

Delivery Models for Climate Information in East and West Africa

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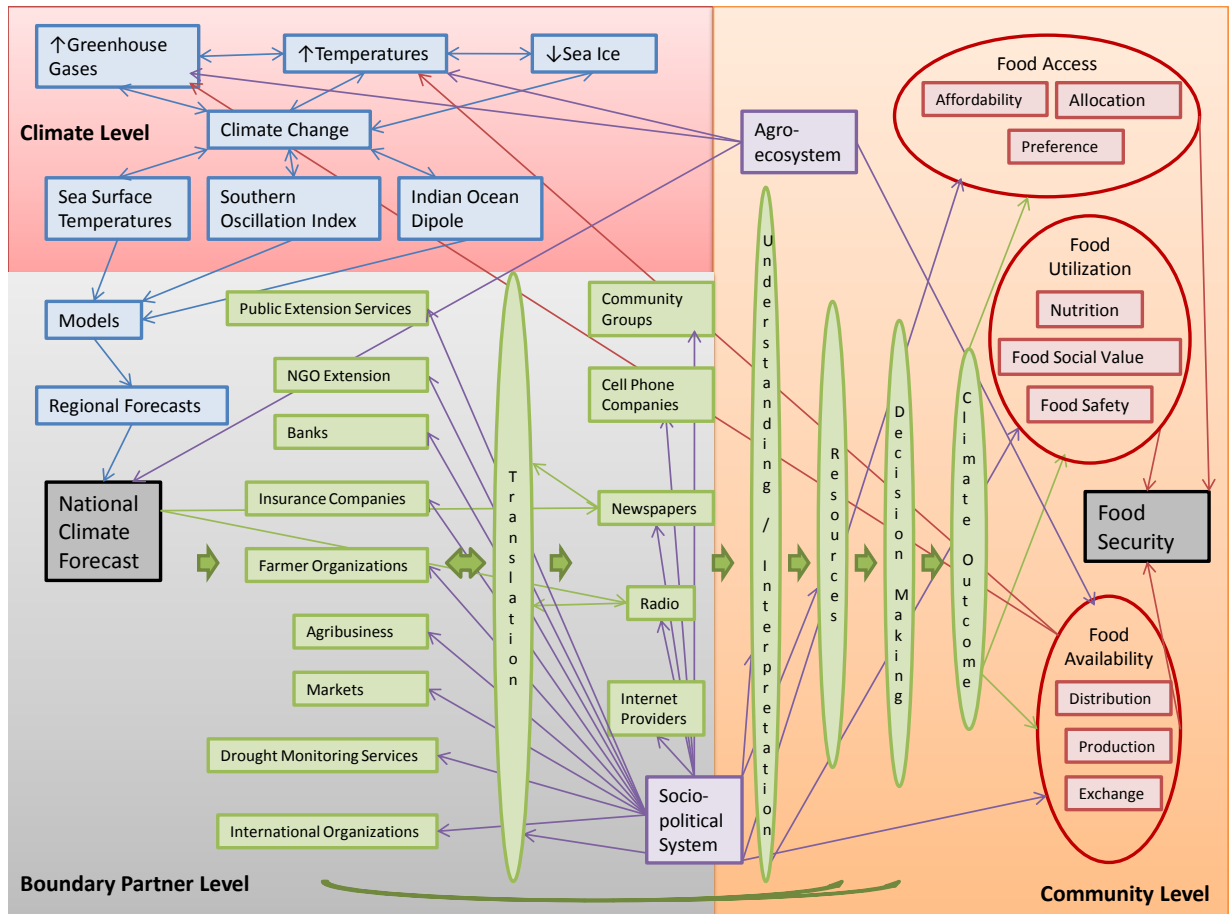
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Appendix 1: Diagram of Climate Information Dissemination

A diagram showing the relationship between production of climate information (in this case a seasonal climate forecast), boundary partners involved in production, translation and dissemination of the information, and variables impacting understanding and use of forecast by smallholder farmers in agricultural production and decision making for food security.



Appendix 2: Literature Search Questions and Search Strings

Search Engines: Google Scholar and ScienceDirect

1. Agriculture information delivery:
 - a. What methods have been used to deliver agriculture information to farmers, as well as public and private organizations that support farmers, and how have these methods performed in terms of access, understanding, usability and impact?
 - b. What information communication technologies (mobile phones, internet, etc.) are emerging that have the potential to increase farmer access to agriculture information, what examples are there of rural farmers using information technology for farm-level decision making, and how have these technologies performed in terms of access, understanding, usability and impact?
 - c. What are the recommendations for improving farmers' equitable access to agriculture information, and the usability of this information?

Strings: [\(smallholder* or "small hold*" or "small scale"\) and agriculture* and information and deliver*](#)

Africa* and farmer* and (poor or rural) and (information or advice)

2. Climate information:
 - a. How has climate information performed in terms of:
 - i. Salience: Do the information address the questions of stakeholders?
 - ii. Credibility: Is the information perceived to be credible (accurate and reliable) by scientific, policy and farming communities?
 - iii. Legitimacy: Is the process of producing and disseminating information perceived to be objective by stakeholders?
 - b. What is the process for production of regional, national and local seasonal climate forecasts? To what level are forecasts co-produced by forecast producing and using stakeholders (international experts, national meteorological services, agriculture services, international organizations, drought monitoring services, agribusiness, NGOs, farmers' organizations, etc)?
 - c. What organizations act as boundary partners in forecast production and dissemination in terms of:
 - i. Convening – what organizations bring parties together, and how effective is the process?
 - ii. Translating – what organizations translate forecasts in terms of language and jargon, and how effective is the process?
 - iii. Collaborating – to what level is forecast information co-produced, what organizations participate, and how effective is the process?
 - iv. Mediating – what are the goals of the different organizations participating in forecast production and dissemination, and to what extent are there commonalities in these goals?
 - d. Access to what resources better enable farmers to use forecasts?

Strings: [\(Climate* and information\) and product* and Africa*](#)
[\(Climate* and information\) and \(salience or credib* or legitimat*\) and Africa*](#)
[\(Climate* and information\) and use* and Africa*](#)

3. Farmer support services (government, NGO, agribusiness, etc.):
 - a. What organizations provide farmers with agricultural advice, and what evaluations have been made of these services?

- b. What gaps in extension services have been identified, and in particular meeting which of these gaps would improve the ability of farmers to use agriculture information?
- c. What evaluations are available of government extension services from 2000 onward?

Strings: (smallholder* or "small hold*" or "small scale") and (advice or advisory) and service*
(smallholder* or "small hold*" or "small scale") and extension and Africa*

Appendix 3: Internet Sites Searched for Grey Literature and Dissemination Models

1. Grey literature search engines:
 - CIARD Ring <http://www.ciard.net/the-ciard-ring>
 - AGRIS <http://agris.fao.org/>
 - CGIAR Virtual Library <http://vlibrary.cgiar.org/V?RN=377036618>
 - Development Gateway: http://www.idrc.ca/en/ev-1-201-1-DO_TOPIC.html
2. Networks focused on climate change:
 - International Research Institute on Climate and Society <http://portal.iri.columbia.edu/portal/server.pt>
 - Africa Adapt: <http://www.africa-adapt.net/AA/>
 - Africa Climate Change Resilience Alliance: <http://community.eldis.org/accra/>
3. Networks focused on ICT:
 - African Technology Policy Studies Network <http://www.atpsnet.org/index.php>
 - Technological Centre for Agriculture and Rural Cooperation (CTA): <http://www.cta.int/en>
 - Communication Initiative Network Soul Beat Africa: <http://www.comminit.com/africa>
 - researchICTafrica.net: <http://www.researchictafrica.net/>
 - Farm Radio: <http://www.farmradio.org/>
 - Telecentre.org: <http://www.telecentre.org/>
 - TelecentresAfrica: <http://www.share4dev.info/telecentres/>
 - Connect4Change: <http://www.connect4change.nl/>
 - Communication for Social Change Consortium: <http://www.communicationforsocialchange.org/>
4. Networks focused on development:
 - The Global Forum for Agricultural Research <http://www.egfar.org/egfar/website?contentId=-1&>
 - ELDIS: <http://www.eldis.org/>
 - Global Forum for Rural Advisory Services: <http://www.g-fras.org/>
 - Panos London: <http://www.panos.org.uk/aboutus>
 - Centre for Learning on Sustainable Agriculture (ILEIA): <http://ileia.leisa.info/>
5. Organizations
 - Practical Action: <http://practicalaction.org/>
 - International Institute for Communication and Development: <http://www.iicd.org/>
 - International Fund for Agricultural Development: <http://www.ifad.org/>
 - International Development Research Centre: http://www.idrc.ca/en/ev-1-201-1-DO_TOPIC.html
 - Climate Change Adaptation in Africa: <http://www.idrc.ca/ccaa/>
 - Comprehensive Africa Agriculture Development Program (CAADP): <http://www.nepad-caadp.net/>

- Overseas Development Institute: <http://www.odi.org.uk/>
- Institute of Development Studies: <http://www.ids.ac.uk/>
- L'Institut de recherche pour le développement (IRD) : <http://www.ird.fr/>
- International Institute for Environment and Development : <http://www.iied.org/>
- Swiss Development Corporation: <http://www.sdc.admin.ch/>
- CIRAD: <http://www.cirad.fr/>
- CAB International: <http://www.cabi.org/>
- UK Department for International Development (DfID): <http://www.dfid.gov.uk/>
- Research Into Use: <http://www.researchintouse.com/>
- Rockefeller Foundation: <http://www.rockefellerfoundation.org/>
- Ford Foundation: <http://www.fordfoundation.org/>
- Gates Foundation: <http://www.gatesfoundation.org/Pages/home.aspx>

Appendix 4: Questionnaire on Information for Agriculture Decision Making by Smallholder Farmers

1. Introduction

You are invited to participate in a study on information dissemination to smallholder farmers in East and West Africa, including the dissemination of climate information. The study has been commissioned by the International Research Institute for Climate and Society (IRI) for the Climate Change, Agriculture and Food Security (CCAFS) challenge program (<http://www.ccafs.cgiar.org/>).

This questionnaire is being distributed to subject experts in the meteorological services, agriculture services, research services, agribusiness, farmers associations, and communication outlets. Your participation is important so that the study captures the viewpoints of diverse experts with experience disseminating information to smallholder farmers. Our objective is to identify promising frameworks on which to build for the delivery of climate information to rural communities in East and West Africa.

The questionnaire is being administered by a National Facilitator in each CCAFS country. The role of the National Facilitator is to email the questionnaire to respondents, answer any queries that respondents have, and submit completed questionnaires. It should take you one hour or less to complete the questionnaire. Because the questionnaires will be compiled and submitted by the Facilitators, your identity will remain anonymous.

We would greatly appreciate if you could complete every item in the questionnaire and return by reply email to your National Facilitator. If you have any questions, please do not hesitate to contact your national facilitator. We would be most grateful if you could complete and return the questionnaire by **15 November 2010**.

Thank you very much for participating in this study. Please do not hesitate to contact study leader Dr Christine Jost at: International Livestock Research Institute, PO Box 30709, Nairobi 00100, Kenya, email c.jost@cgiar.org, telephone +254-736-715-417.

2. Background Information

2.1 Date: _____

2.2 Job title: _____

2.3 Degrees held: _____

2.4 What type of organization do you mostly work for (*put an 'X' on the line of only one*):

- Government meteorological service
- Government agriculture services
- Government livestock services
- Government fisheries services
- Government agriculture extension service
- Government agriculture research service
- Agribusiness
- Farmer association (regional to national groups)
- Internet company
- Cell phone company
- Telecentre network

- Rural radio
- Newspaper
- Television
- Local development NGOs
- International NGOs (CARE, Oxfam, etc)
- International organization (FAO, WMO, etc)
- Other (please indicate: _____)

3. Information delivery to smallholder farmers

3.1 Rate the types of technical information listed below according to how **important** they are for smallholder farmers (resource limited farmers and livestock keepers), and how **available** they are to smallholders. *Rate each type of information using the following scale, placing the rating number in each box. Do not leave any boxes blank as doing so will invalidate the entire table.*

0=don't know (I have no experience with this issue), 1=none (not important; not available), 2=low (would make little difference to decisions; rarely available), 3=medium (somewhat helpful for decisions; sometimes available), 4=high (would improve decisions; often available), 5=very high (would greatly improve decisions, almost always available)

	Important	Available
Agriculture Information		
Information on varieties (seeds, species, etc)		
Information on inputs (fertilizers, medicines, etc)		
Information on water management		
Information on land and soil management		
Information on crops and livestock management		
Other:		
Market Information		
Market projections		
Local market prices		
National market prices		
Other:		
Climate Information		
Forecast of total precipitation for rainy season		
Forecast of onset and end of rainy season		
Forecast of number of days with precipitation in rainy season		
Forecast of temperatures during rainy season		
Monthly updates of climate forecasts		
Daily and weekly weather forecasts		
Real time weather information (daily rainfall and temperature, etc)		
Extreme event advisories (drought, floods, etc)		
Climate change projections		
Climate atlases		
Other:		

3.2 In the table below indicate the relative **frequency** by which smallholder farmers in your country use the different mechanisms to access technical information that helps them with crop and livestock production. *You have a total of 100 points to distribute between the different mechanisms. Assign the most points to the mechanism most frequently used, the least to the most rarely used, and no points to mechanisms not used by smallholder farmers. The column must add up to 100.*

Mechanism	Relative Frequency of Smallholder Access
Agribusiness	
Cell phone SMS	
Community groups (women, religious, youth, farmers, etc)	
Development NGOs	
Farmer associations (regional to national groups)	
Government extension services	
Information exchange with fellow farmers	
Internet	
Local traders and middle-men	
Newspaper	
Private extension providers	
Radio	
Television	
Village information centres	
Other:	
TOTAL POINTS	100

3.3 What **communication technologies** are emerging in your country that have the potential to increase smallholder farmers' access to technical information for crop and livestock production? *The first row in the table shows an example entry. The boxes in the table expand to accept responses of any length. Feel free to expand the number of rows in the table if you have more than one example per type of technology. Your detailed responses to this question are particularly important, and your replying as extensively as possible will be highly appreciated.*

Technology	Agriculture Information Provided	Target Audience	Companies or Projects Involved	Description	Your Experience with the Technology
<i>Cell phones</i>	<i>Extension advice</i>	<i>Smallholder farmers</i>	<i>Bugosa Rural Open Source and Development Initiative (BROSDI)</i>	<i>Local NGO that works through farmers groups. They send an SMS to farmer members every week with local agro-related information. When a group member has a speaker option on his/her phone, the group members gather once a month and an NGO staff members calls the phone to discuss with the group any questions they have.</i>	<i>I am a Bugosa employee.</i>
Cell phones					
Internet					
Radio					

Technology	Agriculture Information Provided	Target Audience	Companies or Projects Involved	Description	Your Experience with the Technology
Television					
Village Information Centres					
Other: _____					

3.4 In the table below rate each type of institution in terms of its **importance** in providing technical information to smallholder farmers in your country. *Rate each type of organization using the following scale, placing the rating number in each box. Do not leave any boxes blank as doing so will invalidate the entire table.*

0=don't know (I have no experience with this issue), 1=none (not important), 2=low (would make little difference to decisions), 3=medium (somewhat helpful for decisions), 4=high (would improve decisions), 5=very high (would greatly improve decisions)

Institution	Importance
Agribusiness (seed, fertilizer, cotton, coffee, tea companies, etc.)	
Community groups (women, religious, youth, farmers, etc.)	
Development NGOs	
Farmers associations (regional to national groups)	
Government extension services	
Informal exchanges with fellow farmers	
Local traders and middlemen	
Private extension providers	
Other: _____	

4. Climate Information

Climate Information refers to seasonal climate forecasts, rainfall onset and cessation predictions, monthly climate forecast updates, daily and weekly weather forecasts, real time weather information, advisories and alerts concerning extreme weather events, climate change projections, climate atlases, etc.

4.1 In the table below indicate the relative frequency at which the institutions participate in the **production** of climate information in your country, and **use** climate information. *You have a total of 100 points per column to distribute between the different institutions in the list. Each column must add up to 100*

Institution	Production	Use
Agribusinesses		
Cell phone companies		
Community groups (women, religious, youth, farmers, etc)		
Development NGOs		
Famine early warning centres (FEWS-NET, etc)		
Farmers associations (regional to national groups)		
Government agriculture extension service		
Government agriculture research service		
Government meteorological service		
International organizations (FAO,WMO, etc)		
International research centres (IRI, CSIRO, CGIAR, etc)		
Internet communication technology (ICT) companies		
Media		
National universities		
Regional organizations (EAC, ECOWAS, AU, IGAD, etc)		
Other:		
TOTAL POINTS	100	100

4.2 In the table below indicate the relative capacity for the institutions to bring different people and organizations together to produce and disseminate climate information (**convening**), mediate between different people and organizations when they are together so that they can produce consensus climate information (**mediating**), and put climate information into terms and languages understandable by smallholder farmers (**translating**). You have a total of 100 points per column to distribute between the different institutions in the list. Each column must add up to 100.

	Convening	Mediating	Translating
Agribusinesses			
Cell phone companies			
Community groups			
Development NGOs			
Famine early warning centres (FEWS-NET, etc)			
Farmer associations			
Government agriculture extension service			
Government agriculture research service			
Government meteorological service			
International research centres (IRI, CSIRO, CGIAR, etc)			
International organizations (FAO, WMO, etc)			
Internet communication technology companies			
Media			
National universities			
Regional organizations (EAC, ECOWAS, AU, IGAD, etc)			
Other:			
TOTAL	100	100	100

4.3 Rate the below issues in terms of their importance in limiting smallholder farmers' ability to **access** and **use** climate information in your country. Rate each item using the following scale, placing the rating number in the blank boxes. Do not leave any boxes blank as doing so will invalidate the entire table, except where the box has been shaded grey.

0=don't know (I have no experience with this issue), 1=none (does not limit smallholder access, does not limit smallholder use) 2=low (limits access for less than half of smallholders, limits use for less

than half of smallholders), 3=medium (limits access for half of smallholders, limits use for half of smallholders), 4=high (limits access for most smallholders, limits use for most smallholders), 5=very high (prevents smallholder access, prevents smallholder use)

	Access	Use
Information Characteristics		
Inadequate prediction of occurrence, frequency and length of dry spells		
Inadequate prediction of timing of onset and end of rains		
Probabilistic nature is difficult too difficult to understand		
Analysis of information accuracy not provided		
Inadequate parameters: does not include temperatures, winds, freeze, etc.		
Poor timing (ex. Produced / delivered too late)		
Geographic areas covered are too large to be locally relevant		
Other: _____		
Information Packaging		
Information not communicated in local languages		
Excessive reliance on scientific terms and graphs		
Lack of additional information on how to use		
Other: _____		
Information Environment		
Poor literacy / education levels		
Poor access to agricultural extension		
Lack of information about alternative or improved production practices		
Lack of information about market prices and opportunities		
Previous negative experience with predictive information		
Information conflicts with traditional predictions / knowledge		
Other: _____		
Access to Communication Technologies		
Coverage of the country by radio/TV stations		
Coverage of the country by cell phone providers		
Coverage of the country by internet providers		
Lack of money to buy cell phones, phone cards, batteries, etc.		
Absence of electricity		
Other: _____		
Support Systems for Interpretation and Dissemination		
Coverage by extension		
Presence of NGOs		
Presence of farmers' and community groups		
Conflicts within / across communities hindering circulation of information		
Other: _____		
Smallholder Household Asset Base		
Land scarcity / access to suitable land		
Labour scarcity / ability to perform timely tasks		
Lack of money / access to credit		
Access to seed or money to buy seed		
Access to inputs or money to buy inputs		
Access to equipment and/or means of transport		
Access/availability of water (including irrigation)		
Other: _____		
Trust		
Lack of trust in government		
Lack of trust in extension services		
Lack of trust in scientific information		

	Access	Use
Lack of trust in information communicated electronically (cell phones, etc)		
Other: _____		

4.4 In the table below please rate each source in terms of its capacity to provide **important and relevant** climate information, the **accuracy and reliability** of the information it can provide, and the **authority and legitimacy** of the information. *Rate each source using the following scale, placing the rating number in each box. Do not leave any boxes blank as doing so will invalidate the entire table.*

0=don't know (I have no experience with this issue), 1=none, 2=low, 3=medium, 4=high, 5=very high

Source	Importance and Relevance of Information Provided	Accuracy and Reliability of Information Provided	Authority and Legitimacy of Information Provided
Agribusiness			
Cell phone SMS			
Community groups (women, farmers, etc)			
Development NGOs			
Farmers associations (regional to national groups)			
Government extension services			
Informal exchange with fellow farmers			
Internet			
Local traders and middle-men			
Newspapers			
Private extension providers			
Radio			
Television			
Village information centres			
Other: _____			

5. Seasonal Climate Forecasts

5.1 Regarding **your country**, indicate the extent to which you *agree or disagree* with the following statements regarding seasonal climate forecasts. *Score each statement using the following scale, placing the rank number in the space provided:*

1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 6=no information or opinion

5.1.1 It is important to include **non-scientific** organizations, such as extension services and NGOs, in the process of seasonal climate forecast production because of their **authority and legitimacy**. Score: _____

5.1.2 Including **international** scientific and forecasting organizations in the process of forecast production increases the **accuracy and reliability** of seasonal climate forecasts. Score: _____

5.1.3 **Scientific** organizations are most capable of **disseminating** seasonal climate forecasts to smallholder farmers. Score: _____

5.1.4 Including **non-scientific** organizations, such as extension services and NGOs, in the process of forecast production increases the **accuracy and reliability** of seasonal climate forecasts. Score: ____

5.1.5 **National** organizations are most capable of producing seasonal climate forecasts which are as **authoritative and legitimate** as possible. Score: ____

5.1.6 **Scientific** organizations are most capable of producing seasonal climate forecasts which are as **authoritative and legitimate** as possible. Score: ____

5.1.7 **Scientific** organizations are most capable of producing seasonal climate forecasts which are as **accurate and reliable** as possible. Score: ____

5.1.8 **National** organizations have all the information they need to produce seasonal climate forecasts which are as **accurate and reliable** as possible. Score: ____

5.1.9 It is important to include **international** scientific and forecasting organizations in the process of seasonal climate forecast production because of their **authority and legitimacy**. Score: ____

5.1.10 Involvement of **non-scientific** organizations improves **dissemination** of seasonal climate forecasts to smallholder farmers. Score: ____

5.2 Please respond to the following statements regarding the process of **producing, communicating and disseminating seasonal climate forecasts** in your country. *Place your responses in the boxes after each statement. The boxes expand to accept responses of any length. Your detailed responses to these open ended questions are particularly important, and your replying as extensively as possible will be highly appreciated.*

5.2.1 The primary obstacle in producing a seasonal climate forecast is:

5.2.2 The primary obstacle in holding a meeting of different people and organizations to produce a seasonal climate forecasts is:

5.2.3 The primary obstacle in producing a consensus seasonal climate forecast when different people and organizations are involved is:

5.2.4 The primary obstacle in putting a seasonal climate forecast into terms and languages that smallholder farmers can easily understand is:

5.2.5 The primary obstacle in disseminating seasonal climate forecasts to smallholder farmers is:

5.2.6 The primary obstacle in using seasonal climate forecasts is:

5.2.7 Important information to include in a seasonal climate forecast includes:

--

5.2.8 Seasonal climate forecasts are considered to be accurate and reliable based on:

--

5.2.8 Seasonal climate forecasts are considered to be authoritative and legitimate based on:

--

Appendix 5: Selection Criteria for Case Study Models

1. Selection Method

a. Study proposal called for information gathering via literature search and questionnaire, development of criteria for selection of ‘most promising models’ and using the criteria to select models for the case studies. However, questionnaire results will not be available. Literature results:

- i. Peer reviewed literature provided little new information on new models
- ii. Grey literature extensive. List of ‘interesting models’ in development, but cannot be exhaustive as number of projects and programs for dissemination of information to farmers is growing very rapidly with the ICT explosion.

Criteria used to determine if a model is ‘interesting’:

1. Proven ability to reach poor farmers
2. Proven ability to provide farmers with good (salient, credible, legitimate) and usable (production and translation) information
3. Creativity in terms of information format and farmer interaction that makes the info more farmer friendly
4. Mixture of formats used to address different learning styles and social strata
5. Flexibility in terms of types of info model can provide
6. ‘Information environment’ focus rather than single item of information
7. Sustainability
8. Measurability in terms of a standard M+E format built in, or being imbedded in a research project
9. Replicates (multiple examples of model, multiple countries)

b. Revision to methodology:

1. From grey literature develop list of ‘interesting’ dissemination models in 8 CCAFS countries
2. Within a region search for models starting with country most accessible to research team in terms of travel and contacts:
 - a. Order for EA is Uganda, Kenya, Ethiopia, Tanzania
 - b. Order for WA is Mali, Burkina Faso, Ghana, Senegal
3. Within a region:
 - a. Program or project occurring in multiple countries will only be included in the first country
 - b. Program or project that is the most ‘interesting’ of a type of dissemination model (for example, rural radio projects) will be included, unless an additional program provides significant conceptual or methodological differences from what has already been included
 - c. National facilitators and subject experts to be contacted to identify models that are being mentioned by questionnaire respondents, or that they are familiar with and why
 - d. List finalized
4. Study team to choose 2-3 models per region from list using selection criteria

2. Criteria for Model Selection

a. ‘Interesting’ level from 1.a.ii.

- b. Available reports that include:
 - i. Objectives
 - ii. Impacts
 - iii. Weaknesses
 - iv. Scalability
- c. 2-3 models per region representing the following:
 - i. Type
 - 1. Phone (SMS, GrameenPhone, village cell phone groups, remote banking, market information systems, etc)
 - 2. Rural radio (Farm Radio, RANET, etc)
 - 3. Information centres (Telecentres, Maria Centres, etc)
 - 4. Video and television
 - 5. Person-to-person (extension, farmer group participation, farmer field schools, drama, etc)
 - ii. Information Target
 - 1. Climate information access
 - 2. Market information access
 - 3. Agriculture information access
 - 4. Health information access
 - 5. Rural knowledge sharing
 - 6. Networking and empowerment
- d. Geographic Representivity: 2 countries per region

3. Reporting Format for ‘Interesting Models’

- a. Dates:
- b. Type:
- c. Organizations:
- d. Funding:
- e. Objective:
- f. Reaching farmers:
- g. Information salience, credibility and legitimacy:
- h. Information production and translation:
- i. Information and format flexibility:
- j. Information environment:
- k. Sustainability:
- l. Measurability:
- m. Replicates (multiple examples of model, multiple countries):
- n. Web-links:

Appendix 6: Agricultural Information Dissemination Project/Program Case Study Interview Checklist

1. What is the objective of your agricultural information dissemination project/program?
2. Can you provide me with the following background information regarding the project/program?
 - a. Dates
 - b. Organizations involved with contact information (email and phone) for each
 - c. Funding source(s)
3. What is your target audience?
 - a. What kinds of agricultural information do they need?
 - b. How do you assess these needs?
 - c. Do you reach smallholder farmers directly, or work through organizations that work with smallholder farmers?
 - d. Before your project/program, how did your target audience obtain agricultural information?
 - e. And now, how else do they obtain agricultural information (in addition to your project/program)?
4. Please describe the methods you use to disseminate information to smallholder farmers.
 - a. What methods have been the most successful?
 - b. What methods have been problematic?
 - c. What new ideas would you like to explore in the future?
5. What kinds of agricultural information do you provide to smallholder farmers?
 - a. Where do you get this information and how is it produced?
 - b. How is the information translated for smallholder farmers?
 - c. How would you rate this information in terms of:
 - i. Importance and relevance to your target audience
 - ii. Accuracy and reliability
 - iii. Authority and legitimacy
 - d. What kinds of information does your organization need to better serve your target audience?
6. Who in your target audience is not reached by your program, or may be left out? Why? How can these gaps be addressed?
7. How can smallholder farmers make better use of information about new agricultural methods or technologies? Can you provide some examples?
8. What information do smallholder farmers need but it is unavailable? What can be done to address this?
9. What steps have you taken to ensure the sustainability of your project/program?
10. How do you evaluate your program? Can you provide me with reports about your program?
11. What drives the delivery of information to smallholder farmers in your country?

Appendix 7: National and International Subject Experts Interview Checklist

1. Familiarity with case study information dissemination projects/programs:
 - a. What projects/program(s) and how you are familiar
 - b. Objective of project/program(s)
 - c. Dates, organizations involved, funding source
 - d. Location and target audience
 - e. Methods used to disseminate agricultural information
 - f. Kinds of agricultural information provided
 - g. Successes and failures
2. What drives the delivery of agricultural information to smallholder farmers?
3. What kinds of information do smallholder farmers need to attain their agricultural and livelihoods goals?
4. What are the best methods for disseminating agricultural information to smallholder farmers? Who may not be reached by these methods, and how can these gaps be addressed?
5. How can smallholder farmers make better use of information about new agricultural methods or technologies? Can you provide some examples?
6. What agricultural information do farmers need but it is unavailable?
7. What policies would help to reduce the barriers that smallholder farmers face in accessing information?

Appendix 8: Interesting Dissemination Models

1. Uganda

1.1 Farmers Information Communication Management (FICOM)

- a. Dates: pilot project 2005 – 2007
- b. Type: Village Phone Centre with SMS application. Syngenta Foundation provided loan guarantee for phone centre owners. Farmer purchases phone and establishes farmer group around phone. Profits used to fund new enterprises. Uganda National Farmers Federation SMSs info to district offices and related village phone centres. Farmers send/receive SMS on market prices.
- c. Organizations: Syngenta Foundation, Therese St. Peter; Helika, local IT company, Hellene Karamagi; Kayunga District Farmers Association; [Uganda National Farmers Federation \(UNFFE\)](#); Uganda Microfinance Limited; [Ministry of Water, Lands & Environment \(Department of Meteorology, RANET Program\)](#); [MTN Village Phone Uganda](#); local credit union
- d. Funding: Syngenta Foundation
- e. Objective: Improving communication among farmers and their markets. Connecting farmers to market info, using the phone as income generator for farmer collectives.
- f. Reaching farmers: Farmers groups; info via SMS; supply side info
- g. Information salience, credibility and legitimacy: salience not established
- h. Information production and translation: Produced by Farmer Federation, no translation
- i. Information and format flexibility: SMS and radio (for climate info), Ag information, market information, climate information
- j. Information environment: Not apparent
- k. Sustainability: Syngenta website claims sustainability since June 2007, run by Kayunga District Farmers Association. Personal communication Therese St. Peter - mixed results and not continued because major revisions needed; ‘most successful use’ was Kayunga District dairy’s access for delivery and supply schedules; village phone groups ‘artificially’ created for revenue creation results ‘dismal’; loans slowly repaid, power plays common; phone needed special antenna, giving nearest home control; Uganda Farmer’s Federation ‘disappointed’ and did not continue support; Uganda meteorological service partnered in climate forecast delivery via closed circuited radio broadcast, but too sporadic to be useful.
- l. Measurability: no reports available
- m. Replicates: Many examples of village phone centres. Advances in model (GrameenPhone, etc), Kenya
- n. Web-links: <http://www.syngentafoundation.org/index.cfm?pageID=160>

1.2 GoogleSMS and Grameen Community Knowledge Workers Program

- a. Dates: 2009 – present (piloted for 18 months)
- b. Type: Village Phone Centre with SMS application. First replication of GrameenPhone outside Bangladesh. SMS software "AppLab" (Application Laboratory) developed by Grameen Foundation Uganda. MTN network service provider (village phones and cell phone network). SMS response function receives questions and provides SMS response using Google SMS. This represents first launch of Google SMS, mobile services bundle that allow access to

- content on a range of topics like sports scores, local news, health and agriculture tips, etc, and Google Trader, SMS-based "marketplace" application.
- c. Organizations: Grameen Foundation; Google SMS; MTN; Busoga Rural Open Source and Development Initiative (BROSDI), EdnahKaramagi; Straight Talk Foundation; Marie Stopes International; [Innovations for Poverty Action](#); [Google.org](#); Ministry of Water, Lands & Environment (Department of Meteorology); National Agriculture Research Laboratories (NARO)
 - d. Funding: ?
 - e. Objective: Develop mobile applications that serve the needs of poor and other vulnerable individuals and communities, most of whom have limited access to information and communications technology. Alleviate some of the information and access to markets barriers for the poor, especially those in rural areas.
 - f. Reaching farmers: Village Phone Operators, Community Knowledge Workers, SMS and mobile search functions, supply side info
 - g. Information salience, credibility and legitimacy: Boundary partners like BROSDI included to make sure information meets community needs. Credibility and legitimacy not established.
 - h. Information production and translation: Producers of information unclear. Information automatically provided in response to SMS query. Boundary partners like BROSDI included to make sure information is translated for local consumers.
 - i. Information and format flexibility: Five mobile applications - Farmer's Friend, searchable database with agricultural advice and targeted weather forecasts; Health Tips for sexual and reproductive health; Clinic Directory for nearby clinics; Google Trader matches agriculture buyers and sellers, and other products. Flexibility on information types high, but limited to automated SMS search function formats.
 - j. Information environment: SMS feature appears to handle one type of info at a time, for instance a farmer can SMS 'fertilizer for maize' and the farmer will receive recommended fertilizers to use for maize and perhaps application.
 - k. Sustainability: Concept of Village Phone Operator as entrepreneur who establishes business with micro-credit loan may not transferable from Asia. Personal communication from Milton Waiswa, Met Service - Bangladesh experience was entrepreneurs in villages were profit oriented, they had incentives to go and get info at their own expense and provide a value added service to customers. But that incentive does not have a cultural affinity in Uganda. On Community Knowledge Workers, Fen Breed (IITA plant pathologist for East and South Africa) said, "unique project using mobile phones and technology for creating a two-way extension mechanism between growers and 'scientists'."
 - l. Measurability: Report on Community Knowledge Worker Initiative (CKW) pilot project with IITA.
 - m. Replicates: First in Africa. Kenya's DrumNet similar.
 - n. Web-links: <http://google-africa.blogspot.com/2009/06/google-sms-to-serve-needs-of-poor-in.html>

1.3 Rural Information Support (RIS) project with Department of co-operatives of MTTI and SNV

- a. Dates: 2003 – present (pilot RIS project and 2 new projects with MTTI and SNV). Planned national roll out after replication phase.
- b. Type: Village Information Centre. Warehouse system (supported by the EU) for farmers to store, transport and sell commodities. SMS for sending and receiving market info via crop marketing bureau (mechanism for connection to bureau unclear).
- c. Organizations: *International Institute for Communication and Development (IICD)*, Uganda Commodity Exchange (UCE), Department of Cooperative at MTTI, SNV
- d. Funding: IICD
- e. Objective: Aim is to enable rural farmers to increase their income. Enabling subsistence farmers to adapt a more commercial trading approach.

- f. Reaching farmers: via RIS and SMS, but unclear what kind of face-to-face support RIS provides farmers; supply side info.
- g. Information salience, credibility and legitimacy: Salience not established. Credibility and legitimacy hampered by UCE problems with WRS.
- h. Information production and translation: Produced by UCE, no translation apparent.
- i. Information and format flexibility: Limited to market info; format limited to SMS and possibly advice through RIS
- j. Information environment: Not apparent
- k. Sustainability: From IICD Website - 5 RIS established in pilot phase, sustainability of 1 shaky. Proceeds from RIS go to revolving fund for establishing more RIS. MTTI replication project not showing progress. 18 new RIS established with SNV. Farmers must use WRS, but Uganda Commodity Exchange (UCE) has faced challenges with Warehouse Receipt System (WRS).
- l. Measurability: None
- m. Replicates: None
- n. Web-links: <http://www.iicd.org/projects/uganda-mtti-rural-information>;
<http://www.iicd.org/projects/uganda-snv/?searchterm=None>

1.4 Agriculture Research and Rural Information Network (ARRIN)

- a. Dates: 2004? -
- b. Type: Village Information Centre (INFOPOPS), Dance and Drama distributed electronically. INFOPOPS request dramas on a topic, Ndere Troupe develops a play and distributes the transcripts (text and video) electronically to the INFOPOPS (originally by internet, then CDrom, DVD via normal postal services). INFOPOPS then disseminate play in rural communities in local languages.
- c. Organizations: IICD, Ndere Troupe
- d. Funding: IICD
- e. Objective: Translate important messages (income generation, public policy, health, environment) to and from farmers to a much wider audience.
- f. Reaching farmers: Video showing of a drama. Unclear if INFOPOPS provide classic village information centre services. Demand driven info.
- g. Information salience, credibility and legitimacy: Salience high given request for info from INFOPOPS, credibility and legitimacy unclear.
- h. Information production and translation: Producers of info unclear, translated into farmer friendly formats by Ndere Troupe.
- i. Information and format flexibility: Information types unlimited, format limited to drama.
- j. Information environment: likely, given the ability of drama to holistically cover a topic.
- k. Sustainability: From IICD Website - Project logic was too complex, fighting technology (Internet connectivity upcountry). In 2005 it was decided to close down 3 INFOPOPS and to focus less on the ICT technicalities of the project and instead distribute plays by DVDs. This resulted into the survival of 5 INFOPOPS (though one is still shaky) plus the multi-media facility at the Ndere centre itself
- l. Measurability: None
- m. Replicates: None
- n. Web-links: <http://www.iicd.org/projects/uganda-arrin/?searchterm=None>

1.5 Making Sense of Forecasts: the Role of Group Discussion in Understanding Climate Information

- a. Dates: 2005-2006
- b. Type: Participatory dissemination
- c. Organizations: UC Davis, University of Georgia, Columbia University, Makerere University, Uganda Meteorological Department

- d. Funding: Centre for Research on Environmental Decisions
- e. Objective: Research to understand how farmers perceive, understand, and utilize seasonal climate forecasts; and how receiving and discussing forecasts in a group context alter perception, understanding and use of forecasts.
- f. Reaching farmers: Group meetings – farmers met and forecast was played in local language, then farmers discussed forecast in their groups. Supply side info
- g. Information salience, credibility and legitimacy: salience unknown, credibility and legitimacy increased by presence of Westerners from research team
- h. Information production and translation: Forecast produced by Uganda met service, translated without alteration into local language by research team
- i. Information and format flexibility: low - information covered was forecast, format tape cassette meant to mimic radio broadcast
- j. Information environment: created by group discussion amongst farmers, research reports do not seem to indicate that further information or context was provided by research team on using and applying forecast
- k. Sustainability: research project, but meant to mimic a radio broadcast. Personal communication Milton Waiswa, Met service - by discussing the forecast in groups the climate info became more important for individual farmers. The problem is that outsiders and funds brought people together. The potential to achieve similar results without outside influence is low.
- l. Measurability: Research project
- m. Replicates (multiple examples of model, multiple countries): Forecast distribution via radio is increasingly common and possible given explosion of rural radio, community radio, farm radio. Perhaps greatest lesson from project regarding mass dissemination of information to farmers, beyond published findings regarding participation, is importance of translation and creation of information environment in broadcast content. Rural radio stations choose formats and messages pertinent to their listeners – perhaps emphasis in encouraging climate information dissemination should be on working with such boundary partners to improve their skills in creating usable climate info, given what they receive from met services, in an information environment. See BRODSI
- n. Web-links: <http://www.cred.columbia.edu/research/projects/uganda/>

1.6 Collecting and Exchange of Local Agricultural Content (CELAC)

- a. Dates: ?
- b. Type: Farmers Groups. SMS and cell phone discussion groups, rural radio call in programs, videos of drama, music and dance, website, monthly online newsletter. SMS are sent to phones in a farmers group every Monday so that farmers know to turn on the phone and receive them. Monthly discussions with farmers groups using cell phone voice conferencing function are facilitated by a BRODSI extension worker.
- c. Organizations: BRODSI (Bugosa Rural Open Source and Development Initiative)
- d. Funding: ?
- e. Objective: Collecting and Exchange of Local Agricultural Content (CELAC) Improving rural farmers' livelihoods through enabling food security by engaging government, private sector, and civil society in knowledge sharing and information management of agricultural local content using ICT.
- f. Reaching farmers: SMS, radio, DVDs of drama. Interaction with farmers is possible during monthly farmer group consult with BRODSI extension specialist and during radio call in. Supply side info
- g. Information salience, credibility and legitimacy: Salience is increased as BRODSI attempts to supply information pertinent to groups it works with. Credibility and legitimacy unknown.
- h. Information production and translation: Produced outside, translated by BRODSI

- i. Information and format flexibility: Flexibility built into SMS and radio format by creating interactive features where farmers can ask questions about info provided. Information covers wide variety of agriculture topics.
- j. Information environment: Aim is to create info environment so that farmers can best take advantage of info on new technologies and methods.
- k. Sustainability: Requires funding and extension from NGO, but reaching a large number of farmers
- l. Measurability: Reports on website.
- m. Replicates: BRODSI a partner in Uganda Grameen/MTN Village Phone project – focused on information content relevance for rural communities. SMS and radio to reach farmers has become a common approach. BRODSI is unique in support provided through interactive features.
- n. Web-links: http://celac.or.ug/index.php?option=com_content&view=article&id=18&Itemid=37

2. Kenya

2.1 Maarifa Centres and Sokopepe

- a. Dates: 2007 – present
- b. Type: Community Knowledge Centres (4 computers, printer, GPRS internet, phones, solar power if necessary, libraries with books, newsletters, journals, research reports, CD ROMS, DVDs, Videos). Sokopepe is an internet-based market portal. Ongoing needs assessments in each community to identify appropriate information resources to place in centre. Centre managed by CIF, staffed by CIVs and available to farmers and CKWs.
- c. Organizations: Arid Lands Information Network (ALIN); each Maarifa centre established with host organization in region.
- d. Funding: ALIN
- e. Objective: To increase information and knowledge capacity of communities and enable them to turn past experiences into lessons. To enhance documentation of local content, share knowledge and offer training and discussion room for community workshops, exhibitions etc.
- f. Reaching farmers: Community Information Volunteers (CIVs); community knowledge facilitator (CIF). Direct through centre ICT or indirect through community knowledge workers (CKW). CIVs and CDWs share their knowledge with ALIN for dissemination via openeNRICH software, the Baobab journal, website, community radio etc. Mostly supply side info, some demand driven via needs assessments.
- g. Information salience, credibility and legitimacy: Salience high since based on needs assessments, credibility and legitimacy likely higher than other ICT formats as physically accessible
- h. Information production and translation: Produced outside, likely little translation beyond advice through CKW if accessible.
- i. Information and format flexibility: All types of info, multiple formats.
- j. Information environment: Potential is high
- k. Sustainability: 9 centres established in Kenya but requires donor funding
- l. Measurability: Some assessment provided in ALIN annual reports
- m. Replicates: 1 centre each Uganda and Tanzania. Maarifa centres are an evolution of WorldSpace experience with information dissemination. Multiple examples of community knowledge centres in CCAFS EA countries.
- n. Web-links: http://alin.net/?maarifa_centres

2.2 Rural Internet Kiosks Project

- a. Dates:

- b. Type: Village Information Centre - Rural Internet Kiosks (RIK), movable, recyclable, cost-effective kiosks that operate with satellite connectivity and solar energy and have 3 computers. Knock-down allowing easy transport and set-up. Focused on open source Ubuntu Linux, etc.
- c. Organizations: Rural Internet Kiosks (RIK), Kenyan private sector company, JawaharPatani, jawaharpatani@gmail.com; software by Useful; internet connectivity by InterSat Africa
- d. Funding: ?
- e. Objective: Achieving MDGs through connectivity for rural communities.
- f. Reaching farmers: Through computers. Access designed for all including children and the disabled. Working on portable USB pen screen readers and websites for visually impaired and non-English literate. Supply side info.
- g. Information salience, credibility and legitimacy: Salience not established
- h. Information production and translation: Produced outside, no translation.
- i. Information and format flexibility: agriculture, health, telemedicine, the environment, and e-governance, climate, markets, etc., format limited to Internet.
- j. Information environment: High, given user has capacity to access additional info related to subject of interest
- k. Sustainability: ?
- l. Measurability: None
- m. Replicates: None in CCAFS countries. Outside of CCAFS countries Nigeria, Rwanda, and Zambia.
- n. Web-links: <http://www.ruralinternetkiosks.com/index.html>

2.3 DrumNet Project

- a. Dates: 2004 - present
- b. Type: Village Phone Centre with SMS application. Market Centre Offices (MCOs) in both Nairobi's Central Farmers Market and in Karatina. SMS scouting, data mapping and tailored reporting - market trends, weather, prospective partners, etc - produce aggregation and post-transaction payment processing.
- c. Organizations: Pride Africa, Tom Rausch (trausch@prideafrica.com), Regional Director for East Africa; IDRC, Edith Adera, Senior Program Specialist Acacia; University of Nairobi's Institute for Development Studies (IDS); the Centre for Basic Research in the Social Sciences at Harvard University; and the Department of Economics and International Affairs at Princeton University.
- d. Funding: IDRC
- e. Objective: Improve overall market efficiency to help reduce poverty
- f. Reaching farmers: Via SMS, supply side info.
- g. Information salience, credibility and legitimacy: Salience not established
- h. Information production and translation: Producers of information unclear. No translation.
- i. Information and format flexibility: a range of for-fee services limited to agriculture, including market linkages, real-time market price information, the coordination of produce transport, and group purchase of farm inputs, as well as information on leading farming techniques. Format limited to SMS.
- j. Information environment: ?
- k. Sustainability: Possible given rural entrepreneurs as service providers
- l. Measurability: Research project in 2004 with case (participating) and control farmers
- m. Replicates: None, similar to MTN Village Phones (Grameen Foundation)
- n. Web-links: <http://www.prideafrica.com/ourwork.php#tab1>

2.4 Safaricom M-Pesa, M-Kesho and 411 Get It with SMS Sokoni

- a. Dates: 2007 - present
- b. Type: SMS, money transfer, banking on mobile phones

- c. Organizations: Safaricom, Kenya private sector company
- d. Funding: Private sector
- e. Objective: Banking, money transfer and information services targeting rural populations
- f. Reaching farmers: SMS via 411 Get It news, entertainment, verses, quotes, horoscopes, stock exchange, jobline, Kenya Living, and via SMS Sokoni Commodity prices, market transactions, and farm input advice; supply side info
- g. Information salience, credibility and legitimacy: salience not established
- h. Information production and translation: Produced outside, no translation
- i. Information and format flexibility: multiple information types. Also allows money transfer and banking. Format limited to SMS.
- j. Information environment: Low
- k. Sustainability: Private, high
- l. Measurability: Chris Mwangi CTA contest essay winner for East Africa on youth and ICT; FSA reports on M-Pesa and M-kesho
- m. Replicates: Increasingly common services being provided by mobile phone service providers throughout Africa
- n. Web-links: <http://www.safaricom.co.ke/index.php?id=292>

2.5 Kenya Meteorological Department/Kikawa Field School Partnership

- a. Dates:?
- b. Type: Demonstration station. Measuring local rainfall and temperature, trials of agriculture-fodder-forestry adaptation to climate info, rainwater harvesting, crop varieties, soil profiling, evapotranspiration, extension services, student attachment
- c. Organizations: Kenya Meteorological Department, Ministries of Agriculture and Livestock, Kenya Forestry Research Institute, Provincial Administration, Local community Kikawa Field School of Faida Seeds (Charles Ng'ang'a, coordinator, kikawafieldschool@faidaseeds.com)
- d. Funding: ?
- e. Objective: Partnership to create new users of climate information and develop applications and technologies for the use of climate info.
- f. Reaching farmers: Field station visits, extension services, supply side (farmers receive results of field trials at station) and demand driven info (new trials can be created based on farmers needs)
- g. Information salience, credibility and legitimacy: Unknown if trials are addressing farmers most important questions. Salience increased with new trials based on farmers' questions; seeing application of climate info increases its credibility and legitimacy
- h. Information production and translation: produced by met service, translation through Kikawa Field School
- i. Information and format flexibility: format limited to agriculture technologies demonstration, information limited to technologies and methods for using climate info
- j. Information environment: high, as research and demonstrations are 'live' and include all aspects of putting climate info into practice
- k. Sustainability: sustainable technologies
- l. Measurability: ?
- m. Replicates: ?
- n. Web-links: <http://www.faidaseeds.com/>

2.6 Integrating Indigenous Knowledge in Climate Risk Management in support of Community Based Adaptation

- a. Dates: 2008 - present

- b. Type: Participatory dissemination – met service working with traditional weather forecasters in Nganyi community to produce and disseminate consensus (scientific and traditional) seasonal climate forecasts using traditional communication channels
- c. Organizations: Nganyi community, ICPAC, KMD, KIPI, NMK (Kisumi), GLUK
- d. Funding: Climate Change Adaptation in Africa (CCAA) of UK’s Department for International Development and Canada's International Development Research Centre
- e. Objective: to enhance the resilience of vulnerable communities to the negative impacts of climate variability and adapt to climate change through integration of indigenous knowledge (IK) and western climate risk management science
- f. Reaching farmers: ceremonies, public meetings and person-to-person - established methods of communication in communities where many cannot read or write. Supply side info
- g. Information salience, credibility and legitimacy: integration of traditional and scientific forecasts should increase credibility and legitimacy. Unknown if info is addressing farmers’ most important questions.
- h. Information production and translation: Production and translation is a collaboration between scientists and traditional forecasters
- i. Information and format flexibility: forecasts only, traditional formats
- j. Information environment: forecasts only
- k. Sustainability: questionable if effort would continue without funding
- l. Measurability: Research project
- m. Replicates: ?
- n. Web-links: <http://www.africa-adapt.net/aa/ProjectOverview.aspx?PID=PUXVdbXh9bM%3D>, http://www.idrc.ca/en/ev-118882-201_104903-1-IDRC_ADM_INFO.html

2.7 Community-based Climate Change Adaptation Programme (CCCAP)

- a. Dates: 2009 - present
- b. Type: Video of drama - document climate change impact, build adaption capacity, promote sharing, and inform the decision and policy making process of community perspectives
- c. Organizations: Resource Africa UK
- d. Funding: ?
- e. Objective: to communicate local climate change adaptation through the use of community based theatre, photo and video story techniques, a cross-media web site, case study video documentaries, and a ‘toolbox’ of information and methodologies to address Tenure rights and conflicts, Information flow and Network support.
- f. Reaching farmers: drama and visual techniques, unknown how visual documents are spread in communities; mostly demand driven, some supply side info.
- g. Information salience, credibility and legitimacy: salience high as info produced is based on community demand; credibility and legitimacy unknown
- h. Information production and translation: by community with support from NGO
- i. Information and format flexibility: Limited to visual documentation, information types unlimited
- j. Information environment: High, as methods allow for holistic approach to subject
- k. Sustainability: Relies on funding from NGO
- l. Measurability: ?
- m. Replicates: Tanzania and Southern Africa (Namibia, South Africa)
- n. Web-links: <http://www.resourceafricauk.org/cccap.php>

2.8 Makutano Junction

- a. Dates: ?
- b. Type: TV drama with mobile SMS/Text interface to obtain detailed follow-up information about key development issues addressed in weekly show

- c. Organizations: Mediae.org, Steadman and Associates (Research)
- d. Funding: Ford Foundation, DFID, Land o'Lakes; each show has a different funder
- e. Objective: To portray through TV drama significant social and development issues, thereby impacting knowledge and behaviours
- f. Reaching farmers: TV, SMS feature on issues covered. Supply side info.
- g. Information salience, credibility and legitimacy: Salience increased by research to determine most important topics to address; drama broadcast on TV captures attention and interest, increases perceived credibility and legitimacy
- h. Information production and translation: Producers of information unclear, high degree of translation suitable for EA audiences
- i. Information and format flexibility: format limited to drama, but SMS interface allows farmers to follow-up with queries, content highly flexible
- j. Information environment: Drama allows holistic coverage of topics
- k. Sustainability: 7.5 million viewers in Kenya
- l. Measurability: Imbedded research component. From Mediae.org website, 'Research shows that Makutano's interactive and participatory elements significantly deepen the project's impact. 68% are rural viewers. 53% women.' Research reports should be accessible.
- m. Replicates: showing in Uganda (most popular TV show in country) and Tanzania through DSTV. Unknown if other TV shows exist, but likely
- n. Web-links: http://www.mediae.org/makutano_junction; www.makutano.org

2.9 Index-based Livestock Insurance (IBLI) and KilimoSalama

- a. Dates: 2009 – present (KilimoSalama); 2010 – present (IBLI)
- b. Type: Index-based agriculture insurance. For KilimoSalama insurance premium of 10% of inputs, 5% met by farmer and 5% by Syngenta EA Limited (seeds) and MEA Limited (fertilizers). Local agents register a policy with UAP by using a camera-phone to scan a bar code. Farmers registered to nearest weather station. 30 automated solar-powered weather stations. Station transmits via GPRS. In case of bad weather farmers are automatically paid via M-Pesa. For IBLI satellite imagery used to determine and predict potential losses of livestock forage which are basis for payout through the Hunger Safety Net Program (HSNP).
- c. Organizations: UAP Insurance of Kenya, Safaricom, Syngenta EA, MEA Fertilisers, AGMARK (KilimoSalama); ILRI, University of Wisconsin BASIS, Cornell, Syracuse University, Equity Insurance Agency, UAP Insurance Limited, Financial Sector Deepening (FSD) Kenya, Kenya Meteorological Department, Ministry of Development of Northern Kenya and other Arid Lands, Ministry of Livestock (IBLI)
- d. Funding: Syngenta Foundation, Foundation for Sustainable Agriculture (KilimoSalama); DFID, USAID, World Bank (IBLI)
- e. Objective: To insure small-holder farmers against climate variability
- f. Reaching farmers: agriculture supply shops and SMS (KilimoSalama); project partners (IBLI); supply side info
- g. Information salience, credibility and legitimacy: not an information service
- h. Information production and translation: not an information service
- i. Information flexibility: none
- j. Information environment: none
- k. Sustainability: KilimoSalama trial with 200 farmers 2009, the trial scheme was hit by one of the worst droughts in decades triggering compensation payments of 80% of farmers' investments, expanded to 11,000 farmers in western and central Kenya 2010, self-financing with minimal transaction costs and no paperwork; IBLI 2000 households in Marsabit in 2010
- l. Measurability: IBLI is a research project
- m. Replicates: KilimoSalama expanding to EA in 2011; IBLI expanding to Ethiopia; World Food Program Ethiopia program; Oxfam Harita program Ethiopia; other programs in EA
- n. Web-links: <http://www.syngentafoundation.org/index.cfm?pageID=674>; <http://www.ilri.org/ibli/>

2.10 ShujaazFM and Farm Inputs Promotions Africa (FIPS)

- a. Dates: 2010 - present
- b. Type: Extension (FIPS-Africa Village Based Agriculture Advisors, make available farm inputs in small affordable quantities, supported by information about how to maximise their use); comic books (monthly, main focus of Shujaaz); rural radio (daily syndicated Shujaaz program, weekly call-in Shujaaz discussion program) with SMS for interactive audience feedback; Shujaaz TV (planned animated cartoons); website. Info is agriculture, based on research to identify relevant topics.
- c. Organizations: Well Told Story; Farm Input Promotions Africa Ltd; Athi River Mining Limited; Minijingu Mines & Fertilizer Ltd; Osho Chemical Industries; Pannar Seeds Co; Well Told Story Ltd; Western Seeds Co.; University of Exeter; Bangor University
- d. Funding: Research Into Use (RIU)
- a. Objective: To provide young people with ideas and knowledge to generate income through agricultural activities, and support the development of new networks of service providers amongst the Kenyan youths. FIPS-Africa will create demand for new varieties of crops such as maize, beans, cowpea, pigeon pea, cassava and sweet potatoes, and improved fertilizer blends, in East Africa, working closely with seed, fertilizer and other input supply companies, and national agricultural research centres; to integrate outputs from selected successful agricultural research projects, including from the DFID-funded RNRRS to improve soil, crop and livestock management
- e. Reaching farmers: private extension workers. Comic book in Sheng (combination of Swahili and English widely spoken by cool young Kenyans), free inside the Saturday Nation newspaper and at Safaricom M-Pesa shops. Radio series on Qfm (nationwide) and is being syndicated also to Koch FM, Pamoja FM and Lake Victoria Radio, with other stations expected to join for as wide as possible regional distribution Shujaaz creates brand name widely recognizable to young Kenyans. Supply side (Shujaaz) and demand driven (extension workers) info.
- f. Information salience, credibility and legitimacy: Salience high, based on study to identify info needs, credibility and legitimacy likely high given format with young followers
- g. Information production and translation: Shujaaz - Production unknown, translated by professional team at Shujaaz; FIPS-Africa private sector but using outputs of DfID RNRRS.
- h. Information and format flexibility: Info is agricultural, but covering broad range of livestock and crop topics; format includes visual (comic books and TV) as well as radio and SMS, and face-to-face.
- i. Information environment: High, given variety and nature of formats.
- j. Sustainability: Of FIPS-Africa high given private sector, Shujaaz ?
- k. Measurability: 600,000 copies per month and an anticipated readership of 12 million. 100 SMS daily.
- l. Replicates: Low word content messaging (flip charts, posters, etc) commonly used development tool in Africa to target non-literate audiences. Village-based Agriculture Advisors (private sector) appears similar in concept at MTN/Grameen Community Knowledge Workers in Uganda, although sustainability of MTN/Grameen model not clear beyond project lifetime. This program is unique in that it ties together multiple media through a brand, and targets young audiences. In Uganda and Tanzania
- m. Web-links: www.shujaaz.fm;
<http://www.researchintouse.com/bestbets/bb37shujaaz01about.html>

3. Ethiopia

3.1 Livestock Information Network Knowledge System (LINKS) and Livestock Early Warning System (LEWS)

- a. Dates: 1997 – 2009?
- b. Type: SMS, rural radio, website
- c. Organizations: [Global Livestock Collaborative Research Support Program \(GL-CRSP\), Texas A&M University](#)
- d. Funding: USAID
- e. Objective: Provide regular livestock prices and volume information on most of the major livestock markets in Ethiopia, Kenya and Tanzania along with information on forage conditions, disease outbreak, conflict and water supply to support decision making at multiple scales
- f. Reaching farmers: SMS, radio and internet. Livestock information monitors, but unclear of level of interaction with farmers (trained to enumerate questionnaires, but apparently not trained to provide extension advice). SMS and internet systems complex, not farmer friendly. Internet involves multi-windowed data bases providing tabular downloads in code. SMS requires knowledge of code system for location and data required. Supply side info
- g. Information salience, credibility and legitimacy: Salience high, credibility and legitimacy unclear
- h. Information production and translation: Produced by project, no translation
- i. Information and format flexibility: market info, early warning info, no format flexibility
- j. Information environment: none
- k. Sustainability: technical components require external funding source. LINKS and LEWS websites remain live, but host organizations and funding could not be identified.
- l. Measurability: research project
- m. Replicates: Kenya, Tanzania and Mali. Many market information programs and projects throughout Africa.
- n. Web-links: EA - <http://www.lmistz.net/Pages/Public/Home.aspx>; Mali - <http://www.malibetail.net/Pages/Public/Home.aspx>

3.2 Woreda Knowledge Centers, Improving Productivity & Market Success (IPMS) of Ethiopian Farmers Project

- a. Dates: 2004 - 2010
- b. Type: Community Knowledge Centres and the MoARD Ethiopian Agriculture Portal (EAP) for agriculture experts. Woreda Centres have five computers, printer, TV set, DVD Player, books, manuals, training materials, demonstration materials.
- c. Organizations: ILRI and Ethiopian Ministry of Agriculture and Rural Development (MoARD)
- d. Funding: CIDA
- e. Objective: To contribute to improved agricultural productivity and production through market-oriented agricultural development, as a means for achieving improved and sustainable livelihoods for the rural population.
- f. Reaching farmers: Government extension personnel that access Woreda Knowledge Centres. It does not appear that giving farmers access to centres is objective of project, nor does it appear that reaching government extension personnel is an objective of project. Supply side info
- g. Information salience, credibility and legitimacy: Salience unclear as information needs of communities do not appear to be assessed, credibility and legitimacy likely higher than other ICT formats as physically accessible
- h. Information production and translation: Produced outside, likely little translation beyond advice through extension worker if accessible.
- i. Information and format flexibility: All types of info, multiple formats.
- j. Information environment: Potential is high

- k. Sustainability: Project dependent. Model intended as an upgrade of the Ethiopian government's 15,000 Farmer Training Centres
- l. Measurability: research project, but publications don't address Woreda Knowledge Centres
- m. Replicates: none, but many examples of community knowledge centres throughout Africa
- n. Web-links: <http://www.ipms-ethiopia.org/default.asp>, www.eap.gov.et

4. Mali

4.1 Agrometeorology Project

- a. Dates: 1982 – present
- b. Type: Met service dissemination (10-day bulletins and 3-day forecasts). Multi-disciplinary working group established with local level replicates. Functions of working group – identify farmers' info needs, analyze technical aspects of data and products, develop recommendations related to agricultural production, disseminate info and build capacity. Farmers supplied with rain gages and provide data to regional met offices.
- c. Organisations: GoM meteorological service, AGRHYMET, WMO, national and rural radio and television networks, Compagnie Malienne de Coton, the Office de Riz Ségou (ORS), the Organisation de la Haute Vallée du Niger (OHVN), and the Programme d'Appui aux Initiatives des Producteurs et Productrices Agricoles (PAIP/HELVETAS)
- d. Funding: Swiss Agency for Development and Cooperation (SDC) through 2005, GoM 2005 onward
- e. Objective: To identify whether and how climate information might be useful to farmers in a system where farmers have access to extension services.
- f. Reaching farmers: Extension workers, radio, newspaper, television. Supply side info
- g. Information salience, credibility and legitimacy: Information supplied based on farmer surveys of needs increases salience; credibility and legitimacy unknown
- h. Information production and translation: Produced by met and agriculture services, translated by working group
- i. Information and format flexibility: Information covers 10 and 3 day climate forecasts with related technologies and methods; format appears to be bulletins supplied to partners and then provided to farmers via multiple formats (radio, extension advice, etc)
- j. Information environment: High, providing info on technologies and methods for using climate info
- k. Sustainability: Long-term, currently funded by GoM
- l. Measurability: From Hellmuth, M.E., Moorhead, A., Thomson, M.C., and Williams, J. (eds) 2007. Climate Risk Management in Africa: Learning from Practice. International Research Institute for Climate and Society (IRI), Columbia University, New York, USA. Pilot phase was research project; currently 2000 farmers in 5 districts; 80% of radio audiences in the project areas follow the agrometeorological bulletins.
- m. Replicates: CFAR project in Burkina Faso, almost all African met services engaged in distribution of climate info.
- n. Web-links:

4.2 JefakoGelekan - Rural Information System for Farmers in the Sikasso region

- a. Dates: ?
- b. Type: Community Knowledge Centres – computers and internet, local radio (20 stations)
- c. Organizations: Sikasso Regional Committee for Coordination of Rural People (CRCR), seven Local Committees for Coordination of Farmers' Organisations (CLCOPs), 215 local organisations, a total of more than a million farmers
- d. Funding: IICD
- e. Objective: to improve communication and information between local farmers' organisations in the province of Sikasso and the regional and national authorities.

- f. Reaching farmers: some farmers trained to use internet, CLCOP leaders to pass agriculture info to farmers and vice versa, radio. Supply side info
- g. Information salience, credibility and legitimacy: unknown, supply driven
- h. Information production and translation: Produced by CRCR Sikasso, translation through CLCOP leaders
- i. Information and format flexibility: information focused on agriculture policy, formats include document sharing between CRCR and CLCOPs, Radio broadcasts focused on Agriculture legislation (Loid'Orientation Agricole or 'LOA'), presumably farmer union meetings where CLCOP share info gained from internet
- j. Information environment: Via documents emailed likely low, if CLCOP are research agriculture policy issues on internet higher
- k. Sustainability: From IICD website – cost of connectivity and electricity infrastructure high; current information products will not provide incentives for farmers to invest in centres; 3 CLCOPs have difficulty with internet connectivity; farmers feel less intimidated by internet when CLCOP leaders act as intermediaries
- l. Measurability: ?
- m. Replicates: Likely largest Village Knowledge Centres project in WA, an increasingly popular model for farmer access to info and examples exist in all CCAFS countries. Francophone WA model seems to provide info through farmer cooperatives rather than directly to farmers
- n. Web-links: www.crcr-mali.org; <http://www.iicd.org/projects/mali-jefako-gelekan/?searchterm=None>

4.3 SeneKunafoniBulon

- a. Dates: 2004 - present
- b. Type: Community Knowledge Centre. Farmer organization offices equipped with Information and Communication Technology (ICT) equipment (internet). Organization leaders interact with IER and use ICT to repackage agriculture and market info for their farmer constituents using video, radio, posters and extension.
- c. Organizations: Union of Mango producers, Federation of Potato producers, Federation of Women Mango Transformers, Institute for Agricultural Research (IER) Sikasso
- d. Funding: IICD
- e. Objective: To improve information flow from head offices to farmers and value chain actors, and to acquire knowledge about the production, conservation and commercialisation of agricultural products by translating, repackaging and channelling existing academic information on productivity, conservation, transformation and commercialisation in ways that can be better absorbed and understood by local farmers
- f. Reaching farmers: Extension from farmer organizations, video, radio and posters. Demand driven in that farmer organizations are cognizant of what types of info their constituents need and can access and translate that info.
- g. Information salience, credibility and legitimacy: Salience high as info is based on constituents' needs, credibility and legitimacy increased through participation of IER.
- h. Information production and translation: Produced outside, translated by IER and farmer organizations.
- i. Information and format flexibility: Ag and marketing information, format includes visual extension and one-on-one
- j. Information environment: High, given that farmers organizations are focused on providing information packages suitable for farmers
- k. Sustainability: ?
- l. Measurability: ?
- m. Replicates: Likely high in country and CCAFS regions.
- n. Web-links: <http://www.iicd.org/projects/mali-sene-kunafoni-bulon/?searchterm=None>

4.4 Rural Information System for the Mandé Region

- a. Dates: 2004 - present
- b. Type: Village Information Centre – 5 Fabema village centres with solar powered short wave radio and internet at AAAG headquarters in Bamako allowing information to be sent from Bamako to and from all the connected villages, and between the villages themselves. Fabema centres working with Communal Health Centres (CSComs) on info campaigns using digital cameras, video and slideshows
- c. Organisations: AAAG (Association d’Aide et d’Appui aux Groupements), Fabema (Fédération des Organisations de Base du Mandén)
- d. Funding: IICD
- e. Objective: Improve communication between local NGOs and constituents to improve agriculture productivity, market access and commercialization, and enhance health awareness.
- f. Reaching farmers: some farmers trained to use internet, village volunteers located in village information centre; community health workers located in CSComs; supply side info
- g. Information salience, credibility and legitimacy: Salience low. Initial focus of project was to provide farmers with market prices, but found that marketing was entirely local with low profit margins making it unattractive for farmers to seek alternative markets. So project switched to health communication.
- h. Information production and translation: Produced by AAAG, translation by AAAG and Fabema
- i. Information and format flexibility: Visual formats, information appears to be focused on health
- j. Information environment: May be high as format allows for more holistic coverage of topic, but presentations prepared for farmers appears rigid
- k. Sustainability: ?
- l. Measurability: ?
- m. Replicates: Shortwave connection to internet operator appears to be unique
- n. Web-links: <http://www.iicd.org/projects/mali-aaag/?searchterm=None>

5. Burkina Faso

5.1 Market Price Information System Using Web and National Television

- a. Dates: 2005 – present
- b. Type: TV Koodo – monthly 3-minute TV show, hosted by 2 puppets and guests, on livestock and grain market prices while addressing the trials and tribulations of farming; IABER website - a market price system linked to a database and website to inform buyers and sellers of agricultural products on market prices
- c. Organisations: Institut Africain de Bio-Economie Rurale (IABER)
- d. Funding: IICD
- e. Objective: to disseminate price information on agricultural products, especially cereals, oil products and animals, on a national scale through television and a specially designed website.
- f. Reaching farmers: via TV, supply side info
- g. Information salience, credibility and legitimacy: salience not established
- h. Information production and translation: Produced and translated by IABER
- i. Information and format flexibility: Format is drama on TV, information is market focused but has shown some flexibility
- j. Information environment: High, given format but IABER may not have expertise to provide information environment around market prices
- k. Sustainability: IABER is small and may have difficulty maintaining productions
- l. Measurability: One million viewers
- m. Replicates (multiple examples of model, multiple countries): ?

- n. Web-links: www.iaber.bf; <http://www.iicd.org/projects/burkina-iaber/?searchterm=None>; <http://www.comminit.com/en/node/284323/306>

5.2 TinTua

- a. Dates: 1986 - present
- b. Type: Literacy program - Based on needs identified by villagers themselves, Tin Tua developed a curriculum in five local languages covering basic literacy and numeracy skills along with practical knowledge about health, hygiene, human rights, gender, and farming.
- c. Organizations: Tin Tua (local NGO)
- d. Funding: Swiss Agency for Development and Cooperation
- e. Objective: to pursue the fight against illiteracy; work towards the development of literature in local languages; assist people, particularly women and youth, to take charge of their self-development; support rural entrepreneurship and promote development of economic, social, and cultural activities; and research, adopt, and disseminate information around desertification, habitat preservation, health, and food security.
- f. Reaching farmers: through literacy classes where development issues are integrated into literacy lessons. Supply side info
- g. Information salience, credibility and legitimacy: salience not established
- h. Information production and translation: production and translation by Tin Tua
- i. Information and format flexibility: The first objective of the information format is literacy training
- j. Information environment: Likely limited by primary objective
- k. Sustainability: High, participants pay for classes.
- l. Measurability: 40,000 learners across 750 villages each year
- m. Replicates: Community-based literacy programs are common, focus on inclusion of practical knowledge as material for literacy development unique.
- n. Web-links: <http://www.tintua.org/>; <http://www.comminit.com/en/node/310900>; [http://www.sdc.admin.ch/en/Home/News/Close up?itemID=182030](http://www.sdc.admin.ch/en/Home/News/Close_up?itemID=182030)

5.3 Climate Forecasting for Agricultural Resources (CFAR)

- a. Dates: 1998 - 2007
- b. Type: Participatory dissemination
- c. Organizations: Tufts University, University of Georgia, Burkina Faso Meteorological Service, INERA, Plan International
- d. Funding: NOAA
- e. Objective: To identify incentives and obstacles for dissemination of seasonal forecasts, and how to best disseminate, interpret and add value to seasonal climate forecasts
- f. Reaching farmers: participatory meetings, interactions with project animators, interaction with scientific (DMN, INERA) partners, handouts, radio broadcasts. Supply side info
- g. Information salience, credibility and legitimacy: Farmers indicated that forecasts met only some of their information needs
- h. Information production and translation: Info produced by DMN, translated by workshop facilitators and animators
- i. Information and format flexibility: Information focused on climate forecasts and agriculture production, format was highly interactive
- j. Information environment: participatory meetings allowed for creation of info environment around forecasts
- k. Sustainability: Forecast dissemination did not continue beyond project
- l. Measurability: Research
- m. Replicates: Most met services in Africa disseminating climate forecasts. Replicates of participatory approaches in Uganda and Kenya
- n. Web-links:

6. Ghana

6.1 IITA Sustainable Tree Crop Program (STCP) Extension

- a. Dates: 2003 - present
- b. Type: Farmer Field School, video – graduates of farmer field schools supported in making videos about cocoa production
- c. Organizations: CAB International, Ghana Crop Research Institute, Cocoa Research Institute Ghana, IITA Sustainable Tree Crop Programme regional office for West and Central Africa, Strategic Communications Africa Ltd.
- d. Funding: CAB International
- e. Objective: teach improved cultivation principles and pest management to cocoa farmers
- f. Reaching farmers: via video, supply side info, but videos are made by local farmers about solutions to problems they are facing
- g. Information salience, credibility and legitimacy: Salience high as addresses current local problems, credibility and legitimacy unknown
- h. Information production and translation: produced and translated by local farmers
- i. Information and format flexibility: Information specific to cocoa
- j. Information environment: high, format allows holistic treatment of issue
- k. Sustainability: ?
- l. Measurability: ?
- m. Replicates (multiple examples of model, multiple countries):
- n. Web-links: <http://ictupdate.cta.int/index.php/en/Feature-Articles/Ghanaian-cocoa-farmer-videos-tackle-pod-pest>

6.2 Community Information Centre (CIC) Initiative

- a. Dates: ?
- b. Type: Community Knowledge Centres – 5 computers, internet. Targets District Assembly members and government officials, farmers and traders, teachers and students. Centres to be staffed by local government.
- c. Organizations: Ministry of Communications Ghana Investment Fund for Telecommunications GIFTEL, Ministry of Local Government. Ministry of Information and National Orientation (MINO)
- d. Funding: IICD
- e. Objective: Complement the CIC initiative with activities that will enhance the development impact and the sustainability of the CICs; deploy the experiences and lessons-learned from IICD-supported projects, with specific regard to content development and the utilization and mobilization of user groups at community level
- f. Reaching farmers: via internet. Supply side info
- g. Information salience, credibility and legitimacy: salience not established
- h. Information production and translation: Produced outside, likely little translation beyond advice through CIC staff if accessible.
- i. Information and format flexibility: All types of info, multiple formats.
- j. Information environment: Potential is high
- k. Sustainability: GoG will build 230 CICs, this project supports 10 in Northern Ghana.
- l. Measurability: ?
- m. Replicates: Many governments are encouraging (direct finance to guiding NGOs) the establishment of centres to provide communities with information. This project is unique in that coverage of the entire country with internet access through community knowledge centres is planned by the central government working through local governments.
- n. Web-links: <http://www.iicd.org/projects/ghana-cic/?searchterm=None>

6.3 Eastern Corridor Agro-Information Centre (ECAMIC): A three year learning process

- a. Dates: 2003 - present
- b. Type: SMS – Esoka Platform (formerly Tradenet) district market prices SMS alerts and requesting prices from various market centres. Notice boards in 10 communities. Market Information Centres. Farmer cooperatives information officers (trained in ICT).
- c. Organizations: Social Enterprise Development Foundation of West Africa (SEND Foundation)
- d. Funding: IICD
- e. Objective: To provide smallholders timely, accurate and concise agricultural market information so that they can make informed judgement on the marketing of their crops (soybean, pepper, okro, maize, cassava, beans and groundnut); to provide farmer cooperatives with information on farm inputs (agro-chemicals, improved seed, farm-implements), health (nutrition, reproductive health, HIV/AIDS) and relevant government policies; to develop the capacity of individual farmers (and in groups) to use mobile phones and internet facilities to carry out agro-market transactions (upload prices, receive price offers, make offers/bids, follow-up market negotiations, etc.) in a much faster and economical manner; to develop the capacities of farmer-cooperatives to be effective and efficient in information down-streaming.
- f. Reaching farmers: SMS, including queries and function allowing sales interactions with farm produce buyers. Notice boards in community centres. Market info centres allow face-to-face interaction, but are urban-based. Farmer Cooperative Officers. Supply side info.
- g. Information salience, credibility and legitimacy: salience not established
- h. Information production and translation: production and translation SEND.
- i. Information and format flexibility: Mostly market info (prices, buyers, two-way interaction for trading), primary format appears to be SMS providing low flexibility.
- j. Information environment: Low unless interacting with cooperative officer or market info centre.
- k. Sustainability: ?
- l. Measurability: 24 cooperative farmer communities with around 15.000 members
- m. Replicates: Many systems across Africa to provide farmers with market info. This system links farmers directly to buyers for trade.
- n. Web-links: <http://www.iicd.org/projects/ghana-ecamic/?searchterm=None>

6.4 African Farm Radio Initiative (AFRI)

- a. Dates: 2007 – Present
- b. Type: Rural Radio, research to explore linkages between radio and ICTs. Working with 5 radio stations in Ghana (Classic FM, Volta Star, Radio Ada, Radio Simli, Radio Afram Plains). Programming will introduce one new agricultural product that is known to contribute both to household nutrition and household income, new land use measures that are known to conserve or improve the quality of farm soils (e.g. contour ploughing, mulching, agroforestry), measures that have been proven to reduce post-harvest losses.
- c. Organizations: Farm Radio International; Agriculture extension department University of Ghana, Dr Pascal Atengdem
- d. Funding: Bill and Melinda Gates Foundation
- e. Objective: Aims to assess the effectiveness of farm radio on meeting the food security objectives of rural farming households in Africa. Research objectives:
 - How and in what ways is radio most effective in enabling smallholder farmers in Africa to address food security challenges?
 - How can new technologies such as cell phones, satellite radio and MP3 players increase the effectiveness of radio as a sustainable, interactive development communication tool?
- f. Reaching farmers: Radio broadcasts; interactive radio via phone-in shows, live community forums, radio diaries; mechanisms for farmer info access via ICT unclear; supply side

- g. Information salience, credibility and legitimacy: Salience not established, participatory approach for each station to provide info judged most salient to farmers, should be credible and legitimate as national advisory committee includes Ghana Community Radio Network, Ghana Information Network for Knowledge Sharing, KNUST – Kumasi, Ghana Broadcasting Corporation, Ministry of Food and Agriculture, Quarcoo Initiative, Ghana National Association of Farmer and Fishermen, WUSC, Council for Scientific and Industrial Research
- h. Information production and translation: Research focus is on production and translation to best serve farmers
- i. Information and format flexibility: Format fixed (radio), content highly flexible
- j. Information environment: High, given potential that radio format allows holistic coverage of a topic
- k. Sustainability: Rural radio is a proven media
- l. Measurability: Research project
- m. Replicates: Uganda, Tanzania, Mali, Ghana. Many rural radio stations, all African countries, experimenting with local ownership, agriculture support, etc
- n. Web-links: <http://www.farmradio.org/english/partners/afri/>

7. Senegal

7.1 Oxy'Jeunes de Pikine

- a. Dates: 1999 – present
- b. Type: Rural Radio – a school for training in community radio (convening, reporting, technical, etc), and has supported 12 community radio projects
- c. Organizations: La radio Oxy'Jeunes
- d. Funding: Development and Peace, Canada (CARITAS)
- e. Objective: Empower local communities in community radio so as to address pressing socio-economic, political, health, environmental, and cultural issues.
- f. Reaching farmers: The school supports individual radio stations. School graduates go on to form stations or take jobs in and influence important sectors such as radio and media.
- g. Information salience, credibility and legitimacy: The school focuses on radio content that is most important to communities, and is an award winning organization in good programming – thus credibility and legitimacy of info are important points in the curriculum.
- h. Information production and translation: Information from outside or communities, translated through radio journalism.
- i. Information and format flexibility: Information content is broad, format is radio but encouraging community participation.
- j. Information environment: High, given holistic nature of coverage allowed by format.
- k. Sustainability: Rural radio increasingly important medium for rural communities to access information.
- l. Measurability: PANOS Institute West Africa report
- m. Replicates: Many replicates of rural radio throughout Africa. Oxy'Jeunes de Pikine unique because it is a school focusing on training rural radio workers in excellence.
- n. Web-links: <http://www.panos-ao.org/ipao/spip.php?article15449&lang=en>

7.2 Jokko Initiative of the Community Empowerment Program (CEP)

- a. Dates: 2009
- b. Type: Village Phone Centre with SMS. Focus is women. Phase one is to teach basics of SMS to women in communities (mobile phones for literacy); phase 2 is to implement 3 SMS applications - the “Community Forum” allows a community member to disseminate information to a virtual network of her peers by sending a single text message, Jokkondiral!”

- allows SMS texting with relatives in the diaspora, and Community Management Committees to report on their activities. Piloting community telecenters in rural, off-grid communities
- c. Organizations: Tostan, UNICEF, Centre of Evaluation for Global Action (CEGA) at the University of California, Berkeley.
 - d. Funding: UNICEF
 - e. Objective: to empower people to harness the power of accessible mobile technology to improve their lives and those of their children by providing training to rural communities on the practical uses of standard cell phone capabilities and SMS texting.
 - f. Reaching farmers: SMS communications between farmers. Demand driven info
 - g. Information salience, credibility and legitimacy: This project does not focus on providing specific info, it focuses on providing means for women to communicate with one another and their social network.
 - h. Information production and translation: Ibid
 - i. Information and format flexibility: Any information, format is SMS
 - j. Information environment: ?
 - k. Sustainability: 800 participants in 25 villages. Relies on SMS platforms developed by UNICEF. Village phone centres are meant to be self-sustaining through profit.
 - l. Measurability: Evaluations through Berkley
 - m. Replicates: CEP is in 9 African countries including Mali, Jokko unique to Senegal
 - n. Web-links: <http://www.jokkoinitiative.org/>;
<http://www.tostan.org/web/page/824/sectionid/547/pagelevel/2/interior.asp>

7.3 InfoClim : Platform for Helping Vulnerable Communities Adapt to Climate Change

- a. Dates: 2007 - 2010
- b. Type: Demonstration Station (Communication Platform) - 4 communities in the region of Thiès with climate change observatories (computers, rain gages, etc - system to collect, process, share, and disseminate information on CC and their impacts on production systems), sensitize local actors, and identify and implement adaptation strategies to improve the living conditions of vulnerable populations, or at least slow down their degradation.
- c. Organisations: Centre de suiviécologique (CSE), ANAMS, FONGS, GREEN, LPA-SF, Labo Genre, ISRA/CERAAS, Communauté rurale de TaibaNdiaye, communauté rurale de NottoNdiobass, Communauté rurale de Fandène, la Ville de Thiès et le Conseil Régional de Thiès
- d. Funding: IDRC
- e. Objective: Help vulnerable populations gain access to science-based information in order to strengthen their climate change adaptation strategies
- f. Reaching farmers: ?presumably farmers can observe at the climate change observatories
- g. Information salience, credibility and legitimacy: salience not established
- h. Information production and translation: ?presumably by CSE
- i. Information and format flexibility: ?
- j. Information environment: ?
- k. Sustainability: Community climate change observatories include high cost technology
- l. Measurability: ?
- m. Replicates (multiple examples of model, multiple countries):
- n. Web-links: http://www.idrc.ca/en/ev-118878-201_104795-1-IDRC_ADM_INFO.html;
<http://www.africa-adapt.net/aa/ProjectOverview.aspx?PID=7QPujnL0%2fr0%3d>

7.4 Community Multimedia Centres project

- a. Dates: 1990s? - present
- b. Type: Community knowledge centre
- c. Organizations: Government of Senegal, UNESCO and SIDA
- d. Funding: UNESCO and SIDA

- e. Objective: to provide access for poor and marginalized communities to the vast information resources available through information and communication technologies
- f. Reaching farmers: radio and Internet. Supply side and demand driven info
- g. Information salience, credibility and legitimacy: centres are community run. Radio provides supply side info, but internet provides demand driven
- h. Information production and translation: Source of information unclear, rural radio allows for translation by local communities
- i. Information and format flexibility: Radio and internet allow for unlimited information types, format limited to two delivery methods
- j. Information environment: Both formats allow for creation of information environments
- k. Sustainability: Centres established throughout Senegal by government, and includes training of community members in management of centres, financial management, etc. Sustainability beyond donor support unclear
- l. Measurability: CTA report
- m. Replicates (multiple examples of model, multiple countries): Common model throughout Africa. Program unique in that it combines rural radio with community knowledge centres
- n. Web-links:

[ends]