

DANIDA Study

Using ICT to Promote Governance

APRIL 2012



Table of Contents

1	INTRODUCTION	1
2	METHODOLOGY	2
3	WHY ICT?	3
4	HOW TO USE ICT FOR GOVERNANCE? 4.1 Transparency: Government Open Data 4.2 Social media for empowerment 4.3 Social media accountability 4.4 Lessons learned	6
5	HOW TO INTEGRATE ICT INTO PROGRAMS?	21
6	CONCLUSIONS, OPPORTUNITIES AND RECOMMENDATIONS 6.1 Conclusions 6.2 Opportunities 6.3 Recommendations	25
4	TABLE OF APPENDICES Annex 1 Terms of Reference Annex 2 List of interviewees Annex 3 List of references	31

1 Introduction

In the fall of 2011, Danida commissioned a study with the objective of:

- examining strategic opportunities for using ICT for promoting governance and democratization efforts within development assistance; and
- exploring opportunities for ICT in the present Danish portfolio of development programs and within the vision of the Strategy for Danish Development Cooperation.

The study touches on a range of ICT technologies but its focus is the use of mobile phones, including voice calls, SMS-Text, mobile internet, and social media.

This report presents the findings, conclusions and recommendations of the study and falls in 6 chapters: an introductory part outlining study objectives and the methodology applied (Chapters 1-2); a presentation of why ICT is important (Chapter 3); a presentation of ICT case studies from Kenya emphasizing transparency, accountability and empowerment (Chapter 4); a presentation of other donor practices and experiences with emphasis on institutional issues (chapter 5); and a concluding chapter outlining the conclusions/recommendations (Chapter 6).

The report is not aimed at specialists in communications for development. Rather, the intended audience comprises members of the development community, who are familiar with theories of change, and the strategies and practice of development assistance. A narrative approach is employed in the case studies in order to highlight the practical opportunities and limitations of the use of mobile phones and other ICTs to support governance.

The team responsible for the study conduct is John Siceloff (team leader) and Rikke Ingrid Jensen (governance expert). Harrison Manga assisted the team in Kenya. The team may be contacted at: info@jumpstartglobalmedia.org

Acronyms

AusAID	Australian Government Overseas
	Aid Program
CIDA	Canadian International
	Development Agency
CDF	Constituency Development Funds
	(Kenya)
CSO	Community Service Organization
DFiD	Department for International
	Development (UK)
EC	European Commission
EU	European Union
GAID	Global Alliance for Information and
	Communication Technologies and
	Development
ICT	Information and Communication
	Technology
KETAM	Kenya Treatment Access Movement
KODI	Kenya Open Data Initiative
NCIC	National Cohesion and Integration
	Commmission (Kenya)
NGO	Non-Governmental Organization
NSC	National Steering Committee on
	Peacebuilding and Conflict
	Management (Kenya)
SDC	Swiss Agency for Development and
	Cooperation
Sida	Swedish International Development
	Cooperation Agency
SMS	Short Message Service
TI	Transparency International
TOR	Terms of Reference
UNDP	United Nations Development
	Programme
UNICEF	United Nations International
	Children Fund
USAID	United States Agency for
	International Development
WB	World Bank
WBI	World Bank Institute
WSIS	World Summit of the Information
	Society

Society

 $^{^{1}}$ See terms of reference (TOR) for the study in annex 1.

2 Methodology

The methodology for the desk-study is presented below covering scope, study frame, data collection instruments, limitations, and terminology.

The very broad nature of the study objectives, as outlined in chapter 1, has required a narrowing of **study scope** to further specify and deepen the focus of the study:

- ICT. The study has primarily focused on the application of mobile telephony for information, dialogue and participation purposes.
- Governance/democratization. Focus has been on governance outcome level with emphasis on transparency, accountability and empowerment. Governance at sector and cross-sector level has only been addressed as relevant.
- Geographical focus. Kenya has been the primary focus for the research.

With the compilation of better practices as the overall objective, the main study frame of the study has been ICT/ mobile telephony for governance initiatives in Kenya based on consultations with partner government, civil society, donor agencies, and private sector/software developers. Furthermore, key bilateral and multilateral donors headquarters have been contacted for a brief overview of their ICT policy and implementation experiences with emphasis on mainstreaming and harmonization issues. Finally, select lead civil society organizations and think tanks have been contacted for substantiation of thematic issues as needed. A total of 71 stakeholders have been interviewed; 38 of these were based in Kenya. See annex 2, list of interviewees, for further information.

The primary methods for **data collection** have been semistructure interviews (phone or fact-to-face) coupled with complementary desk-study of program documentation, policy documents and oversight studies. See annex 3 for list of references. In regard to **limitations** the following challenges were encountered during study conduct:

- Lack of hard data. The field of ICT work for governance is still so new that most of the initiatives reviewed were yet to be evaluated; nor were steps taken to ensure evaluative work in the future (establishment of baselines, monitoring procedures, etc.). Furthermore, with the rapid developments that mobile telephony is undergoing, the availability of oversight studies for triangulation purposes were limited as only the most recent research, dating back no more than 2-3 years, holds relevant lessons learnt for today's strategic orientations. Finally, information on donor ICT activities at global level were difficult to obtain due to decentralization of programming activities to country level coupled with weak mechanisms for institutional learning.
- Only one country study. While Kenya is very relevant as a country case study due to its unique status as a hub for ICT and mobile telephony development and exploration; the same characteristics also make it less relevant as a comparative country case for most other countries on the African continent.
- **Broad study scope.** Even with the narrowing of study scope, the focus of the study proved to be too broad to allow for review of ICT for all types of governance themes such as the rule and law and anti-corruption initiatives. Furthermore, in regard to transparency the study has applied a focus on open data initiatives over other approaches such as e-governance. As a consequence, the analysis presented in chapter 4 should not be read as an exhaustive description of ICT initiatives for the promotion of governance.

Finally in terms of applied **terminology** for the study, the terms social media and mobile telephony will be used interchangeably for ease of reference although it is understood, that it is the latter, more narrowly defined term, which is the focus of this study. Furthermore, the term Information and Communication Technology (ICT) – under which social media and hence mobile telephony feature as a subset category of activities— will also be referred to and this especially in relation to donor policy and practices.

3 Why ICT?

Four recent trends serve as the frame for this study. They are:

- The explosive growth of cell phone penetration and use in sub-Saharan Africa.
- The emergence of an entrepreneurial ecosystem in sub-Saharan Africa.
- The acceleration of direct overseas investment in Africa's strategic resources.
- The phenomenon of the Arab Spring.

There are many scenarios for how sub-Saharan Africa will emerge from this tumultuous period of transformation. Elite capture of new investment; an empowered entrepreneurial class; and bottom-up citizen voice are all in play.

One key question is this: What effect will these changes have on governance? Governance, in the context of this report, includes transparency and accountability in government; citizen voice and civic engagement in decision-making; and support for the rights of all citizens.

That is the context for examining the role of mobile-enabled social media in support of governance. Mobile-enabled social media will be used here to refer to mobile telephony (voice and text), social-networking services, and internet applications. Can social media amplify citizen voice? Strengthen transparency and accountability? Build capacity within government for responsiveness to citizen input? Leverage a rights-based approach to governance? The objective of this study is to examine case studies and best practices in the use of new media for governance in sub-Saharan Africa, with the aim of creating a strategic perspective useful for Danida and other development assistance organizations.

Mobiles and social media: a transformed landscape

Scale and accessibility. The past decade has witnessed an extraordinary expansion of communication tools in sub-

Saharan Africa. In 2000, the number of cell phones first exceeded the number of fixed lines, at 20 million. Then, over the next ten years, the number of mobile handsets increased, to 285 million in 2008, and to 500 million in 2010. Penetration and service, which was originally concentrated in urban areas, now covers large swaths of rural Africa.

The biggest markets for mobile service are: Nigeria, South Africa, Kenya and Ghana. In South Africa, cell phone penetration is estimated at 98%. Far more South Africans have cell phones than piped water or electricity in their homes. In Kenya, there were 24 million cell phone subscribers in July 2011, out of a population of 41 million. There are countries lagging in uptake, including Zimbabwe and Ethiopia. And in a middle tier of countries, such as Liberia and Zambia, cell phone penetration is concentrated in urban and periurban areas. But uptake in middle tier countries is rapidly extending into rural areas, and into the hands of subsistence farmers. Throughout Africa, the cost of service has declined. For example, costs in Kenya for voice and SMS have dropped over 90% in the past five years.

The growing importance of social media. Social media has been variously defined; in this report it refers to media which supports interactive communication, conversation, and networking—in contrast to traditional, "one-way" media such as television, newspapers and radio. In Africa, the social media picture is different than in the West. The penetration of Facebook and Twitter is growing, but still minor. In 2010, the number of Facebook users in Kenya passed the one million mark; they now comprise 3.5% of that country's population. (The figure for the US is 50.5%; for Denmark, 52%).

In Africa, however, SMS-texting and internet communication are widely used as social media. In Kenya, just in the past year, the use of mobile phones to access the internet has exploded. In 2011, fully half of Kenyan cell phone users accessed the internet through their phones. This far outstrips

the use of computers (only 2% of Kenya internet users access the web through a computer). The same trend is evident throughout Africa. In 2008, imports of data-enabled phones exceeded that of non-data enabled phones in many African countries.

Appliance innovation and affordability. In Kenya, the cost for an internet-connected cell phone in Kenya has dropped below \$50. As costs have dropped, usage has grown exponentially. In the three months comprising the second quarter of 2011, Kenyans sent 655,000,000 text messages, and made voice calls totaling 7.5 billion minutes. Across sub-Saharan Africa, usage of mobile phone services is increasing by 50% every year.



There are over 500 million mobile handsets in sub-Saharan Africa.

The growing multi-functionality of the mobile phone makes it a highly adaptable tool. There has been a vast increase in the development and roll-out of mobile applications in Africa. For example, Kenya has become a market leader in the use of mobile banking, through the M-PESA service rolled out in 2003 by the largest wireless carrier, Safaricom (an affiliate of Vodaphone). Customers can receive funds on their mobile phone, and withdraw them or add deposits at a network of agents. It is also possible to send funds from one mobile user to another. As of November 2011, M-PESA had over 14 million subscribers and 28,000 agents. M-PESA launched in Tanzania in 2011, and there are plans to launch in South Africa, India and Egypt.

Intersection with governance. Mobile-enabled social media are useful in many areas related to governance. The impact is enhanced by low cost, ease of use, and scalability. One of the most importance advances is evidence-based advocacy. Evidence-based advocacy is made possible by opening up government data on budgeting and project implementation. For example, when villagers in community A sift through the data and find their school has fewer teachers and a smaller budget than, say, the national mean for villages of similar size; then that makes possible a new kind of advocacy. The request for more teachers is not based on a claim for preferential treatment but on real data. Evidence based advocacy is a potent tool at the level of village, region, and county. It is also a tool for CSOs and NGOs, which can use data to argue for more equitable distribution of government resources. At a national level, aggregated data about government performance can be a powerful lever for positive change.

Other governance applications include:

 Fast and easy information services about citizen rights; about the electoral process; about the judicial system and how to report a crime; and listings of official prices for government services.

- Aggregating and amplifying citizen voice. Collecting
 citizen views on topics ranging from budget proposals
 to government performance. Expression of opinion is
 fast and frictionless (sending a text message as opposed
 to travelling to a government office to speak to a
 bureaucrat). Aggregated views have power far beyond
 individual expressions of opinion.
- Public service delivery. Applications of "m-governance" include patient care management in clinics; SMS-Text school registration and school fee payment; registering to vote; paying taxes, fees and fines electronically.
- Real-time data collection. Rapid capture of survey information; scalable from village to national level.
- Transparency and accountability in government expenditures. Open data for government expenditures reduces graft and creates new opportunities for datadriven planning.
- Anti-corruption. Networked systems connect citizen complaints with improved government capacity for response.
- Human rights monitoring. Cell phone video provides graphic evidence, which can be distributed widely and quickly.
- Access to information driving transformation of everyday life. Changes in the way people learn, live and work. Examples: Real-time market information for farmers; Empowering a marginalized community.

Role of development assistance. The use of social media to enlarge the democratic space in sub-Saharan Africa will not thrive without intervention by donors. Why is this? The citizen sector is weak. The entrepreneurial sector is in a start-up phase, with software developers racing to be "first-to-launch" in the most profitable business niches. In the area of social media, these apps include music downloads, news aggregation, and dating/social meet-ups. Governance and citizen advocacy are not viewed as profit centers.

Donor influence has two components. **Resource investment** can leverage models that have demonstrated proof of concept into initiatives at national scale. This moves projects from interesting experiments to effective vehicles for advocacy and dialogue with government. **Pro-governance strategies** can bring government entities to the table, and unite CSOs, NGOs and government into information partnerships which address national priorities. Scale and citizen/government partnerships create the basis for long-term sustainability.

4 How to use ICT for governance?

In this chapter, specific interventions using mobile telephony and social media in sub-Saharan Africa are examined grouped into three areas: transparency, accountability and empowerment. Emphasis will be on the presentation of select Kenyan case studies in narrative form with summarized lessons learned drawing on all three focus areas.

4.1 Transparency: Government Open Data

Access to information is the basis of transparency. Social media and citizen engagement with information requires access which is widespread, easy, and inexpensive. The most promising entry point for applying social media for transparency is the new approach of open data portals.

Transparency is a key element of democratic governance. Its meaning is set out as follows by the NGO Transparency International:

"Transparency" can be defined as a principle that allows those affected by administrative decisions, business transactions or charitable work to know not only the basic facts and figures but also the mechanisms and processes. It is the duty of civil servants, managers and trustees to act visibly, predictably and understandably. ²

For the purposes of this study transparency will be taken to mean that detailed information about the processes of government is visible and accessible to citizens—including proposed budgets, details about how planning and financial decisions are made, and actual budget and implementation of public services.

Government open data is a relatively new approach to the promotion of transparency in revenues, planning, decision-making, and public service delivery. In July 2011, Kenya established the first open data portal in sub-Saharan African (www.opendata.go.ke), marking the event with a ceremony at

the UN General Assembly. Social media and SMS-text have already allowed tens of thousands of Kenyans to make use of the information.



Kenyan president Mwai Kibaki inaugurates the Kenyan Open Data portal in July 2011.

What is "Open data" and how is it different than "E-Government"?

Open data is a global movement for open government data as a strategy for transparency, efficiency and innovation. The first government open data portals were established in 2009 by the US (www.data.gov) and UK (www.data.gov.uk). Thus, open data is the rare technological advance being implemented simultaneously and concurrently in the developed world and the developing world. A global partnership is working to implement government open data and establish a sustaining ecosystem. Representatives of developed and developing nations work as co-equals. Fifty countries have joined the open government partnership: http://www.opengovpartnership.org/countries. Denmark joined in 2011 but has not yet implemented an open data portal – so that puts Kenya ahead of Denmark in open data.

² "Corruption FAQ", www.tranparency.org

"Open knowledge is content that people are free to use, re-use and distribute without legal, technological or social restrictions," is a summary definition of open data (www. opendefinition.org). How does government open data differ from e-Government? In e-Government, the concept is the government itself implements systemic change, using technology bought, installed and controlled by the government.

Citizens and Entrepreneurs help build open data.

Open data is a much broader ecosystem, built around service and delivery by many agents, inside and outside government. It uses the concept of "pro-creation": anyone can build and add services, including the private sector. "Apps" created by private groups and companies are a key part of the user experience.

How does open data work? The concept is simple. Government datasets are collected and integrated so that they can be accessed by citizens, companies, NGOs and government agencies. The data may include government expenditure by sector and by region; health data; census data; and data on transport, building, water and air quality, energy use, education, crime and public security. Applications on mobile web or using SMS text may make use of a single data set, or may offer geo-mapped layering of several datasets. Applications can be created by anyone and used by anyone. In fact, the experience of New York and other large cities using open data is that government agencies find the data as useful as citizen groups. Journalists are engaging in data journalism to report on emerging trends. And citizen advocacy groups are using the data in order to push for more resources, and better use of resources, by government.

This is a movement in its infancy. The most powerful applications of open data to date have been for more efficiency in public services in large urban areas in the US – New York³, Chicago, San Francisco.⁴ Sectors include transport, housing and energy use, impacting the lives of millions.

In sub-Saharan Africa, many citizen groups support the open data movement as contributing to transparency. For governments, however, equally important drivers are efficiency and innovation. In addition to Kenya's open data portal, the governments of Rwanda, Tanzania, Ghana, Nigeria and South Africa are also implementing open data projects.

Future Prospects.

In Kenya, the initial results are promising. Citizen demand for the data is high. The integration of citizens and entrepreneurs into the initiative has created new drivers for success. And government entities are finding new uses for the aggregated data as a planning tool. The promise of KODI is that citizens can access data that is directly relevant to their lives, and give feedback to government agencies about what is working and what is flawed.

The ecosystem of citizens, NGOs, and government entities making use of the data has begun to appear, but it is still small. Tariq Khokhar, World Bank "Open Data Evangelist" based in Washington DC: "The demand side is a big problem in many countries in Africa. It's important to support tech entrepreneurs to use the data in innovative ways which have a business model."⁵

A key concern is whether open data has accomplished a change in the incentive structure within government. It is not known if government ministries will be willing to update and deliver databases on a regular basis going forward. And what about interacting with thousands of citizens? Tracey

³Mathew Ingram, "New York sees its future as a data platform," April 28, 2011, www.gigaom.com http://gigaom.com/2011/04/28/new-york-city-sees-its-future-as-a-data-platform/

⁴Ariel Schwartz, "How Open Data Could Make San Francisco Public Transportation Better," October 10, 2011, Fast Company Magazine ⁵http://www.fastcoexist.com/1678624/how-open-data-could-make-san-francisco-public-transportation-better-updated

Lane, World Bank's Senior Country Economist for Kenya: "I am not sure that government has bought into handling feedback."

The Kenya team behind KODI chose to implement the country-level open data initiative at unprecedented speed – a mere six weeks from concept to launch. Says a senior official: "Work fast. Skip the pilot project. Don't get bogged down in a working group with dozens of participants from all the ministries. They will find ways to study it to death, and kill it. You need to get something up and show that citizens are interested. Then you can make it better."

After the successful launch, however, the challenge is to "entrench" the project within the government ministries. In Kenya, the KODI initiative is still in a fragile state. Data has not yet been made available down to the village and community level. This sub-national data has particular attraction for citizen groups, as it enables granular analysis of government expenditure and project implementation at the community level.

The issue of long-term funding for the Kenya initiative has not been solved. At this time, the project has support at the highest levels of government in Kenya, which may be a good harbinger that these issues will be addressed.

E-government and open data: background and history.

Because government open data is so new, it is helpful to analyze the events that brought it about.

Starting around the year 2003, the big new thing was "e-Government". E-Government was conceived as systemic reform of government operations and government services using technology. "E-Government is about change," proclaimed one 2006 World Bank study.⁷ "Governments, businesses, communities, and citizens around the world are recognizing the value that information and communications technologies can bring to their operations, relationships, and outcomes."

Several countries around the globe embraced portions of the e-Government approach. Singapore, Brazil and India allied with global technology providers to change the information architecture of government data and services. In these locations, impressive results were achieved. Government became more efficient, and more citizen-facing. Instead of standing in line (or sometimes, several lines) to pay a fee or submit a form, these activities could now be done online. And the integration of data among ministries allowed better coordination and implementation of public service.

In sub-Saharan Africa, there was a flurry of interest in the implementation of e-Government. Technology providers marketed proprietary solutions. A number of countries set up e-Government working groups. One example of success came in Mozambique, in a decade long project to improve SISTAFE – the State Public Financial Management system. Outputs included ICT-tools for budget execution and accounting; improved IT capacities within government ministries; and a citizen feedback system in budget planning.¹¹

In East Africa, there are a number of successful implementations of point of service delivery using

⁶Tariq Khokhar, World Bank, phone interview, November 2011.

⁷Tracey Lane, World Bank, Interview in Nairobi Kenya, November 2011.

⁷ infoDev/World Bank, 2006-2009. e-Government Primer, Washington, DC.

^{8 &}quot;Singapore E-Government Journey," Infocomm Development Authority of Singapore, Republic of Singapore, 2010 http://www.pacsa.gov.la/accsm/resources/Singapore/Country%20Report%ac20-%20Singapore%20eGovernment.pdf

⁹ "Knowledge Management and e-Government in Brazil," Peter Knight, 2007. http://unpan1.un.org/intradoc/groups/public/documents/unpan/unpan025989.pdf

¹⁰ India, IBM Set Out To Build Billion-Person Web Portal," Information Week, September 26, 2006 http://www.informationweek.com/news/193004850?queryText=india+portal+ibm

¹¹ Daban, Teresa, "Budget Reform Holds Promise in Mozambique," IMF, http://www.imf.org/external/pubs/ft/survey/so/2007/CAR1126C.htm

e-governance, particularly in the area of health. Hellström documents a number of promising approaches in m-health in Tanzania: the delivery of health care services through mobile phones. ¹² The health care provider D-tree is using mobile phones to provide accurate and effective point-of-care diagnosis and treatment in areas where doctors are few or non-existent. The idea is to give support to frontline health workers, such as nurses and community health workers, through mobile access to treatment protocols. The downloadable application takes the health worker step by step through the diagnosis and treatment options for the most commonly diagnosed illnesses. The system also allows health workers to collect other relevant statistical data for evaluation, research, or surveillance. ¹³

However, in many parts of Africa, the results of e-government fell short of expectations. "We discovered the 'government' part of e-Government was more important than the 'e' part," said one multi-lateral donor representative. Obstacles were substantial. Ministries did not want to share back-end solutions. Many within government saw no incentive to be more citizen-facing.

The story of e-Government in Kenya is illustrative. The Directorate of E-Government was established in 2003. It was originally housed within the Ministry of Finance; however, it was soon moved under the President's office as an indication of its importance. A planning group was established. However, as the government grew in resources and functions, ministries sought their own automation and technology contracts. Then, in 2007, the number of ministries doubled, to 42. Dr. Katherine Getao, who heads the e-Government directorate in her capacity as ICT Secretary, laid out a strategy for cohesive and coordinated action across the government. "There were achievements, but clear weaknesses and wastages," she said. Among the problems were: a "silo mentality" among ministries; incompatible hardware and software systems within ministries; and frequent siphoning of ICT

funds to other areas deemed more urgent. In Kenya, the implementation of e-Government, to date, has been minimal.

"E-Government is properly a public management project, not a technology project," says one official.¹⁵ Data solutions are now available off the shelf: cloud computing, enterprise management and digital strategies for delivery of citizen services.

The Kenyan Open Data portal: how did it begin?

In Kenya, the creation of the open data portal is a remarkable story of collaboration of politicians, entrepreneurs, and citizens. In 2006 Kenya elaborated an ICT policy and created the Kenya ICT Board. An early priority was to build out infrastructure for communication. Connectivity was radically improved through laying multiple fiber optic cables.

Then came the constitution approved by referendum and enacted in August 2010, which makes information a basic right of all citizens. "Every citizen has the right of access to information held by the State," begins article 35. It continues: "The State shall publish and publicise any important information affecting the nation."

After the enactment of the constitution, Dr. Bitange Ndemo became the champion for open data. Dr. Ndemo is the Permanent Secretary of the Ministry of Information and Communications. He worked to secure buy-in from the President and from key ministries, including the Ministry of Finance. The World Bank was an important partner. The Bank already had some data sets assembled through its Public Expenditure Review Program. The World Bank worked with government agencies to gather a more comprehensive database. A related task was harmonizing existing data. For example, three different datasets existed about primary and secondary schools in Kenya. DFiD financed the project of integrating the three into one database with a grant of

¹² Hellström, Johan, The Innovative Use of Mobile Applications in East Africa, Sida Review 2010:12

¹³ http://www.d-tree.org

¹⁴ Katherine Getao, PhD, ICT Secretary, Directorate of E-Government, Republic of Kenya, interview, December 2011.

¹⁵ Valerie D'Costa, Executive Director, InfoDev, phone interview, December 2011.

US\$600,000. This allowed the creation of a single dataset with information about each school—number of teachers, number of students, budget, and performance.

Al Kags, a software engineer and entrepreneur, was hired by the Kenya ICT Board to implement the Kenya Open Data Initiative (KODI). "We went from inception to launch in six weeks!" Kags says. 16 He describes a tense moment only days before the official launch date. Several key politicians had decided to kill the project. They were reportedly unhappy that their ministries' data would be shared and made public. Says Kags, "Not everyone supports the idea of data transparency." The open data project was saved, according to Kags, by an eleventh-hour visit by Permanent Secretary Ndemo to the President's office, where President Mwai Kibaki reiterated his support.

When the open data portal was launched, there were 390 datasets available. In the first three months, 17,000 downloads occurred. This was an important proof of concept: citizens were interested in this data.

Still underway is the creation of an ecosystem of "apps" which allow dynamic analysis and use of the data. The Kenya ICT Board sponsored a contest for creation of apps, and dozens of

Kenya software writers responded. Winning apps are posted on the site: http://opendata.go.ke/page/community-apps One app allows analysis of constituency development funds; another has education data, and there is a health app. More are in the works.

The Kenyan Ministry of Information has taken a proactive approach to encouraging the entrepreneurial ICT sector. Says Dr. Bitange Ndemo, Permanent Secretary for the ministry, "Our objective is to make this economy a knowledge economy." Private vendors are encouraged to bid on projects that will be utilized by government ministries. Competitions, conferences and prizes play a role. In 2011, the government inaugurated the Vision 2030 ICT Innovation Awards as a yearly competition for "apps" and software developed in Kenya. 18

Tariq Khokhar of the World Bank, cautions that there still remain obstacles for KODI. A sustainable financing and incentive mechanism is only partly implemented. "It's not out of the startup phase yet," he says. But, Khokhar says, KODI represents a "deep structural awakening" with tremendous possibilities.



The Kenyan Open Data Portal makes government and demographic data easily accessible.

¹⁶ Al Kags, interview in Nairobi Kenya, November 2011.

¹⁷Dr. Bitange Ndemo, interview by Kuza Biashara, November 9, 2011.

¹⁸ Kenyan ICT Board, "Awards for top Kenyan innovators go online," www.ict.go.ke

4.2 Social media for empowerment.

This section examines the application of mobile telephony and social media for empowerment of marginalized populations. From a political perspective, empowerment can be defined as: The equitable representation of a group in decision-making structures, both formal and informal, and the inclusion of the group's voice in decisions affecting the group and the larger society. But a rights-based approach uses the term "empowerment" more broadly, to mean full cultural, social and political inclusion in a society.

The concept of 'citizenship' for excluded and marginalized groups is complex. What are the necessary elements for such a population to achieve full membership in a society, and to exercise active citizenship with its government? In a rights-based approach to development, an obvious first step is to provide information to members of marginalized groups about their rights and responsibilities as citizens. But is that enough? Many such groups have been actively excluded from participation in politics and society, and face economic discrimination as well. Is there a role that new information pathways can and should play to reverse this discrimination?

New communication pathways promote empowerment of marginalized groups in a rapid, cost-effective manner. The benefits include:

- Networked communication among individuals, groups and society
- New approaches to influencing opinion
- New avenues for political mobilization
- Direct participation in democratic dialogue, erasing divides of distance and geography.

Two types of case studies will be examined: Information networks and hybrid media.

Information networks for marginalized groups.

Mobile telephony can be used to create information networks for marginalized groups. The network allows information to flow into and out of the community, and also amplifies communication among the members of the community.

One case study is the creation of a mobile phone network in the pastoral communities in north-eastern Kenya in 2011. This is a remote area, larger than the size of Denmark, which in recent years has suffered periodic drought. ActionAid International is an NGO which conducts a food distribution program, operating out of Isiolo, which serves hundreds of communities. ¹⁹ It is supported by the World Food Program.



A community relief worker in north-eastern Kenya, one of 250 villages linked by a SMS network.

ActionAid worked with the UK NGO InfoAsAid (a collaboration between the BBC World Service Trust and Internews) to distribute mobile phones and solar chargers to 250 villages. In each location, a village community relief worker received training. In the town of Isiolo, the network hub was installed—a laptop equipped with the software platform FrontlineSMS. The installation and training took three months and cost under US\$10,000.

¹⁹ Henry Wanynonyi Kituyi, Actionaid International, interview in Nairobi Kenya, November 2011.

Villages transmit and receive information on the network using SMS-text. The 250 community relief workers receive a bulletin from Isiolo each week with the market prices of food and livestock. They copy the information and post it on village notice boards. The prices allow villagers to avoid being overcharged by middlemen when they are buying food or selling livestock.

The Isiolo hub also sends out information and dates for upcoming food distributions. Villages send a status report back to the hub after the food distribution.

Villagers and ActionAid staff both see benefits from the network. The villagers say they were often cheated by truck owners and middlemen when buying and selling food and livestock. Vegetables were offered at double the market price; buyers offered one-third of the market price for local livestock. Now villagers have current prices at hand. And ActionAid staff can avoid lengthy trips made in order to tell villages about upcoming food distributions. Now the information is sent through the network.

After a few months of operation, a new phenomenon arose: villagers began to find new uses for the information network. They communicated urgent news to the hub: a sick child, a woman who was raped. ActionAid gave a networked phone to the local police to enable them to respond when necessary. The network has also served as an early warning system for cattle raids, which can be both devastating and deadly.

An additional suite of network service is real-time data collection. The Isiolo hub can design and send a custom data collection form to all 250 villages. Real-time survey information is being collected about issues ranging from health to education to food stocks and livestock census information.

The Isiolo ActionAid project is a good example of creating a network that provides information and feedback in a marginalized community. The approach could be implemented at low cost in practically any community project. But this raises an important question: What is the need for this service? Is there really an "information gap" in marginalized communities?

²⁰ "Dadaab, Kenya: Humanitarian communications and information needs assessment among refugees in the camps—Findings, analysis and recommendations," Internews, August 2011.

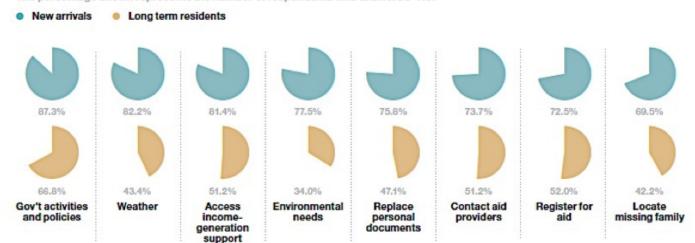
²¹ IMS/Media Frontiers, phone interview, December 2011.

²² "Dadaab, Kenya", ibid, p. 4

Information needs

Refugees were asked whether they had enough information in the following areas.

The percentage shown represents the number of respondents who answered "No."



A recent survey conducted in the Dadaab refugee camps in Northern Kenya provides baseline data in this regard. ²⁰²¹ It finds that community members don't have essential information, which they need on a daily basis. The study states, "Serious communication gaps between the humanitarian sector and refugees in Dadaab, Kenya, are increasing refugee suf-fering and putting lives at risk." ²²

Some key information gaps are illustrated in the graphic image above, taken from the Internews report. Among new arrivals, 87% lacked information about government policies and actions (66% for long-term residents). The new arrivals lacked essential information to reunite their families: 69% did not know the steps to locate missing family (40% for long-term residents). Similarly large percentages did not know how to request aid or contact an aid provider.

The report concludes that media, especially radio and mobile telephony, has a key role to play in informing the refugee population and working to eradicate information gaps.

Hybrid media for community empowerment.

Hybrid media refers to the use of mobile telephony and social media in conjunction with traditional media, such as radio. The combination offers a path to convert a one-way communication medium into a community information network.

Pamoja FM is an example of hybrid media. 'Pamoja' means 'Unity' in Swahili. It is a community radio station formed in 2007 in the Kibera shantytown near Nairobi. Pamoja FM gained national attention during the violent aftermath of the election in December 2007. The station worked around the clock to calm the population, issuing repeated calls to restrain from retaliatory killings. During the same period, other stations stuck to music or even incited violence.

In 2011, Pamoja worked with the US NGO Developing Radio Partners to enable two-way communication with their listeners. ²³ Pamoja staff installed the FrontlineSMS software platform and incorporated SMS-text into their broadcasts. The station uses texting as a way to get feedback on programming and to engage in conversation about topics of community interest. But SMS-texting has also enabled the station to advance its mission of 'equal, sustainable development and peaceful coexistence among the various communities of Kibera.'

By using hybrid media, Pamoja FM creates a community conversation. The station is run by community members, and they seek out and interact with the wider community. Topics which come up through SMS-text conversations become subjects for radio broadcasts, which enlarges and amplify the discussion.

²³ "Bill Siemering, Developing Radio Partners, email exchange, November 2011.

²⁴ Rob Burnett, Interview in Nairobi, November 2011.

In short, the hybrid model of Pamoja FM enables the marginalized community of Kibera, one of the largest slums in Africa, to claim its own voice.

A second example of hybrid media is Shujaaz.FM. Shujaaz is a cartoon series begun in 2009, aimed at the youth of Kenya. Its primary delivery mechanism is a bound paper booklet included in The Daily Nation newspaper and available at Safaricom kiosks, with approximately 500,000 copies distributed a month. Shujaaz chronicles the adventures of a diverse group of teens living in a Kenyan shantytown, and their interactions with adults, ranging from mentors to drug-dealers. The Shujaaz team plots out story-lines about empowerment and positive change, which go through focus group testing before being finalized. The portraits of gritty urban life and savvy dialogue in KiSwahili, English and local dialect have helped Shujaaz gain a large national following.

Right from the conceptualization of Shujaaz, hybrid media was envisioned. The primary story-line follows a Kenyan teen who creates a pirate radio station; he hijacks the airwaves to broadcast stories of hope and transformation. Shujaaz has partnered with over a dozen stations around Kenya to broadcast Shujaaz.FM audio stories. Listeners are encouraged to send SMS-texts with opinions and reactions. Also, each of the characters in Shujaaz has a Facebook fan page. Rob Burnet, the creator of Shujaaz, would like to do even more with radio, SMS and social media. "We want to help young people to find creative solutions to their problems," he says. "With social media, there's a two-way conversation, and that creates positive reinforcement."

Social media accountability

How do citizens hold their government accountable? The United Nations employs a precise definition: "Accountability refers to the obligation on the part of public officials to report on the usage of public resources and answerability for failing

to meet stated performance objectives."²⁵ But how does that work, in practice?

In a country with a well-functioning political system built around democracy, elections are the primary tool for ensuring accountability. Once elected, members of the legislative branch and the executive branch engage and consult with their constituencies to shape legislation, expenditure, and plans for the future.

Information as a tool for accountability.

The fragile democracies of sub-Saharan Africa have come closer to this ideal model in the past two decades. Many gaps remain, however. In order to strengthen democracy, it is critically important to enlarge citizen voice and build systems of citizen accountability.

Information is the necessary ingredient for citizen accountability. Citizen accountability requires citizens who are informed of their rights as stakeholders in government, and who are informed about the issues.

Mobile telephony and social media have opened new conduits for citizen accountability. There are multiple advantages:

- Scaled input: hundreds of thousands or millions can participate.
- Much lower cost than print or television campaigns.
- Ease of input. No standing in line, no forms: citizens send a text message from a mobile.
- Real-time data and rapid response.
- Feedback: citizens who send messages receive responses, telling them what action was taken.
- Citizens create public engagement with the government, enlarging the democratic space.
- Data and information link citizens, NGOs, media and government in a joint effort to solve problems.

²⁵ Elia Armstrong, "Integrity, Transparency and Accountability in Public Administration: Recent Trends, Regional and International Developments and Emerging Issues," UN Working Paper, August 2005, pg. 1

These information pathways make a new type of accountability possible, which can be described as "evidence-based advocacy." With evidence-based advocacy, the articulation of a problem moves from anecdote, to evidence collected around the country and aggregated. Instead of saying, 'This village health clinic has been out of anti-malarial medicine for a month,' the statement could be: 'Our citizen network has checked with 2,000 clinics and 70% have been out of anti-malarial medicine for at least a month.'

In the emerging area of evidence-based advocacy, one of the immediate benefits is scale. Moving from individualized, anecdotal protest to advocacy based on thousands of citizen inputs, gets the attention of government at higher levels. It becomes a media story. It tells citizens that the problem they encounter locally is reflected elsewhere in the country. As aggregated data, it conveys hard facts as a counter-story to government propaganda. And the data enables change agents within government to direct resources at critical problems.

Rakesh Rajani, founder of the East African NGO Twaweza ni sisi, puts it this way: "What we do it take information from behind closed doors into the public domain, in way that's easy to understand. That allows people to imagine things differently. They have a more diverse set of stories to draw upon, rather than relying entirely on the official explanation."

The examination of case studies in evidence-based advocacy found that many projects are in a start-up phase, characterized by lots of experimentation and enthusiasm. There are only a handful of projects, which include careful monitoring, and analysis of lessons learned.

These early experiments show great promise. There have been several "proof of concept" events where advocacy based on citizen-driven data and information produced meaningful results. One area of particular promise is public service delivery.

Four categories of case studies will be analyzed: Information partnerships; rights-based information campaigns; citizen auditing; and public service delivery.

Information Partnerships.

To see how mobile telephony and social media can radically improve citizen accountability, let us examine UWIANO Platform for Peace. UWIANO is a Swahili word that connotes 'cohesion'. The organization was established in the aftermath of the 2007 general election in Kenya, when widespread violence left over a thousand people dead. It is a partnership of government entities, NGOs and a donor: the National Steering Committee on Peacebuilding and Conflict Management (NSC); National Cohesion and Integration Commission (NCIC); PeaceNet Kenya; and United Nations Development Programme (UNDP).

UWIANO was structured as an information partnership. Its partners made use of new information pathways to scale and aggregate citizen complaints, to network, and to engage government and provide feedback. Its first test was the referendum for a proposed new constitution in Kenya, which was held on August 4, 2010.



The UWIANO Platform for Peace monitors SMS-text messages during Kenya's constitutional referendum, August 2010, in Bomas, Kenya.

²⁶ Rakesh Rajani, Twaweza, phone interview, January 2012.

Prior to the referendum, UWIANO organized District Peace Committees (DPCs), awarding them as well as many community service organizations (CSOs), small grants. UWIANO placed peace monitors in each of the 47 counties. It created partnerships with the police at local and national levels. It deployed a messaging platform using SMS-texting and email, with a data center and a situation room.

During the six weeks around the referendum, UWIANO received 20,000 SMS-text messages. It was able to validate and analyze approximately 60% of the messages. ²⁷ The data was fed to authorities, police and local leaders for action. Overall, there was good news: The referendum was largely peaceful.

The deployment of UWIANO was an outstanding example of the use of new information pathways to promote citizen accountability, with scaled input, real-time data analysis, and public engagement that produced quick, effective results. UWIANO is an example of an information partnership, which brings together stakeholders across the spectrum from citizen to NGO to government. Data and information are the ties that bind. There's more: The aggregated information has a "data exhaust" that is directed to the media in real time, amplifying the impact of what's learned.

Several respondents pointed to information partnerships as an improvement over other, widely-used models which collect citizen information using SMS-text. The crowdsourcing model built on the Ushahidi software platform aggregates responses from unverified sources to create a data map. The visualization is powerful, but the underlying data can be contaminated by false reporting and activist clusters.

Rights-based information campaigns.

The first step in citizen voice is to ensure that citizens know their rights. Kenya has rolled out several initiatives to inform citizens of their rights. After the successful adoption of the new constitution in 2010, the organization Amkeni Wakenya (http://amkeniwakenya.org/) was formed to engage citizens and CSOs and inform them about the rights and responsibilities contained in the new constitution. SMS-text messages and social media were among the tools used. In other countries in sub-Saharan African, USAID is supporting ambitious efforts to use cellphone video and interactive voice response telephone lines. The information campaigns are directed at citizen groups, and also at government employees—based on the premise that information about rights, procedures and responsibilities strengthens both citizens and government.

Citizen auditing.

In Kenya, there have been initial and promising efforts to scale up citizen auditing. The concept of citizen auditing is that when government information is made available, scrutiny and analysis can be crowd-sourced. Many thousands of people looking at information come up with new insights.



Amkeni Wakenya engages Kenyans with information about rights and responsibilities under the constitution approved in 2010.

²⁷ John Harrington Ndeta, PeaceNet, interview in Nairobi Kenya, November 2011.

²⁸ Amkeni Wakenya, interview in Nairobi Kenya, April 2011.

²⁹ Joshua, USAID, interview in Washington DC, November 2011.

One example of citizen auditing is the Budget Tracking Tool at www.opengovernance.info which was created by the Kenyan NGO Sodnet with support from Hivos.³⁰ The Budget Tracking Tool allows citizens to view projects and expenditures of Constituency Development Funds (CDF). CDF money has been controversial because it is under the control of members of parliament; there have been many instances of misuse and theft.

The Budget Tracking Tool generated tens of thousands of SMS-text queries and thousands of web hits. One example: using the Budget Tracking Tool, one citizen identified irregularities in the use of funds by the Ministry of Water and Irrigation in his constituency. Days after this came to light, a mysterious fire at the local ministry office destroyed records of payments to contractors and audit information. Six managers were suspended.

It is possible to envision a scaling up of the concept of citizen auditing. One scenario would be a coalition of NGOs using its members and networks to analyze government data provided by the Kenya Open Data Initiative.

Public Service Delivery—a "sweet spot" for citizen accountability?

A final area to be examined in the application of citizen accountability is public service delivery. Can citizen feedback become a tool to improve the quality of government provided



Budget Tracking Tool for monitoring Constituency Development Funds.

services, including water supply, agricultural inputs, health services and schooling?

In Kenya, the local chapter of Transparency International made water supply a priority. In Mombasa, for example, TI solicited citizen feedback on the quality of water and sanitation through a number of channels, including SMS and email.³¹ TI then facilitated eight public forums where community representatives met with representatives of the water supply entity, the Mombasa Water and Sewerage Company. Community leaders received assistance in formulating their demands from a local NGO, the Mombasa Advocacy and Legal Advice Center. The data collected by TI and community groups, which showed the extent of the problem, was a critical driver for the water company to initiate needed reforms.

In this example in Mombasa, several essential steps can be discerned: data collection, data aggregation, partnership with NGOs, engagement with government entities and followup. On first glance, this appears to be an example of "retail politics," requiring extensive on-the-ground support in one community to be effective. The question is, can this approach be scaled up using new information pathways?

Twaweza ni Sisi, an East-African NGO, initiated a project in Tanzania in 2011 directed at improving the quality of secondary education. Twaweza focused on the promise by the Tanzanian government to deliver "capitation grants" to all secondary schools—funds specifically earmarked for improvements in educational quality. (World Bank partly funded the capitation grant program.) Twaweza partnered with Haki Elimu, a Tanzanian NGO working in education. Data was collected at 50 schools in 14 regions, by head teachers and networks of parents, and transmitted to Haki Elimu by SMS-text and email (enabling real-time data collection with rapid aggregation). The aggregated data showed that on average only 20% of the funds promised had been delivered to the schools. The partner organizations used

³⁰ John Kipchumbah, Sodnet, interview in Nairobi Kenya, November 2011.

³¹ Samuel Mbithi Kimeu, TI Kenya Executive Director, email exchange, December 2011.

This initiative was partly funded by DFiD and the Bill & Melinda Gates Foundation.

³² James Nduko, Twaweza ni Sisi, interview in Nairobi Kenya, November 2011; and "Improving Quality in Secondary Education: Is the Money Reaching the Schools," March 2011, briefing paper on web site www.twaweza.org



Huduma.org is a software platform for evidence-based advocacy

the data to pressure the government to deliver on its promised funding, and to install more effective monitoring mechanisms for the funds.

Twaweza is one of several partners in an ambitious East African initiative called Huduma, which is Swahili for "service." The web site, developed by the Kenyan NGOs Sodnet and Ushahidi, is considered a beta stage deployment, with the full-featured platform rolled out in 2012.

Huduma invites citizens to submit reports on problems with public service delivery, in the categories of health, education, governance, infrastructure, water and justice. Reports can be submitted via SMS-text, by email, and by using the web platform.

Huduma staff have selected sector-specific NGOs as the liaisons with government to improve services. How does this work? Here is one example. A citizen submitted a report via SMS-text in 2011 that in a government hospital in northern Kenya, surgery had been conducted without using anesthesia.³³ Huduma staff forwarded the report to the partner NGO working in the health area, KETAM –

Kenya Treatment Access Movement. KETAM contacted a nurse at the hospital, who confirmed the hospital was out of anesthesia. Huduma, KETAM, and other partners in the project sent a query to local members around the country to check on anesthesia supplies at local hospitals. The aggregated data revealed that in the surveyed hospitals, 82% of recent operations had been conducted without anesthesia. KETAM then reached out to the responsible state corporation, the Kenya Medical Supplies Agency, as well as top officials at the Ministry of Health, and to media outlets. Within days the problem was publicized, and anesthesia supplies were tracked down and dispatched to hospitals.

Huduma's concept is that citizens and NGOs work together with government to formulate service charters, which contain details about public service delivery. When there are breakdowns in the public service, Huduma amplifies citizen voice, and the partner NGOs becomes its champion. The model is an ambitious effort to scale up evidence-based advocacy across an entire region.

³³ John Kipchumbah, Sodnet, interview in Nairobi Kenya, November 2011.

³⁴ Valerie D'Costa, Executive Director, InfoDev, phone interview, December 2011

4.4 Lessons learned

Based on the case studies presented above, the various interviews with donors, and review of select key background document a series of lessons learned have been identified of which the most important ones are listed below.

Enabling factors

- Weak ecosystem. While the creation of mobile-laboratories (m-labs) in East and South Africa has been critical as a social network platform for the launch of information entrepreneurs, most countries in Africa are yet to benefit from such entrepreneurial ecosystems. Furthermore, even for those m-labs already launched downstream funding is regarded as a challenge given the dwindling donor support. 34
- Rural/urban implementation gap. Given the immediate advantages of social media for empowerment, and the cost-effective implementation, one would expect to find social media initiatives for marginalized groups dotting the landscape. However, few initiatives currently target marginalized populations in rural areas. There are several hypotheses for this "implementation gap." Software developers are almost entirely based in urban areas. Project managers who work with marginalized populations often lack expertise and experience in scaling up networked communications pathways.
- Capacity gap. In most African countries, advocacy based on large-scale data collection and aggregation is weak. The information capabilities of South-based NGOs mostly still reside in the "old" information architecture, relying on collection of anecdotal stories by field representatives, which are then collated into periodic reports. It is true that there is a South community with experience in large-scale data collection and aggregation—the software entrepreneurs. But these "techies" overwhelmingly lack community roots, and

have little experience working with drivers of change. The media ecosystem is weak, with little investigative reporting and, frequently, a reluctance to challenge the powerful and the wealthy.

Better practices for programming

- entrepreneurs and programmatic objective. From entrepreneurs and programmatic staff alike the importance of focusing on programmatic objectives and results over technology was stressed. Indeed, one leading application developer stressed, that "technology only represent approximately 10 per cent" and that the emphasis of social media driven initiatives therefore should be on the strengthening of existing practices and partnerships with ICT modalities and capacities. In order words, a problem-driven and not tool-driven approach.
- Integration into existing initiatives. The most successful cases surveyed were those, which integrated new communications pathways into existing community development initiatives. Community members reported immediate advantages to information provided, and to the opportunity to respond and give feedback. Project staff saw savings in time and travel. Furthermore, the cost of implementing networked communications was extremely low.
- Understanding the user. Several respondents stressed the need to move away from donor-driven initiatives towards basing new social media work on a thorough understanding of users' needs and behaviors including their technological literacy which is not necessarily linked to the users' general literacy level. This not only to ensure that the technological approach of the initiative is feasible, but also to ensure that the programmatic objective match the concerns of the users. One CSO representative summarized the need for relevance in this manner: "People will only react to things that they are outraged about".

³⁵ John Kipchumbah-KIPP, Programme Associate of SODNET.

- Countering the soft bigotry of low expectations.
 - Furthermore, understanding the users will also counter the widespread belief that members of marginalized groups do not have the access or the skills to work with mobile telephony and social media. The experience of projects working among marginalized groups is that there is a "demand side" interest in using new communications pathways to receive information and give feedback.
- Apply locally developed or adapted technology.
 The attainment of sustainability for technology is always a challenge with on-going capacity building-, development-, and maintenance needs which is why several respondents stressed the importance of locally developed or adapted technologies for application.
- Application of different media platforms for impact. For full impact of social media initiatives, experience shows that multiple media platforms need to be applied. This includes traditional "one-way" media: radio and print. Traditional media have a large audience and create brand awareness. SMS-text networks and social media personalize the message and create dialogue. The interactive nature of social media invites users to participate and act.
- Monitoring for results. For the social media projects reviewed only a small handful of these had processes and procedures in place to monitor results and none had conducted a baseline before launching activities. This lack of structured approach for documentation of results leads not only for limited lesson learning within a given project but also to limited knowledge sharing within the wider community.
- Partnering with private sector. For mobile telephony
 projects applying services such as free-texting for users,
 it is critical to partner with mobile providers up-front to
 ensure sustainable cost level for full-scale project rollout.
 Indeed, one donor suggested that funders of social media
 programs for development should harmonize their efforts
 at country-level to encourage private sector stakeholders
 to shoulder some of the cost.

- Partnering with government. Key to effective evidence-based advocacy is not only the ability to attract and communicate citizen's complaints by also to organize and resolve these same complaints. And while collection and communication of citizen's complaints might be best undertaken by a brokering institution in the form of an NGO, the resolution of the complaints will need to be undertaken in partnership with government.³⁶
- Adequate funds for follow-up. Linked to the issue of
 partnering with government is the need for ensuring
 adequate funding for follow-up actions to be taken.
 And this not only to ensure results but also to secure
 citizen engagement. One CSO representative framed the
 concern like this: "If citizens' complaints are not followedup by actions then the text-messages will stop coming."
- Data security. Another key issue is the right to privacy. Countries with autocratic governments are already using software tools to intercept SMS-text and emails.³⁷ Information about the citizens posting the information is collected by the government, putting those people at risk. And advanced facial recognition software is employed to identify individuals depicted in uploaded videos. Individuals shown demonstrating or opposing the government are put at risk. Diplomats are concerned that these techniques may be migrating to sub-Saharan Africa.³⁸ Software developers have created freeware tools, which allow greater security in communications, but to date they have not been widely used in Africa.

³⁶ See also Technology for Transparency Network page 70-75.

³⁷ Sameer Padania, Witness, phone interview, December 2011.

³⁸ Off-the-record briefing, Nairobi Kenya, November 2011

5 How to integrate ICT into programs?

During the past decade the donor community as a whole has undergone a string of shifts to its approach to ICT for development which can best be summarized in the form of three waves: (i) a shift from emphasis on infrastructure and hardware to new focus on the fostering of learning and innovation networks (ii) a shift from ICT global policy making to mainstreaming of ICT into development programs; and (iii) reduction or termination of ICT activities due to shift in donor governments and/or failed mainstreaming efforts.

The first shift was primarily motivated by the dramatically growing private sector involvement in telecommunications and hence a call for shift of role of partner government and donors as the need for financing of infrastructure was taken over by the private sector. For the other two shifts in foci the change was brought about primarily due to failing results.

In regard to the shift away from ICT global policy making, the majority of donors interviewed found that, while the policy work conducted in key ICT bodies such as the World Summit of the Information Society (WSIS), the Internet Governance Forum (IGF), and the Global Alliance for Information and Communication Technologies and Development (GAID) had played an important agendasetting role, as exemplified by the Tunis Commitment of 2005, the policy work did not translate into concrete actions at the ground. And as a consequence several donors chose to shift their resources towards more programmatic ICT work.

Finally, in regard to the reduction or termination of ICT activities due to failed mainstreaming efforts, the main causes listed were inadequate resources and commitment. See also further below.

However, within the past 2-3 years steps have been taken towards ICT for governance with emphasis on social media for activism with especially Sida and USAID as lead agencies.

See table 1 on the following page for brief summary of current donor policies and practices.

While the majority of the donor-funded initiatives are still at a pilot stage, early examples of scaled-up initiatives can be identified. E.g. the newly launched mWomen Programme, a global public-private partnership between the mobile industry association (GSMA) and (among others) USAID and AUSAid aims to addresses the gender gap in mobile technology at global level through the enabling of mobile ownership by underserved women and the creation of mobile services addressing women's needs healthcare, finance, education and entrepreneurship.³⁹ In contrast the Infodev initiative of providing financial and technical assistance to organizations promoting ICT-enabled innovation and entrepreneurship in developing countries is a very mature initiative. Since 2002 more than 70 incubators around the world has received direct support. Furthermore Infodev has created a learning network of more than 300 incubators, who in turn have advised more than 20.000 enterprises leading to more than 200.000 jobs. 40 UNDP has scaled-up its to support to election work in a horizontal manner, replicating its successful election model applying ICT for voter registration and election monitoring to different countries and continents.⁴¹ Finally, Sida has created an ICT implementation and research arm, Spider, with the purpose of scaling-up Swedish ITC4Dev development work with emphasis on democracy, education and health.⁴²

³⁹ For further information see www.mwomen.org

⁴⁰ For more on Infodev's work see www.infodev.org. For further background information on the entrepreneurial ICT sector in East Arica see the Sida 2010 review report The Innovation Use of Mobile Applications in East Africa by Johan Hellström.

⁴¹ For further information see e.g. UNDP's 2012 report: Mobile Technologies and Empowerment: Enhancing Human Development through Participation and Innovation at http://www.undpegov.org/sites/undpegov.org/files/undp_mobile_technology_primer.pdf

^{§2} See www.spidercenter.org for more information.

Donor	ICT policies and practices
	Bilateral Donors
Canada	In 2009, the Government of Canada established five thematic priorities to guide Canadian international assistance going forward: increasing food security; securing the future of children and youth; stimulating sustainable economic growth; advancing democracy; and, ensuring security and stability. While Canada does not have an explicit policy on Information and Communication Technologies (ICTs) for Development, Canada recognizes the value of using ICTs as a tool to support its five thematic priorities. Canada encourages and supports greater access to innovation and emerging technologies, such as social media, to build the conditions for secure, equitable development and to promote good governance. Three Canadian public sector organizations – Foreign Affairs and International Trade Canada, the Canadian International Development Agency and the International Development Research Centre – provide international assistance to support the use of ICTs as a tool for social, political and economic development.
Finland	The Ministry of Foreign Affairs of Finland released a new development policy in February 2012. ⁴³ The use of ICT is geared towards these outcomes. The use of ICT for more transparent governance is mentioned as one of the focus areas with emphasis on open public data. Also use of ICT in education and fight against corruption are given as an example. Special focus is also given to information- and knowledge-society as well as innovation systems as part of transformation of the green inclusive economy. Furthermore, Finland continues its commitment to its ICT and Information Society policy of 2005 addressing the strengthening of regulatory framework, knowledge structures, economy structures, and infrastructure. In terms of implementation, Finland has endeavored to mainstream ICT into all development programs.
Germany	Germany supports partner countries in utilizing ICT for development purposes. As important and sustainable development impacts of ICT rely to a large extend on private sector driven innovation, implementation and distribution of ICT services, Germany puts the focus on supporting the establishment of regulatory frameworks to enable access to ICT. Germany also encourages IT sector promotion, since the growth and job potentials of this sector are immense. Furthermore, Germany encourages the use of ICT in development measures of all sectors, e.g. sustainable economic development, governance (e-Government), education, health, rural development. The potential of social media is seen especially in citizen participation and the strengthening of democratization processes, and is therefore increasingly part of programs for media promotion in partner countries.
Sweden	Sida mainstreams/integrates ICT into Sida's programmes as well as works with a special focus on ICT for health, education and democracy/human rights. Examples of traditional ICT4D support are Spider (www.spidercenter.org), GeSCI (http://www.gesci.org) and APC (http://www.apc.org/en/about). In addition to this, Sida works with ICT4D with the government's special initiative for democratization and freedom of expression launched in 2009, with more of an activist approach emphasizing democratization and human rights: http://www.sida.se/democracy-initiative http://www.regeringen.se/content/1/c6/13/61/89/30340bd3.pdf Moreover, the Swedish Ministry of Foreign Affairs works with Freedom on the internet; see: http://www.siff12.se/ and http://www.sweden.gov.se/sb/d/16042

⁴³ For policy docment see: http://formin.finland.fi/public/default.aspx?contentid=51067&nodeid=15319&contentlan=3&culture=sv-FI)

Switzerland	SDC's ICT policy and unit was phased-out in 2008 due to lack of results on the ground from its policy-oriented work. Instead SDC is now seeking to address ICT for development through its own programs with emphasis on learning and networking. See www.deza. admin.ch/en/Home/Themes/Learning_and_Networking/ICT_for_development
United Kingdom	DFID does not hold an ICT policy in line with the latest DFID trend of producing only few and evidence-based policy frameworks. Instead focus will be on the development of internal how-to notes on ICT for development summarizing lessons learned by sector. Furthermore, a 3-year ICT development research project is about to be launched with the purpose of collecting evidence data. In terms of practices, DFID does not hold experiences with the application of social media for the promotion of governance aside from some limited election work.
United States	USAID integrates ICT into all development practices, primarily in the areas of health, connectivity, agriculture, financial services, education, democracy and governance. USAID has numerous ICT-focused initiatives including the Global Broadband and Innovations program (gbiportal.net) and the Mobile Solutions team (idea.usaid.gov/organization/ms/). USAID also applies ICTs as a tool to amplify governance, access to justice, human rights, civil society, media, and democracy promotion, with Internet freedom and social media as important crosscutting themes.
	Multiilateral Donors
EU	The EU no longer holds an ICT policy for development nor does the EU ICT expert group meet on a regular basis any longer.
UN Women	UN WOMEN's main social media flagship is the SAY NO – UNiTE to End Violence against Women initiative, which is an internet-based advocacy platform that counts and showcases actions on the ground, facilitates campaigns and initiatives by grassroots partners, and amplifies their voice through social media. More than 2 million actions to end violence against women and girls have been counted so far. For further information see www.saynotoviolence.org
UNICEF	UNICEF applies a range a different social media tools for empowerment of children and young people whether in the form of social networking tools, SMS or digital mapping.
UNDP	UNDP currently has a focus on e-governance and access to information with a focus on the use of new ICTs such as mobile devices and social networks. The approach has three core components where ICTs can play a critical roles: enhance the efficiency and effectiveness of public institutions; promote the delivery of basic public services to marginalized and under-served populations; and empowering people to have voice and participate in policy and decision making process while strengthening Interactions with national and local governments. For additional details see: http://undpegov.org.

WB/WBI

The World Bank group strategy is to use ICT to transform, innovate and connect: Using ICT to transform service delivery across sectors; support ICT innovation for jobs and competitiveness across industries; and scale up connectivity – affordable access to broadband internet. There's a focus on open government models for citizen feedback and other accountability mechanism to improve service delivery. The Bank promotes and supports open government data initiatives as they represent a cross-sector foundation for numerous applications, serving as shared infrastructure for citizen, public and private sector co-creation. Examples of the Bank's own expertise in open data is shown in the Mapping for Results (http://maps.worldbank.org) and World Bank Open Data (http://data.worldbank.org) platforms.

As noted above the **mainstreaming** of ICT into programs has been a challenge for the majority of donors interviewed regardless of approach. E.g. Sida has experimented with different models for institutional anchorage for ensuring broadbased commitment: unit-led approach versus mainstreaming – none of which worked effectively. Today Sida is applying a third approach building on internal networks. Other donors found that their mainstreaming efforts were weakened due to lack of ICT-dedicated programming resources; or that their ICT agenda were "mainstreamed into non-existence" due to lack of political commitment. Hence the unison call for need for adequate monetary and human resources to ensure results. Furthermore, dedicated human resources were also seen as being critical to fulfill the important role of knowledge sharing on social media application; and this especially in light of the general decentralization of programming to field level

In regard to **harmonization**, the majority of donors interviewed identified a strong need for harmonization of activities to avoid duplicative efforts and to enhance lesson sharing. Informal forums over traditional mechanisms for harmonization (UN/OECD DAC) were proposed to allow for: i) speedy and virtual knowledge sharing in response to the rapid developments of social media; and ii) to make the knowledge sharing more inclusive through the participation of private sector and CSO stakeholders. DFID is currently pursuing such an approach under the framework of the Transparency and Accountability Initiative (http://www.transparency-initiative.org). A more regional approach for knowledge sharing was also proposed in the form of either Nordic or EU initiatives. Finally, alliances of like-minded donors are currently being pursued in the form of joint programs.

6 Conclusions, opportunities and recommendations

6.1 Conclusions.

Why ICT. The benefits of using ICT for governance are manifold such as enhanced accessibility, affordability and innovation. Above all, ICT provides tools and capacity for greater involvement of citizens in enlarging and strengthening the democratic space. Furthermore, there is a special role for donors to play in the form of provision of resources and progovernance strategies for information partnerships with the overall aim of enlarging the democratic space.

Transparency. In sub-Saharan Africa, the government open data approach shows promise. The first implementation, in Kenya, was launched only months ago. The Kenyan example, even at this early date, shows clear advantages over earlier efforts for data transparency. The enthusiasm of additional African governments in implementing government open data is another good indicator. But many factors are in play pushing for and against transparency. Development assistance support from the donor community will be essential to nurture the growth and sustainability of government open data in sub-Saharan Africa.

Empowerment. This is a time of experimentation in the use of social media for empowerment of marginalized communities. There are clear, cost-effective benefits that come from creating information networks within excluded communities. But can new information pathways also be a tool for active citizenship? Exchanging information, and gaining useful knowledge and skills is a beginning. But information, on its own, does not alter the marginalized position of excluded communities. It does, however, lay the groundwork for community empowerment, advocacy and activism.

Accountability. Scaling up citizen accountability and citizen auditing with mobile telephony and social media is at an early stage of development. Several initiatives in Kenya show

proof of concept. However, there are important obstacles: the citizen sector is relatively weak, and relevant NGOs, while enthusiastic, lack experience in program design at a national scale. The most effective implementation studied, UWIANO, is based on an information partnership, which requires sophisticated coordination among partners with little history of collaboration – citizen groups, NGOs, government entities and security forces. To achieve success in scaling citizen accountability, there are evident benefits for engagement and support by the international donor community in the near and medium term.

Integration of social media into programs. The provision of adequate monetary and human resources is critical for successful integration of social media into programs. Furthermore, opportunities for harmonization with other donors should be explored to avoid duplicative efforts and to enhance knowledge sharing.

6.2 Opportunities.

Social media in support of governance can be characterized as being in "start-up mode," with a lot of experimentation and many small projects. Even at this early stage, a number of approaches have demonstrated proof of concept. This presents a strategic opportunity in which development assistance funds can have considerable impact. Without donor resources and pro-governance efforts, it is unlikely that the initiatives studied will scale up to have national impact on transparency, empowerment, and accountability.

Several strategic opportunities are outlined below. Each presents a possible focus for investment.

Strategic Opportunity: Transparency/Open data.

Initiative: Kenya's KODI. The first open data portal in sub-Saharan Africa has generated great interest from Kenyans, who are already using the newly public data. Working with

government ministries can ensure accurate, current data which provides detail down to village and district level; improved sector planning based on actual, real-time information; and enlarged capacity to accept and respond to citizen input based on the data. There are also opportunities to build capacity in the citizen and entrepreneurial sectors to use KODI data as a tool for government transparency and for engagement in the planning and budgeting process.

Initiative: New portals in Rwanda, Tanzania, Ghana, Nigeria and South Africa. These countries are in advanced planning to create open data initiatives. Working with one or more of these countries can take advantage of lessons learned in the Kenya KODI project.

Initiative: International collaboration. Denmark joined the open government partnership in 2011: http://www. opengovpartnership.org/countries but does not yet have an open data portal. Creating partnerships between Denmark's open data initiative and that of sub-Saharan countries would have long-term benefits for all.

Strategic Opportunity: ICT for empowerment.

Initiative: Capacity building for NGOs and CSOs.

Many of the organizations which provide development and humanitarian services to marginalized populations are not making use of mobile phones and social media for empowerment. The projects surveyed in this report show that creating mobile networks provides immediate benefits. Working with organizations, and supporting South-South information exchanges can build capacity to deploy inexpensive digital networks for empowerment.

Initiative: Capacity building for government. Surveys show that marginalized groups lack access to essential information about citizen rights, about government assistance programs, and about the wider world. Working with government can build capacity to use new information pathways to

bring marginalized groups into the public space, sharing information about rights and urgent issues, and respecting the voices of the groups. Call centers with both voice and SMStext options have been shown to be very effective for elections, to give citizens information about their rights. A similar approach could be adopted in working with marginalized groups.

Strategic Opportunity: ICT for accountability.

Initiative: Scale. Donor resources act as "bridge funding," to scale up to national level, initiatives that aggregate citizengenerated data for evidence-based advocacy. At large scale, with hundreds of thousands of citizens participating, impact is greater and sustainability is feasible.

Initiative: Nurturing information partnerships. Donor resources can support collaborative partnerships among CSOs, NGOs, and government entities. Each "information partnership" would have a specific sectoral objective, such as improving availability of drinking water; or broader democratic objectives, such as supporting non-violent resolution of differences among ethnic groups.

Initiative: Capacity-building in the entrepreneurial sector.

Working with the entrepreneurial sector can nurture and scale up "apps for widespread use by citizens for improved governance. The World Bank InfoDev initiative, which has 40 Incubation Centers and m:labs in 20 African countries, is actively seeking partners: http://www.infodev.org/en/Topic.8.html . A parallel initiative is the UN Global Pulse, which in 2012 is setting up a Pulse Lab in Kampala, Uganda which will be a hub for ICT innovation, especially in the social sector.⁴⁴

Initiative: Capacity-building among NGOs and CSOs. Many established NGOs, which have had support for many years from Danida and other groups, will require training

⁴⁴ Adengo, Patrick & White, Gabriel, "Exploring the Ecosystem for Pulse Lab Kampala," www.unglobalpulse.org/blog

in use of new information pathways. The training should include senior staff. This is not primarily training in IT and technical details: most of the solutions are off-the-shelf. Rather, the training is designed to empower the NGO to develop new strategic plans based on new information pathways. South-South information exchanges can play an important role.

Initiative: Capacity-building in government for improved public service delivery. Over the coming years, many aspects of public service delivery will migrate to mobile phones. This will include: patient management at clinics; school registration; voter registration; payment of fees; completing government forms ranging from judicial complaints to requests for agricultural inputs. Strategic support from donors will be essential to success. One area of activity is to build capacity and infrastructure. Cost-effective, offthe-shelf solutions are available, but strategic planning is required to integrate citizen-facing systems with back-end data management. The regulatory and legal framework is also required to protect the privacy of citizen information. At present, ministries and public service organizations are implementing non-compatible point-of-service systems, and database management which is fragmented and which does not protect citizen confidentiality.

Initiative: Capacity-building in government for improved feedback to citizens. The implementation of public service delivery via mobile phones creates the opportunity to build in citizen feedback mechanisms. Donors can work with public service organizations to build capacity to receive and act upon aggregated citizen data, and to give feedback to citizens about what actions are taken.

6.3 Recommendations

In response to the conclusions and strategic opportunities summarized above, it is recommended that Danida embark on several initiatives.

Two specific "scaling up" initiatives

Each working with social media in different capacities, building on existing initiatives for quick lesson learning:

- Transparency in the form of government open data
- Evidence-based accountability via NGO/CSO community.

The geographical focus suggested for the "scaling up" initiatives is East Africa, due to high mobile phone penetration and the existence of an ecosystem of information entrepreneurs – factors which ease implementation.

Transparency - Scaling up government open data (Kenya).

Danida would open discussions with the Ministry of Information and Communications, and the World Bank/ DFiD, to support the Kenya Open Data Initiative (KODI). KODI is at a critical point in spring 2012. Efforts have begun to institutionalize the project, moving from its current home at the ministry to the Kenya Bureau of Statistics. Conversations are underway with all ministries to ensure that databases are accurate and that they are regularly updated. A particular focus of Danida could be making the KODI data as "citizen-friendly" as possible. Three tactics to accomplish this are: 1) better "apps" for use on mobile phones and online (this could be done through competitions, and/or subcontracting with m:lab/InfoDev); 2) capacity-building among NGOs and media to use KODI and 3) granular data which gives information at the county, the district, and eventually, the village level. Granular data enables citizens, CSOs and NGOs to be informed about government activities,

expenditures and activities at the local level; to compare datasets from one area to another; and to engage in evidencebased advocacy with the government.

Parallel to the KODI project, it is recommended that Danida assume a more pro-active role in the global open data partnership: http://www.opengovpartnership.org/countries Also, there are important synergies that can be achieved between Denmark's own national initiative to create a Danish open data portal, and African countries working on their portals.

Accountability - NGO and CSO capacity-building at scale (East Africa). This initiative would create a large-scale campaign throughout East Africa, engaging hundreds of thousands of citizens for improved public service delivery. The campaign would be conducted by a coalition of NGOs in East Africa, in partnership with the governments of Tanzania, Uganda and Kenya. Danida, using an ICT contractor team (European/US and South), would work with the coalition to build capacity and scale using ICTs for governance.

There are many variations on how this could work. This is one:

- Make the initiative a collaborative effort building on existing sectoral working groups comprised of key donor/ CSO/Government stakeholders. Other donors will be interested in joining a project at this regional scale. Also, the Bill and Melinda Gates Foundation, supporting efforts in Kenya and elsewhere in Africa to engage citizens for improved public service delivery, could be approached for collaboration.⁴⁵
- Determine, in collaboration with partner countries, and Danida country-teams, an overall priority (within public service delivery), which will be the focus of the initiative. In the example, which follows, it will be drinking water supply. But it could also be a different sector—health, education or agriculture. The point is this: scale is only

- possible with a focused goal. The objective would be to mount a campaign, which would engage a million people in East Africa, resulting in significant improvements in drinking water supply in the three countries.
- Identify local NGOs to co-implement the campaign in collaboration with the international ICT contract team. This implementation team together with the donors and the relevant government authorities will form the coalition. The criteria for NGO selection: a track record of effective citizen engagement and evidencebased accountability work; operational partnerships with key stakeholders; and capacity for scale. For the water quality project, this might be: Twaweza, based in Tanzania, with branches in Kenya and Uganda; Kenya National Taxpayers Association (NTA); and Transparency International (TI). In 2010-11, Transparency-International Kenya conducted a successful pilot project in six Kenya locations in citizen-based advocacy for water quality improvements in urban areas, and has also carried out a National Water Supply Integrity Study. 46 (See Report section 4.3.3) Says TI-Kenya Board Chair Dr. Richard Leakey: "Improving governance in water services is not just about government systems and capacities; it is about a range of non-state agents and their interaction with the government. It is about engaging civil society and establishing a functioning social contract between the government and its citizens to bring about effective basic services. And it is ultimately about the progressive achievement of agreed rights to water."47
- The coalition invites the participation of entrepreneurial sector representatives, including mobile providers and app developers. This is an important area of collaboration to ensure cost-savings and sustainability.
- The ICT contract team convenes partner country representatives, NGOs and other stakeholders and creates an action plan. The campaign does not displace existing efforts to improve drinking water supply; it builds on them by introducing citizen engagement for real-time

⁴⁵ Transparency and Integrity in Service Delivery in Africa, www.tisdakenya.wordpress.com

^{46 &}quot;Keep the tap flowing," http://www.transparency.org/news_room/latest_news/press_releases_nc/2011/2011_12_7_keep_the_tap_flowing_strengthen_transparency_accountability_and_participation_mechanisms_to_improve_access_to_water

 $^{^{47}}$ Dr. Richard Leakey, speech given 7 December 2011, in Nairobi, Kenya, marking release of report, National Water Supply Integrity Study.

- data collection and evidence-based advocacy. Citizens become partners in the effort to improve drinking water supply as opposed to clients, customers, or aid recipients.
- The ICT contract team conducts training and capacity building for NGOs and other coalition members, as well as with the responsible government entities.
- The "Clean Water Coalition" mounts the campaign. CSOs and local partners create local water committees, and integrate existing community water groups. The coalition engages a million citizens throughout the region. Real-time data collection aggregates water quality indicators throughout East Africa. The data has important corollary benefits; it functions as an alternative database for the Performance Assessment Frameworks (PAF) of general and sectoral budget schemes.
- The Clean Water Coalition engages government entities and water service providers to create improved drinking water supply in urban and rural areas. This is an ongoing process, using the techniques of evidence-based accountability developed by Twaweza, TI, and NTA. The million-strong Clean Water Coalition advocates for improvement, using SMS-text networks, emails, media coverage, meetings and presentations. At the national level, the Clean Water Coalition uses the data to work toward commitment at the executive, parliamentary and ministerial levels, toward specific targets for improved delivery of clean water. The coalition works with the government at all levels, to enhance capacity to receive and respond to citizen-generated input related to water. At the county and regional level, the coalition engages responsible entities in government and water delivery organizations to formulate action plans based on the real-time granular data for the area water supply. At the local level, the coalition brokers new cooperative work arrangements between water suppliers and citizen groups.
- Monitoring and evaluation are conducted to assess each element of the campaign. Decades of work have shown that delivery of clean water supply can be stubbornly

- difficult to achieve. However, the use of ICTs to support massive citizen involvement in an evidence-based accountability campaign empowers water users to be active stakeholders whose input and advocacy bring improvement. Twaweza, TI, and NTA have had success using the same approach (at smaller scale) in education, construction projects, and monitoring Constituency Development Funds (see Report section 4.3.4). ICTs enable cost-effective scaling to national and regional levels, which in turns increases the impact.
- Using the same model, new campaigns could be launched that target different public service delivery sectors.
- In summary, the two "scaling up" initiatives presented above are intended to give a snapshot of what Danida, working with other donors and with partner countries, could do, beginning right now. The focus on East Africa is only at this initial point. The "scaling up" initiatives should be viewed as a learning stage, the beginning of a long-term strategy throughout sub-Saharan Africa, to use information as a tool to strengthen transparency, accountability and empowerment.

Beyond East Africa.

It is recommended to fund expansions and/or replication of existing, successful East-African ICT for governance initiatives – including Isiolo ActionAid project, Shujaaz.FM, and Twaweza – in other countries/regions.

Identification of initiatives at global level.

It is recommended that Danida explore the opportunities for collaborative efforts at global level, such as:

- Support of national ICT ecosystems through Infodev.
 The m:labs and incubation hubs have demonstrated
 success in strengthening the entrepreneurial sector, which
 promotes creation of ICT applications.
- Support of thematic ICT work through intermediaries

- such as Transparency International, Transparency & Accountability Initiative, and Witness. Areas of collaboration include development and dissemination of platforms to enhance large-scale data collection, aggregregation, security and privacy; and sharing lessons learned in this rapidly evolving field.
- Support of open data work, including the on-going work in Kenya, through collaborative efforts with like-minded donors such as DFID, the ministry of Foreign Affairs of Finland, USAID, and the World Bank – possibly with the objective of establishing of joint multi-donor trust fund for open data support.

Strengthening of capacities (Danida – HQ and country teams).

In order to successfully introduce ICT in Danida's program work it is recommended to develop a two-string capacitating program focusing on: i) the strengthening of Danida's internal capacities based on the development of policy guidelines and practical how-to notes for implementation; and ii) the strengthening of identified NGOs and CSOs to act as intermediaries in evidence-based advocacy work through targeted training programs.

Annex 1

Terms of Reference

15 August 2011

Term of Reference

Study

Using New Media Promoting Governance and Democratization: A Strategic Approach

Background

The widespread use of mobile telephones is a good example of an imported technology that has been successfully adopted by developing countries. It is not designed for poor people, or with their involvement, and is not a result of a specific policy initiative by donors or government to promote new technology. Nevertheless, mobile phone penetration is growing explosively in developing countries. E.g. Africa had 650.000 mobile subscribers in 1995, nearly 52 million in 2003 and by 2008 more than 250 million, - an annual increase rate of 65% (UKCDS 2010)

In Kenya, 26 million people have cell phones, a penetration of 68%, which is expected to rise to nearly 90% in the next few years. Compare that to the number of Kenyan broadband internet subscribers – fewer than 100,000.

Accompanying this increased penetration has been an outpouring of freeware and open-source tools for the use of mobile phones for development. Most of the interest has focused on SMS-texting as it is ubiquitous and lends itself to networked solutions. Twitter and other social networking applications have also been widely adopted, with the additional benefit of allowing multi-point interactions and dialogue.

How does this work? There are many ways to deploy a SMS network. One example: a SMS network for farmers who are working with agricultural extension officers. The network would allow many-to-many, mediated, conversations—a quantum improvement over the one-way communication of a government official telling farmers what to do. The SMS network would allow farmers to share best practices, cost data, price data, and solutions to problems encountered.

Other examples: M-health, where the SMS network is used to improve the communication between health officials and patients, e.g. text messages to remind of treatment or vaccination dates, and disease surveillance and response. And M-banking, where the M-Pesa system in Kenya is perhaps the most well-known mobile banking system providing banking services to poor and remote populations.

On top of this there is an opportunity to employ mobile phone texting to increase the effectiveness of existing development activities. An example: a SMS network collecting information about irregularities on voting day. This has actually been deployed successfully in Kenya as a many-to-one network, with thousands of people texting information to a central resource center, by Uchaguzi: www.bit.ly/bEp9It

What will it cost? The SMS / new media approach offers significant opportunities to create low-cost solutions. Much of the underlying technology is freeware or shareware. Partnerships with cell phone carriers and manufacturers can bring down the cost of delivering and sending messages.

Objective

The objective of the study will be to:

- examine strategic opportunities for using new media for promoting governance and democratization efforts within development assistance.
- explore opportunities for new media in the present Danish portfolio of development programmes and within the vision of the Strategy for Danish Development Cooperation.

A specific area of attention will be use of mobile technology in sub-Saharan Africa to engage and empower citizens in strengthening governance and democracy.

Output

The study will provide a strategic outline for applying new media and mobile technology for promoting governance and democratization within development activities.

It will further map specific opportunities for use of new media as a tool within the existing Danish portfolio of development programmes and describe how it may be applied in practical terms.

To this the study will support a process within Danida - and with relevant partners - to shape knowledge and awareness on the opportunities of applying new media and mobile technology within development assistance programmes targeting support for good governance issues.

Activities

The study will be supported by the following activities by the team:

- Collect and assess present international lessons learned and experiences with new media and mobile technology for
 governance and democratization, including reach out to colleagues working in multilateral and bilateral development
 agencies, including UNDP and the World Bank, to gather the latest information about their new media activities
- Conducts preparatory work in conjunction with a focus group in Danida, looking at the range of existing and
 planned development cooperation activities, in particular governance programmes with a view to identifying areas
 where new media could leverage activities.
- Examine opportunities for the use of new media in development, with specific attention to the use of mobile technology in sub-Saharan Africa to support governance and democratization. There will be focus on issues like accountability, service deliveries, the legal system, freedom of speech, access to information and election procedures. Potential partners will be government, civil society and the private sector.
- Briefings and discussion at Danida headquarters in Copenhagen. The team meets with relevant Danida staff and
 management for wide-ranging discussions about the use of new media for governance and democratization.
 Examples are presented, and to the extent possible, key players speak or present. A workshop involving Danish
 stakeholders and international expertise will be conducted.
- Discussions with South stakeholders at a regional workshop in Africa (tentative Nairobi). This workshop will boost the dialogue with African partners and be a reality check for proposed future action.
- Outline a number of possible strategies which Danida can consider for the use of cell phones/SMS in sub-Saharan
 Africa to support governance and democracy. The emphasis is on integration with existing and planned activities
 supported by Danida.
- Final report (approx. 20 pages + annexes). The team prepares a final report giving strategic recommendations.

Team composition

The study team will be composed as follows:

- John Siceloff, CEO of JumpStart (team leader)
- Danish expert with thorough knowledge on Danida programmes within good governance

Time schedule

The study will be initiated September 2011 and will last for 6 months with final report 1th March 2012.

The team will prepare a short inception note by 1th October to guide the realization of the present ToR.

References

- UK CDS (2010): Science and Innovation for Development. By Gordion Conway and Jeff Waage. Supported by DFID.
- UN E-government Survey 2010.
- World Bank (2011) Developing Independent Media as an institution of accountable governance. A how to note by Shanthi Kalathil
- World Bank (2010): Yes Africa Can. Success stories from a dynamic continent

About JumpStart Productions. JumpStart Productions knows mass media. The company has produced hundreds of hours of prime time programming for broadcast and cable, and over 10,000 web pages. The award-winning show NOW on PBS, seen in the US and other countries, is produced by JumpStart. More at: www.pbs.org/now. NOW's social media campaign for engaging people in the 2008 US elections attracted 22 million unique visitors.

John Siceloff, President and CEO, JumpStart Productions, has won major broadcast television awards, with six national Emmys, the Alfred I. DuPont-Columbia Award, the Peabody Award, the Edward R. Murrow Award from the Overseas Press Club for best international documentary, and the Walter Cronkite Award for Excellence in Television Political Journalism. He has worked as a producer, reporter, senior producer, senior broadcast producer, and executive producer at PBS, ABC, NBC, and CBS. He spent a dozen years working in Africa and Central America, developing an expertise in communications for development. From 2001 – 2009 he was the Executive Producer of NOW on PBS (www. pbs.org/now).

Annex 2 Persons met

Aidi, Beryl A., Programme Officer Media & Publicity, Kenya Human Rights Commission

Arnold, Ann-Katrin, Governance Specialist, CommGAP, World Bank

Aura, Zephaniah, Senior Elections Specialist, United States Agency for International Development, Kenya Mission (USAID/Kenya)

Ayers, Seth, Senior Partnership Specialist, World Bank Institute (WBI)

Azim, Monica, Deputy Director, United States Agency for International Development, Kenya Mission (USAID/Kenya)

Backer, Harry de, European Commission (EC), (phone interview)

Berg, Sanne van den, Coordinator ICT election Watch, Hivos Kenya

Berger, Gerrit, Director of ICT incubation unit, United Nations Children's Fund (UNICEF)

Burnet, Rob, Director, Well Told Story

Chinje, Eric, Manager Global Media Development, World Bank Institute (WBI)

Colaco, Jessica, Innovation Department, iHub Kenya

D'Costa, Valeria, Program Manager, Infodev

Deloge, Joyce, Programme Officer, Democratic Governance Unit, United Nations Development Program in Kenya (UNDP/Kenya)

Ecclestone, Lu, Governance Advisor, Department for International Development (DFID), (phone interview)

Ekehaug, Vidar, Adolescent Development and Participation, United Nations Children's Fund (UNICEF)

Ford, Jared, Manager ICT Programs, National Democratic Institute

Getao, Katherine, ICT Secretary, Directorate of e-Government, Kenya

Gikunda, Mburugu, Director Media Developments, Media Focus on Africa

Gonsalves, Bianca, Governance Specialist, Canadian International Development Agency (CIDA), (phone interview)

Hammer, Craig, World Bank Institute (WBI)

Hauer, Ulla, Independent Consultant

Haynes, Joshua, Senior Development Technologist, United States Agency for International Development (USAID)

Hersman, Erik, Director of Operations and Strategy, Ushahidi

Højberg, Jesper, Executive Director, International Media Support

Jensen, Michael Irving, Head of MENA Department, International Media Support

Kags, Al, Chairman, Kenya Open Data & Government Task Force

Kalathil, Shanthi, Communication for Governance & Accountability program, CommGAP, World Bank

Kimani, Eston, Chief Executive Officer, Africa's Talking

Kimeu, Samuel, Director, Transparency International Kenya

Kipchumbah, John, Program Associate, Innovations & knowledge Management, Sodnet

Kituyi, Henry Wanyonyi, IT/IS Manager, Actionaid Kenya

Kooning, Linda de, Director Programmes, Media Focus on Africa

Lane, Tracy, Senior Country Economist, World Bank, Kenya

Larsen, Jane Møller, Head of Deartment of Easter Europe, Caucasus and Central Asia, International Media Support

Laurikainen, Jussi, Good Governance and Human Rights, Embassy of Finland to Kenya

Letho, Mark, Counsellor, Good Governance and Human Rights, Embassy of Finland to Kenya

Lucante, Pierre, Head of Sector Project ICT4D, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), (phone interview)

Mati, Jane, Director, Mars Group

Mati, Mwalimu, Chief Executive Officer, Mars Group

Moraa, Hilda, Research Department, iHub Kenya

Mwendwa, Gregory, Programme Officer Arts, Culture, ICT & Media for East Africa, Hivos Kenya

Ndetu, John, Knowledge Officer, PeaceNet

Nduko, James, Kenya Program Manager, Twawea ni sisi

Ngatia, Shelia, Team Leader, Democratic Governance Unit, United Nations Development Program in Kenya (UNDP/Kenya)

Njonjo, Mendi, Fund Manager, African Technology & Transparency Initiative (ATTI), Hivos Kenya

Njuguna, Rhodah, Programme Officer, Royal Danish Embassy to Kenya

Novero-Belec, Minerva, Policy Specialist, e-Governance and Access to Information, United Nations Development Program (UNDP)

Odinga, Brian, Programme Assistant, Kenya Media Programme, Hivos Kenya

Otieno, Okero, Programme Leader, Kenya Media Programme, Hivos Kenya

Powell, James, Programme Manager Ureport, UNICEF Uganda.

Pulkkinen, Jyrki, Senior Adviser, Ministry for Foreign Affairs of Finland, (phone interview)

Rasmussen Finn, Director of Development & Head of Department, International Media Support

Roy, Isabella, Senior ICT Specialist, Canadian International Development Agency (CIDA), (phone interview)

Rudra, Urjasi, Coordinator, United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)

Sahley, Caroline, Democracy Specialist, United States Agency for International Development (USAID)

Schumacher, Lene, First Secretary, Royal Danish Embassy to Kenya

Simiyu, Robert, Governance Advisor, Canadian International Development Agency, Kenya Mission, (CIDA/Kenya)

Sing'oei, Abraham K., Senior Conflict and Rule of Law Specialist, United States Agency for International Development, Kenya Mission (USAID/Kenya)

Spence, Chris, Chief Technology Officer, National Democratic Institute

Tabol, Limo, Ushahidi

Thonke, Ole, Deputy Head of Mission, Royal Danish Embassy to Kenya

Tröften, Per-Einar, ICT4Dev Specialist, Swedish International Development Cooperation Agency (Sida), (phone interview)

Tufte, Thomas, Professor, Roskilde University

Uimonen, Paula, Director, Spider Group

Verslas, Katrin, Founder, MobileActive

Wafula, Anthony, Programme Officer, Kenya Media Programme, Hivos Kenya

Warria, Teddy, Head of Business Development, Africa's Talking

Widmer, Alexander, Swiss Agency for Development Cooperation (SDC), (phone interview)

Wildemuth, Norbert, Associate Professor, Roskilde University

Yerkes, Maryanne, Senior Civil Society Specialist, United States Agency for International Development (USAID)

Zambrano, Raul, Senior ICT & Governance Adviser, United Nations Development Program (UNDP)

Annex 3 List of references

Avila, Renata. Feigenblatt, Hazel. Heacock, Rebekah. Heller, Nathaniel. 2010. *Global mapping of technology for transparency and accountability. New Technologies.* Transparency & Accountability Initiative.

Ayers, Seth. 2011. Mapping for Results. Danida Development Days. Power point presentation.

Bekri, D., Dunn, B., Oguzertem, I., Su, Y., Upreti, S. 2011. *Harnessing Social Media Tools to Fight Corruption*. Transparency International.

Burnet, Rob. 2010. Communications Strategy. Royal Danish Embassy to Kenya.

Changemakers. 2009. SMS Quick Start Guide.

Governance and Social Development Resource Center (GSDRC). 2010. New ICTs for Development. Helpdesk Research Report.

Governance and Social Development Resource Center (GSDRC). 2011. Social Media and Reform Networks, Protests, Social Movements and Coalitions.

Greenberg, Alan. 2008. Sida's Support to Information and Communications Technologies (ICT) for Development. Sida Evaluation 2008:07.

Greenberg, Alan.Muchanga, Americo. 2006. Evaluation of Sida Information and Communications Technologies Support to Universities. Sida Evaluation 06/13.

Haider, Huma; Mcloughlin, Claire; Scott, Zoë. 2011. *Topic Guide on Communication and Governance*. Communication for Governance and Accountability Program (CommGAP) and Governance and Social Development Resource Center (GSDRC).

Hellström, Johan. 2010. The Innovative Use of Mobile Applications in East Africa. Sida Review: 2010:12.

Hellström, Johan. Mobile phones for good governance – challenges and way forward.

Hivos. 2011. Kenya Media Programme.

Independent Evaluation Group (IEG). 2011. Capturing Technology for Development. An Evaluation of World Bank Group Activities in Information and Communication Technologies. The World Bank Group.

Institute of Development Studies. 2007. Mobile Phones and development. Id21 Insights 69. Internews. 2011. Dadaab, Kenya. Humanitarian Communications and Information Needs Assessment among Refugees in the Camps: Findings, Analysis & Recommendations.

Kalas, Patrick; Spurk, Christoph. 2011. *Deepening Participation and Improving Aid Effectiveness through Media and ICTs.* Swiss Agency for Development and Cooperation. SDC Working Paper.

Ministry of Foreign Affairs of Denmark. 2007. Effective and Accountable Public-Sector Management.

Ministry of Foreign Affairs of Denmark. 2009. Democratisation and Human Rights for the Benefit of the People.

Ministry of Foreign Affairs of Denmark. 2010. *Drivers of Accountability Programme (2010-2015). Project Memorandum.*

Ministry of Foreign Affairs of Denmark. 2011. How to Note on Media and Freedom of Expression.

Ministry of Foreign Affairs of Denmark. Kenya Governance Support Programme 2010-2015.

Ministry of Foreign Affairs of Finland. 2012. Finlands utvecklingspolitiska åtgärdsprogram.

Ogden, Jessica; Bergmann, Heather. 2010. *Don't Let Your Loved Ones Get Involved With a Fataki. Addressing Intergenerational Sex in Tanzania Through the Fataki Campaign*. Case Study Series. USAID's AIDS Support and Technical Assistance Resources. AIDSTAR-One.

Regeringskansliet. Forändring för frihet. Policy för Demokratisk Udveckling och Mänskliga Rättigheter inom Senskt Utveklingssamarbete 2010-2014.

Sarrazin, Tom. Texting, Tweeting, Mobile Internet. New Platforms for Democratic Debate in. Africa. Friedrich Ebert Stiftung. Fesmedia Africa Series. 2011.

Sasaki, David. (Editor). 2011. *Technology for Transparency. The role of technology and citizen media in promoting transparency, accountability and civic participation.* Technology for Transparency Network.

Siceloff, John. 2011. New Media as a Change Agent. Danida Development Days. Power point presentation.

Sida. 2009. ICTs for Democracy. Information and Communication Technologies for the Enhancement of Democracy – with a Focus on Empowerment.

Spider. 2010. Increasing Transparency & Fighting Corruption Through ICT. Empowering People & Communities. SPIDER ICT4D Series no. 3.

Swedish International Development Agency. 2009. *ICTs for Democracy. Information and Communication Technologies for the Enhancement of Democracy – with a Focus on Empowerment.*

Uimonen, Paula. 2011. Social and mobile media in ICT4D. Spider.

UNDP. 2012. Technologies and Empowerment: Enhancing Human Development through Participation and Innovation.

United Nations Development Programme. 2009. *E-governance and Citizen Participation in West Africa: Challenges and Opportunities*.

Verclas, Katrin; Mechael, Patricia. 2008. A Mobile Voice: the Use of Mobile Phones in Citizen Media. An Exploration of Mobile Citizen Media Tools and Projects. USAID.

WITNESS. 2011. Cameras Everywhere. Current Challenges and Opportunities at the Intersection of Human Rights, Video and Technology.

World Bank Institute. 2011. WBI Innovations: Social Accountability Tools for Improved Government Transparency and Responsiveness. Emerging Areas of Work within WBI's Governance Program. World Bank Group.

Yeomans, Keith. 2003. ICT for Development in the Danish Ministry of Foreign Affairs. Consultation Report from DflD.