

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



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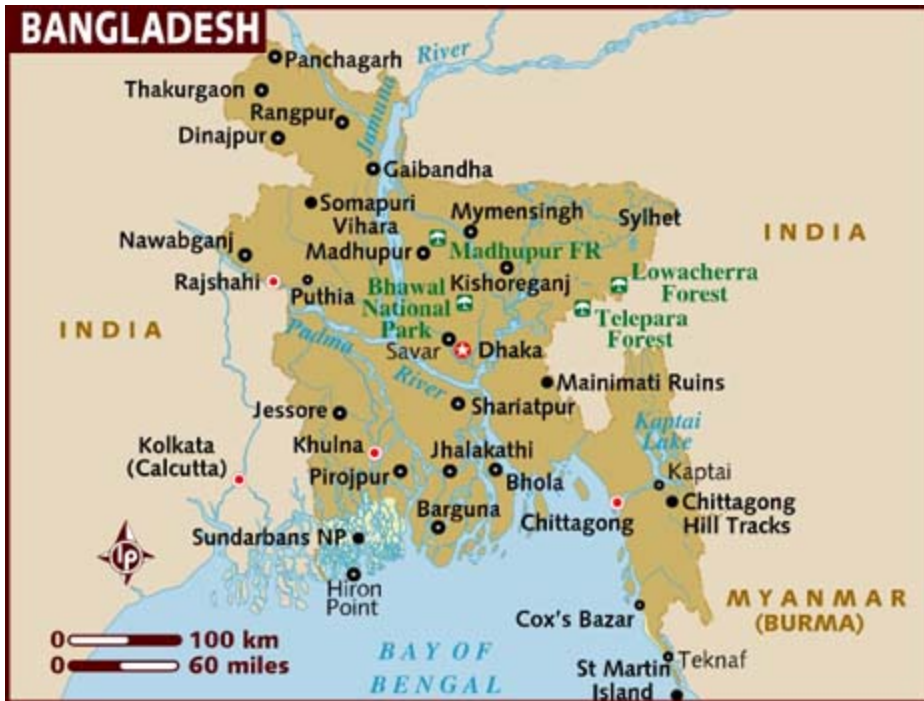


Plenary Session
November 6, 2013

CTA ICT4Ag
Kigali, Rwanda



Background: A concrete project in Bangladesh



Source: Lonely Planet

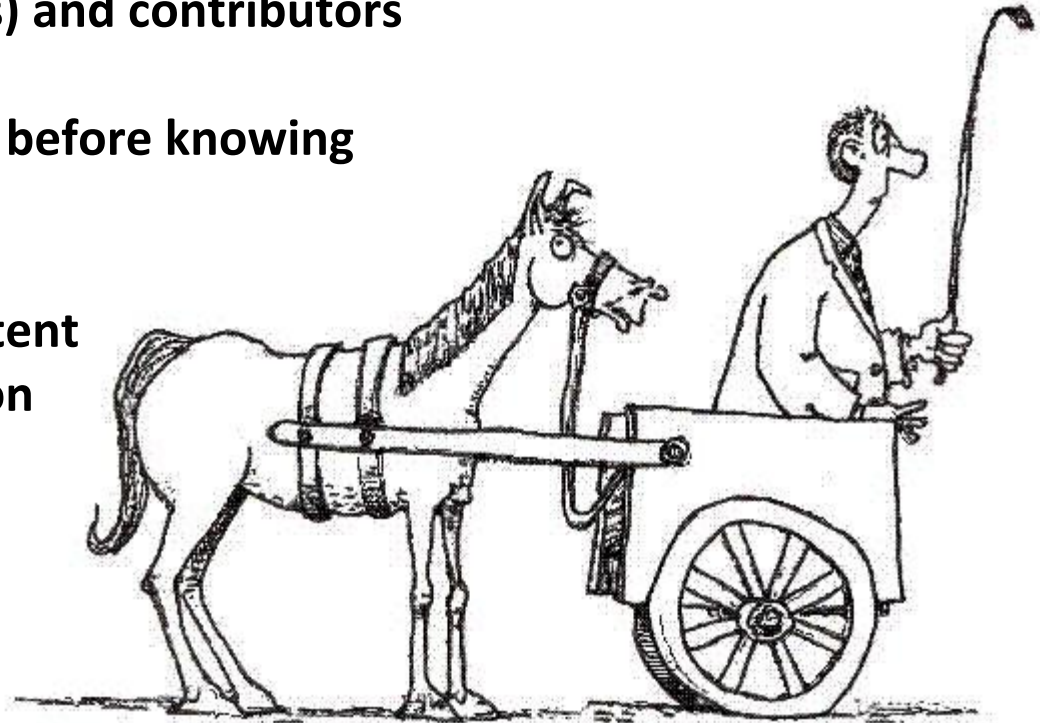
MEAS Team is providing support to a Feed-the-Future project in southwestern Bangladesh that has strong emphasis on agricultural extension.

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.

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

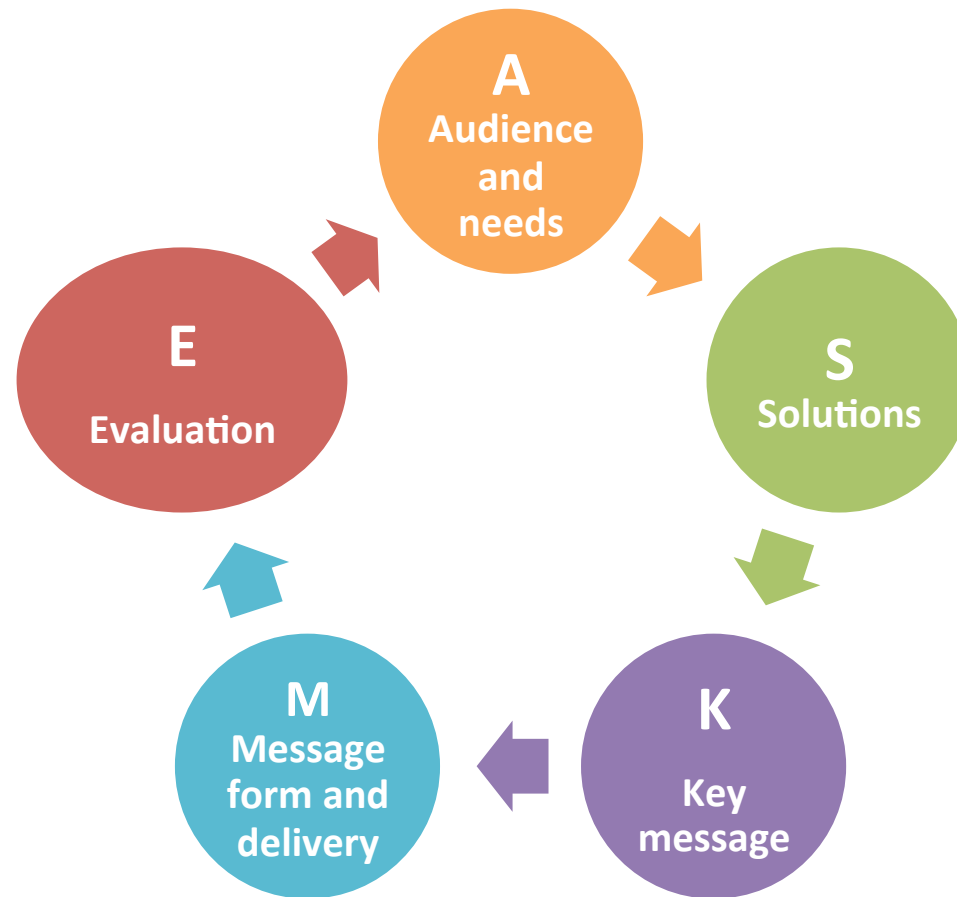
Who is doing what?

- 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.**

Recommendation: Build Strategy on good extension practice

ASK ME Framework



© Mark Bell and Paul Marcotte, 2013

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 and Key Message

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



ICT Design based on ASK ME framework

Message form and delivery (ICT plus ...)

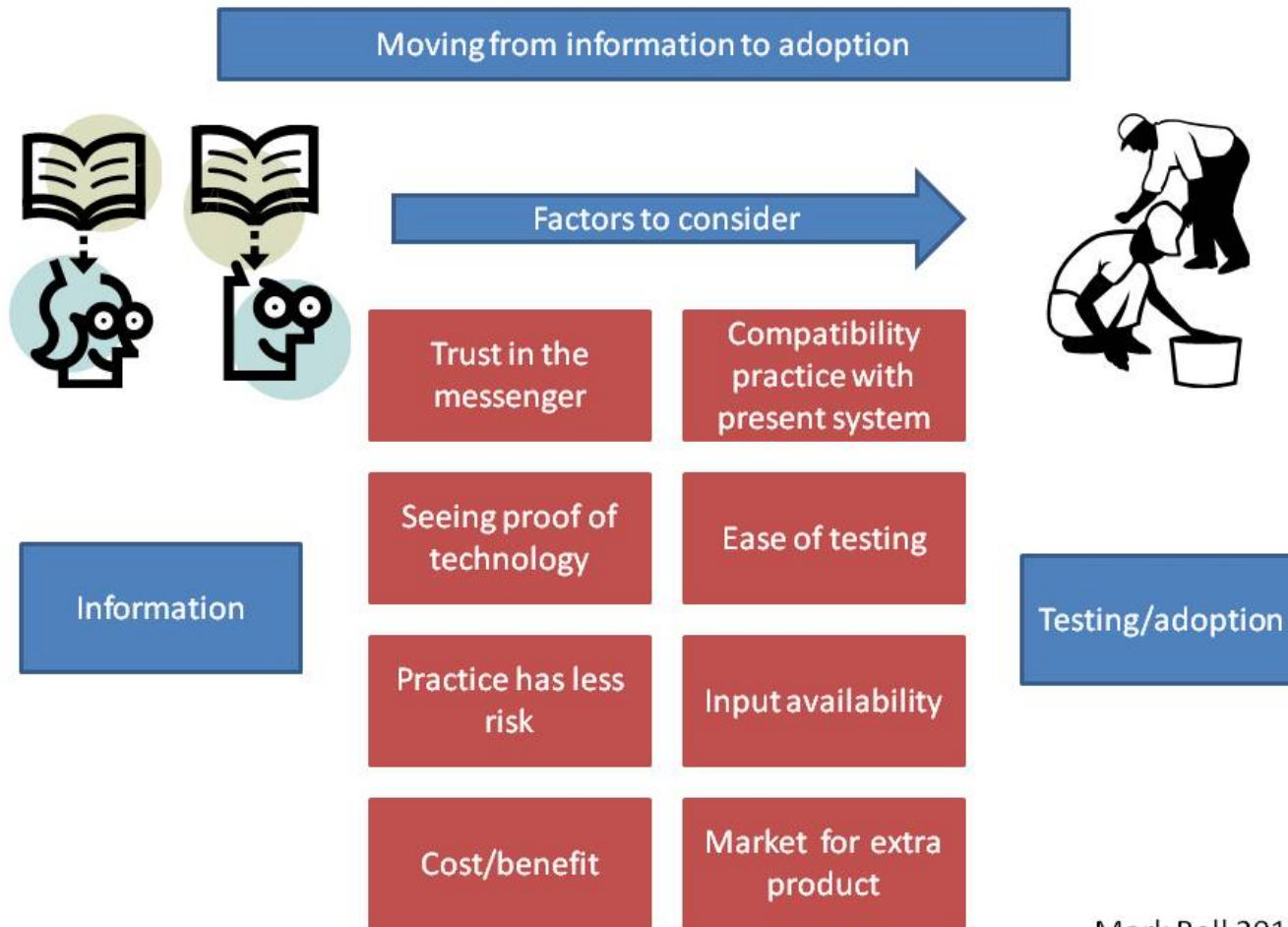
- Take into account: literacy, education, gender, access, ...
- How will information be packaged and delivered? Who will be involved?
- Can public and other extension service providers be engaged in this process?
- Complement ICT with “traditional” methods like demonstrations to deepen learning, build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

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



Evaluation and improvements, feedback loop

Information is necessary but not sufficient



Mark Bell 2011

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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FROM THE AMERICAN PEOPLE

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.



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)

Key Statement about ICT in Extension

“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.**

Key Statement about ICT in Extension

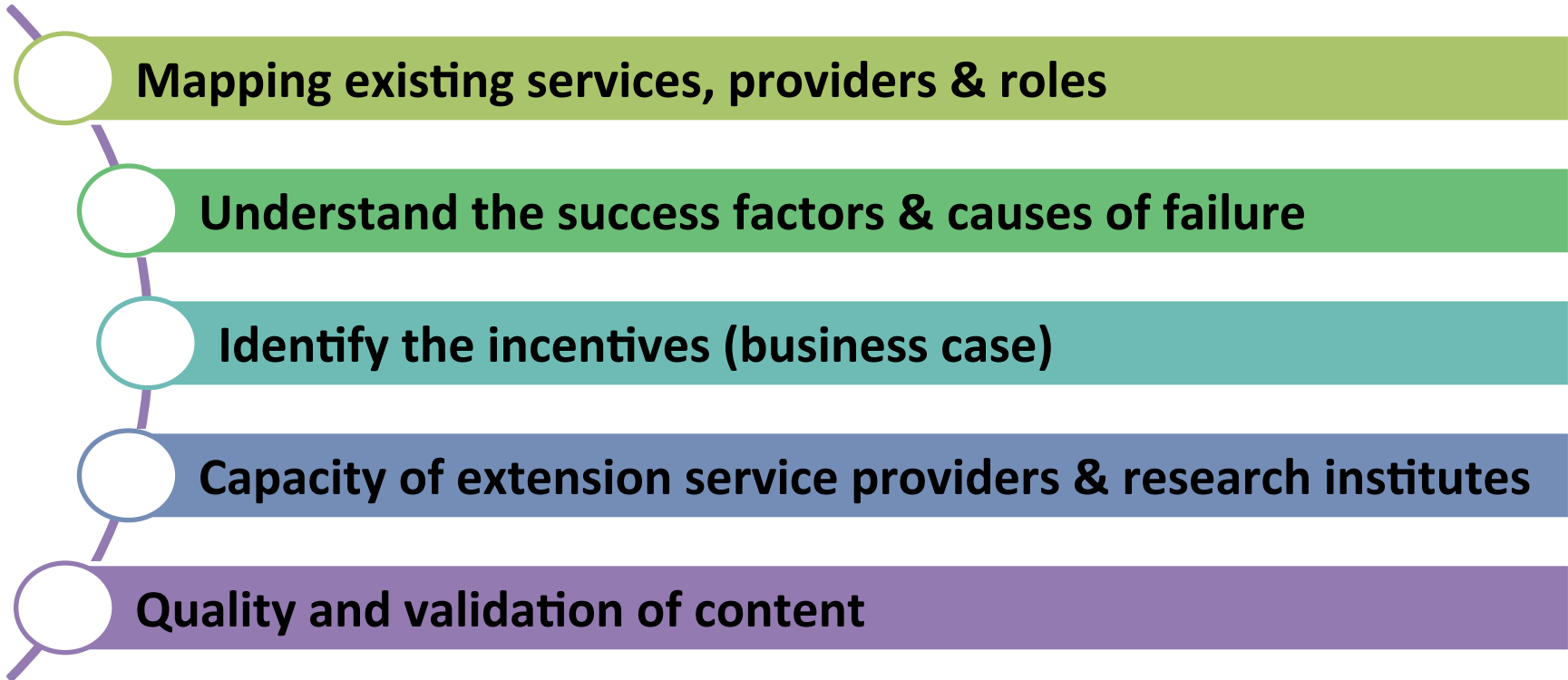
For extension in general and for ICT in particular to be effective, the service has to be **client focused** and **needs driven**, providing **credible content** and a **relevant as well as actionable message** through a **trusted messenger**.

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)



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

Resources on ICT for Agriculture and Extension

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](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

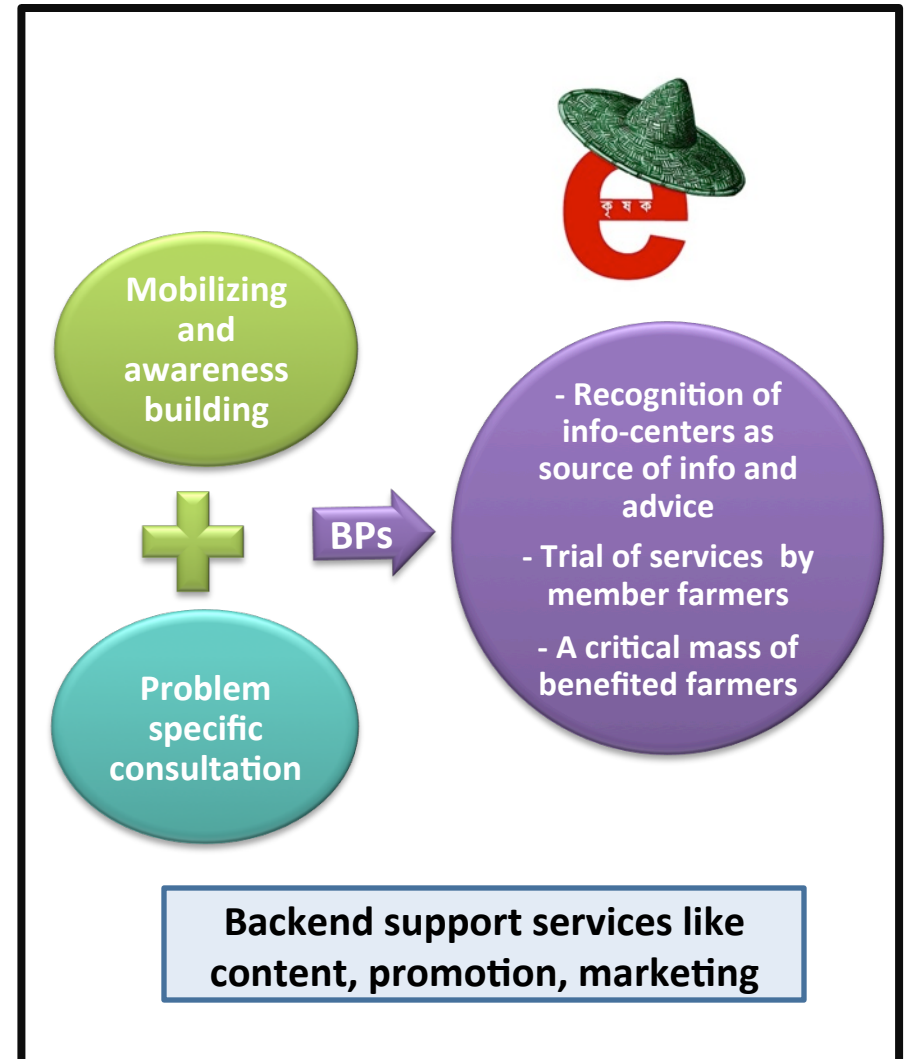
- ❖ E-Krishok (BIID)
- ❖ E-Afghan Ag (UC Davis, USDA funded)
- ❖ Market Maker (University of Illinois Cooperative Extension, implemented in growing number of States)

e-Krishok: An ICT enabled service

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



e-Krishok: An initiative of BIID



Inclusive Business Concept
(Service & technology adoption, Scaling up)



Innovation, Strategy and Business Model
(Envisioning the future market of ICT in Agriculture)

E-Afghan Ag

"Provide credible, relevant information to those helping farmers in Afghanistan."

Firefox Afghan Agriculture
www.eafghanag.ucdavis.edu

UCDAVIS UNIVERSITY OF CALIFORNIA

Search Site Search

Afghan Agriculture

Home Fruits, Nuts and Vegetables Grains and other Field Crops Livestock Watersheds and Forestry Other Topics Province Information Questions?

UC Davis home > Afghan Agriculture

Afghan Agriculture

For more information, contact Mark Bell.

Provinces

- Badakshan
- Badghis
- Baghlan
- Balkh
- Bamyan
- Daikundy
- Farah
- Faryab
- Ghazni
- Ghor
- Helmand
- Herat
- Jawzjan
- Kabul
- Kandahar
- Kapisa
- Khost
- Kunar

Afghan Agriculture

"We provide credible, relevant information to those helping farmers in Afghanistan." The site is supported by the United States Department of Agriculture, Foreign Agricultural Service. For site information, please contact the team at: expert@eafghanag.org

- Questions?
- Province Information
- Fruits, Nuts and Vegetables
- Grains and other Field Crops (MaizeDoctor)
- Livestock
- Watersheds and Forestry
- Other Topics

Site Disclaimer

www.eafghanag.ucdavis.edu

Lessons learned from e-Afghan Ag

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

Lessons learned from Market Maker, www.foodmarketmaker.com

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.

Lessons learned from Market Maker, **www.foodmarketmaker.com**

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.**

Lessons learned from Market Maker as collaborations with India, Brazil, etc. are being set up:

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