Putting the horse in front of the cart: A strategic approach to designing ICT-supported extension

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Background: A concrete project in Bangladesh

MEAS Team is providing support to a Feed-the-Future project in southwestern Bangladesh that has strong emphasis on agricultural extension.

Assistance with developing the ICT strategy for the project

Training in using certain communication tools, especially video and radio, primarily to “illustrate the point” of participatory methodology.
Temptation to put the cart in front of the horse ...

- Committing to a tool or application before understanding the needs and abilities of the audience/users (farmers, intermediaries) and contributors

- Filling the “cart” with content before knowing where the journey is going to

- In-house technology and content development vs. collaboration and building on what is already there

- A solution in search of a problem?

It is easy to get very excited about certain ICT applications (the cart and its content) but on its own (and in front of the cart) this will go nowhere.

Source: http://www.metronetiq.com/archives/2008/06/putting_the_car.html
Now: Put the horse in front of the cart!

• Who is the primary audience: *farmers* or *extension staff*?

• What is the need or problem ICT is supposed to help solve?

• Don’t be pre-committed to certain ICT applications

• How is the audience accessing information now?

• Who or what are trusted sources of information?

Build on existing resources and pathways!

Fill the cart with information that is CREDIBLE, RELEVANT, LOCALIZED, TRUSTWORTHY, ACTIONABLE
Understand existing ICT landscape – don’t reinvent the wheel

Who is doing what?

• Map out the **existing ICT ecosystem** and options to integrate ICT components in the process.

• Need to be aware of and **leverage other service providers / projects / organizations** active in the area.

• **Know who is doing what** both in-house and in the project area.

• What are the existing ICT facilities like? How can other actors be engaged? Opportunities for public-private-partnerships?

→ **We conducted background research and held stakeholder workshop along with field visits to Jessore region. Still: huge motivation on part of implementer to build ICT from scratch.**

(Report available at [http://www.meas-extension.org/meas-offers/country_studies/country-overview/bangladesh](http://www.meas-extension.org/meas-offers/country_studies/country-overview/bangladesh))
Recommendation: Build Strategy on good extension practice

ASK ME Framework

A Audience and needs
E Evaluation
S Solutions
K Key message
M Message form and delivery

Also see: http://www.meas-extension.org/tip-sheets
MEAS Framework for Designing and Implementing ICT Supported Extension and Information Services (July 2013)
Audience and their needs (wants)

What are the problems, priority needs, interests and opportunities of the clients (e.g., farmers) that could be addressed via ICT?

MEAS partner Access Agriculture conducted participatory video and script writing trainings → Eye opening experience!
Solutions

Content needs to be CREDIBLE, RELEVANT, LOCALIZED, coming from a TRUSTED MESSENGER, and ACTIONABLE

• Where is the reliable information to meet the identified needs going to come from? Consider audience members themselves!

• Is there need for (further) validation?

• Are farmers getting conflicting messages?

Network with other potential content and service providers (organizations, companies, projects).

Key message
Message form and delivery (ICT plus ...)

- Take into account: literacy, education, gender, access, ...
- How will information be packaged and delivered? Who will be involved?
- Can public and other extension service providers be engaged in this process?
- Complement ICT with “traditional” methods like demonstrations to deepen learning, build trust, demonstrate success

(“seeing is believing “, and “learning by doing”)

Evaluation and improvements, feedback loop
Information is necessary but not sufficient

Many factors contribute to changes in behavior (→ productivity increases, higher profitability, improved nutrition, etc.), which is what we are ultimately interested in!
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www.meas-extension.org
DEFINING Information and Communication Technology (ICT)

can be defined as any technology that helps in the transfer of information.

This entails **DEVICES** such as radios, televisions, simple mobile phones or smart phones, computers (desktops, laptops, netbooks, tablets), cameras, and recording /play back devices for voice, video, and still images.

**Communication TOOLS** used include text, voice, photo and video.

**DEVICES** such as smart phones and web-enabled computers combine the functionality of several devices and permit the use of multiple communication tools.

Mark Bell, 2011
DEFINING Extension

“Extension is defined broadly to include

• all systems that **facilitate access** of farmers, their organizations and other market actors **to knowledge, information and technologies**;

• **facilitate their interaction** with partners in research, education, agri-business, and other relevant institutions;

• and **assist** them to develop their own technical, organizational and management skills and practices.”

*Ian Christoplos, FAO, 2010 (emphasis added)*
“Information and communication tools such as cell phones, the internet, radio, and television can dramatically improve farmers’ and intermediaries’ access to information relevant for rural households, production agriculture, and agribusinesses.

The tools can be used to raise awareness or to provide specific information in response to questions about agricultural technologies, markets, prices, etc. As such these tools are just a part of the extension process and are most effective if combined with established good extension practice.
For extension in general and for ICT in particular to be effective, the service has to be client focused and needs driven, providing credible content and a relevant as well as actionable message through a trusted messenger.

Furthermore, access to information is just part of the formula for success. Farmers have to see sufficient evidence that they are convinced to turn the new information received into 1) a willingness to test the approach, and then 2) if the test is successful, adopt.

Success of an IC tool or approach therefore also depends on availability of required inputs, sufficient knowledge to test and use those inputs appropriately, and access to markets for farmers to profitably sell their products.”

Mark Bell, 2012
Analyzing Existing ICT & Extension And Expected Future Scenario (Supply Analysis)

Mapping existing services, providers & roles

Understand the success factors & causes of failure

Identify the incentives (business case)

Capacity of extension service providers & research institutes

Quality and validation of content

Expected Future Scenario

- Need-based & trustworthy, high quality content
- Packaging (tool, low cost, access & availability)
- Market driven and branded services
- Enabling environment
Service Development and Delivery

- Localization and customization
- Validation of content and quality
- Update mechanism and incentives
- User-friendliness of service delivery (cost & technology)
- Demonstration of impact and sharing success cases
- Feedback mechanism and development
Assessing the Capacity

Service Providers

- Institutional: Policy & Resources of Government, Research organizations, NGO’s, Private Sectors to adopt new technology
- HR: Awareness, Willingness and Understanding

Service Recipients

- Farmers: Access, Awareness, Benefits/Results, Skills
- Extension agents (public, private): Access to technology, Awareness, Skills, Marketing, Demonstration, Incentives

Policy And Regulatory Environment
MEAS

- www.measict.weebly.com
- www.meas-extension.org/resources/ict
- MEAS Framework for Designing and Implementing ICT Supported Extension and Information Services (July 2013)
- MEAS Guide to Producing Farmer-to-Farmer Training Videos (April 2013)

ICT in Agriculture: www.ictinagriculture.org/ictinag/
Sponsored by the Agricultural and Rural Development unit of the World Bank

ICT for Ag Online Community:
https://communities.usaidallnet.gov/ictforag

The e-Agriculture Community: www.e-agriculture.org
e-Agriculture is a global Community of Practice, where people from all over the world exchange information, ideas, and resources related to the use of information and communication technologies (ICT) for sustainable agriculture and rural development.

ICT Update by CTA: http://ictupdate.cta.int/en
Look into the many archived issues (come out on a bi-monthly basis) at http://ictupdate.cta.int/en/Issues/(issue)/69
Annex

The 80:20 Rule

Success in ICT depends to 20% on technological factors, to 80% it depends on social factors/social interaction.

Source: Darlene Knipe and Richard Warner, University of Illinois, 2013 (personal communication)

Following slides: learning from

- E-Krishok (BIID)
- E-Afghan Ag (UC Davis, USDA funded)
- Market Maker (University of Illinois Cooperative Extension, implemented in growing number of States)
BIID has been facilitating proper usage of the first and only (as of now) private sector driven provision info bank (www.ekrishok.com) of agriculture related information and knowledge.

Based on the experiences of piloting in 10 locations in 2008, BIID is now expanding the service as ‘e-Krishok’ nationwide to induce trial of agricultural extension and market linkage service.

BIID now introduced short code 16250 to offer voice & SMS service
Inclusive Business Concept
(Service & technology adoption, Scaling up)

Innovation, Strategy and Business Model
(Envisioning the future market of ICT in Agriculture)
“Provide credible, relevant information to those helping farmers in Afghanistan.”

www.eafghanag.ucdavis.edu
Keys to success

- Be demand-driven (clarity of audience and needs)
- Provide credible information - draw on a range of credible knowledgeable sources
- Draw on contributions from all partners/stakeholders
- Link to trusted delivery agents
- Collect feedback
- Acknowledge sources and contributors
The Five Conditions of Collective Impact

**Backbone Support** * Creating and managing collective impact requires a separate organization(s) with staff and a specific set of skills to serve as the backbone for the entire initiative and coordinate participating organizations and agencies.

**Common Agenda** All participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions.

**Shared Measurement** Collecting data and measuring results consistently across all participants ensures efforts remain aligned and participants hold each other accountable.

**Mutually Reinforcing Activities** Participant activities must be differentiated while still being coordinated through a mutually reinforcing plan of action.

**Continuous Communication** Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and create common motivation.
Subsequent research by University of Illinois’ Market Maker has confirmed that **backbone organizations serve six essential functions:**

1) Providing overall strategic direction;
2) Facilitating dialogue between partners;
3) Managing data collection and analysis;
4) Handling communications;
5) Coordinating community outreach; and
6) Mobilizing funding.

Richard Warner, University of Illinois for MEAS Summer Institute, on May 31, 2013
Positioning Extension: Societies in Transition

- Transaction costs for collaborations are real (and initially high)
- Agile responses in academic / science based context
- Community presence and communication
- Challenge of addressing complex issues (e.g., food-water-energy nexus)
- Identify and know collaborators and competitors
- Delivery mechanisms & partners change
- Business model: Funding strategies & resources
- Measuring and reporting shared impacts