unclear if the primary indicator of success for Acacia partners is, for example, evidence of research capacity building, policy dialogue, or community development. Despite the different perspectives and indicators one can employ to measure success, what came across clearly at the Forum was the importance of reflecting on intent, processes and outcomes within and across projects in the Acacia network.

The Forum also reinforced the utility of the network and capacity-building approaches being implemented by Acacia. It should be acknowledged, however, that the need for ICT4D research capacity-building in African countries is not simply an issue of weak markets, weak organizations, or limited research cross-fertilization within the continent – ICT4D as a field is itself still in search of appropriate theoretical and methodological foundations, as well as the formulae (if any) to generate change through the application of ICTs. The lively exchanges, learning and networking activities, and evidence of a variety of outcomes presented at the Forum demonstrate that Acacia, in its efforts, has the potential to provide leadership in building theory, practice and evidence in the ICT4D field.