



## Information and Communication Technologies for Extension



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Paul E. McNamara

Associate Professor, Department of  
Agricultural and Consumer  
Economics, University of Illinois at  
Urbana-Champaign; Director,  
Modernizing Extension and Advisory  
Services Project (MEAS)



## Outline

- ICT overview
- Topics and questions about ICTs
- Challenges and benefits of ICTs
- Some examples of ICTs
- Group work on ICTs
- Wrap up

## ICTs definition

- Information and Communications Technology is an umbrella term that includes all types of technologies for the communication of information. It encompasses any medium to record and broadcast information, as well as technologies for communicating information through voice, sound, and/or images. Information technology (IT) has become a hub for communicating information, most often using computers. Begin with the audience in mind

## ICTs definition

- "ICT (information and communications technology - or technologies) is an umbrella term that includes any communication device or application, encompassing: **radio, television, cellular phones, computer and network hardware and software**, satellite systems and so on, as well as the **various services and applications associated with them, such as videoconferencing and distance learning**. ICTs are often spoken of in a particular context, such as ICTs in education, health care, or libraries. The term is somewhat more common outside of the United States.

## ICTs (MEAS glossary)

- According to the European Commission, the importance of ICTs lies less in the technology itself than in its ability to create greater access to information and communication in underserved populations. Many countries around the world have established organizations for the promotion of ICTs, because it is feared that unless less technologically advanced areas have a chance to catch up, the increasing technological advances in developed nations will only serve to exacerbate the already-existing economic gap between technological "have" and "have not" areas. Internationally, the United Nations actively promotes ICTs for Development ([ICT4D](#)) as a means of bridging the [digital divide](#). (retrieved 9/21/2010 from [http://searchcio-midmarket.techtarget.com/sDefinition/0,,sid183\\_gci928405,00.html](http://searchcio-midmarket.techtarget.com/sDefinition/0,,sid183_gci928405,00.html))

## ICT Principles from MEAS Work

- Begin with the audience in mind
- The technology is a tool
  - Take care that the ICT does not become the main focus – reaching farmers and linking farmers and assisting farmers should be the at the center
- Don't underestimate the need for staff capacity building and training with ICTs
- Costs vary widely depending on ICT approach
- For NGOs and Farmer Associations, can start with print, radio, audio, video

## Discussion: Questions

- What questions do you have about information and communication technologies in agricultural extension?



Patricia Lazicki (former ECHO intern) conducting a training on soil testing and analysis for Ministry of Agriculture consultants (field staff) in Georgia by USAID-funded SEAS project

## Discussion: Benefits and Challenges

- What advantages and benefits do you observe in using information and communication technologies in your extension work?
- What challenges do you see in utilizing ICTs in your program with farmers?

Sept. 2013

**FARM<sup>D</sup>** Forum for Agricultural Risk Management in Development

## Rice Advice Videos in Uganda

Jeff Bentley, Agro-insight

There are not enough extension agents to reach all the farmers in the world. If video or another ICT tool could share good ideas with some of those forgotten farmers, it might help them to grow more food, earn more money and manage risk.

Between 2003 and 2011 Paul Van Mele and colleagues filmed eleven Rice Advice videos in Bangladesh, Benin, Mali, and Burkina Faso. These 15 minute videos cover all the major stages of the crop, from seed, through cultivation to post-harvest. Farmers appear on the screen, speaking to the audience about how they have improved their rice harvests with simple innovations. In 2011 a DVD was made for East Africa with eight language tracks (English, French, Swahili, Luganda, Lutojara, Runyankara, Tese, and Luo) and 7500 copies were distributed in Uganda, through 18 institutions.

In late 2012, I was asked to visit Uganda with Ugandan journalist Grace Musimami to find out what had happened with those DVDs. Before I went to Uganda, I had assumed that farmers would glean little information just by watching a video. I supposed that the videos had to be facilitated, that is, an extensionist had to show the videos and discuss them and answer villagers' questions.



I was surprised to find that the videos do stimulate creativity and change, even without facilitation. All over Uganda, farmers who had simply sat and watched the videos learned and started doing new things. I met some that began leveling their land (for an even spread of water), and others who transplanted rice for the first time. Some began planting in rows and others started using rice straw as mulch instead of burning it.

These videos work because they are good. They take topics that are relevant to most farmers (like how to store rice seed at home) so that farmers anywhere can take the practical information and really use it. Contrary to the belief of many bureaucrats, farmers relate well to other farmers, even foreign ones. For example, the Ugandan farmers we spoke to were pleased to learn that there were farmers like themselves in other countries working small plots of land by hand. Some Ugandan farmers offered to appear on videos that could be shown in 'to our brothers and sisters in Benin and Bangladesh.' The videos do not need to be filmed again and again in each country, starting with a script in English and French makes it easier to translate the video into local languages. Making a video is 10 times as expensive as translating one.

Translating the videos still demands time and expertise, but it is worth it. We found that in Uganda, rural men are more likely to speak English than the women and therefore local language translations are crucial for reaching women. And video is a format that appeals to youth, so an open air screening in the early evening can reach most of the village, not just the senior men. Many of the farmers who appear on the videos are women and youth, which appeals to women and youth in the audience.

**Distribution.**

\*I could have distributed all of the videos in one hour if I had used donkeys!

Splata Isamba and neighbors show the rice they learned to transplant in lines by watching the videos.

[www.agriskmanagementforum.org/content/rice-advice-videos-uganda](http://www.agriskmanagementforum.org/content/rice-advice-videos-uganda)

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## The Grameen Foundation's Community Knowledge Worker Program

Daniel McCole, Ph.D., MBA | Department of Community Sustainability at Michigan State University

**Introduction**

The important role of agricultural extension and advisory services in building capacity among farmers in the developing world is widely known. Like in many places, access to and diffusion of agricultural knowledge throughout Uganda is a country where 19.3 million people are members of farming households is critical to improving food security, reducing poverty, and developing sustainable agriculture.

As a landlocked country, Uganda produces almost all of its own food, and most of its agricultural production is for domestic use. The main export crops of coffee, tea, cotton, and sugar together comprise less than 8% of cropped areas (Gollin & Rogerson, 2010). Rural households in Uganda are very poor, with a poverty rate (34.2%) almost triple that of urban households (Uganda Bureau of Statistics, 2009).

Most of Uganda's agricultural production occurs on smallholder plots (Uganda Bureau of Statistics, 2009) on which the majority of farmers implement traditional practices that provide low yields. According to a USAID report on Uganda's rural economy (2008), agronomic best practices such as mulching, proper plant spacing, weeding, and pruning are not widely used in Uganda, and intercropping for higher yields is not properly understood. The report concludes that the "inability to manage pests and disease, together with poor post-harvest handling, often result in substantial crop losses" (p. 12). The lack of these improved farming practices to manage production risk creates a precarious situation for the millions of farmers involved in agriculture in Uganda. Better diffusion of agricultural knowledge in the country would likely lead to improved yields and improving food security, reducing poverty.

As with many developing countries, agricultural extension and advisory services (EAS) have not traditionally reached a large portion of the farming population in Uganda. Poor transportation infrastructure makes travel to remote villages difficult for extension agents, and many government extension agencies face organizational challenges that limit their reach. Since 2001, Uganda's agricultural extension and advisory services have been implemented by the National Agricultural Advisory Services (NAADS), but the ratio of farmers-to-extension workers in Uganda is reported to be over 3,000 to one, an inadequate ratio to fully meet the country's need for extension and advisory services. (Ministry of Agriculture, Animal Industry and Fisheries, 2009). According to the 2008 National Service Delivery Survey, for example, only 14 percent of all farming households had been visited by an extension worker in the 12 months preceding the survey (Uganda Bureau of Statistics, 2008).

In addition to the poor coverage of extension agents, knowledge diffusion is further hampered by a high rate of illiteracy amongst Ugandan farmers, which makes the use of written material a less effective option for EAS. The illiteracy rate among Ugandan farmers has been reported to be as low as 31% (Uganda Census of Agriculture, 2011) and as high as greater than 50% (Iluwawari, 2011). Because of the challenges presented by the high illiteracy rate, and without the infrastructure for a large number of high-quality extension agents, EAS providers in the development world have increasingly



[www.agriskmanagementforum.org/content/grameen-foundation%E2%80%99s-community-knowledge-worker-program](http://www.agriskmanagementforum.org/content/grameen-foundation%E2%80%99s-community-knowledge-worker-program)

### **Digital Green – Farmer Filmed Videos of Best Practices**

- Digital Green – India based NGO
- Farmer filmed videos of good agricultural practices
- A database of films that other farmers can view and learn from
- Low cost and substantial impact and learning from other farmers

### **Internet Assisted Extension Training Program**

- Min of Agriculture (Govt of Kenya), CRS, and University of Illinois
- Extension workers trained in Five Skills (Smart Skills): Group management, financial management, marketing, natural resources and environment, and farmer learning
- Face to face training and internet-based Five Skills training using tablets

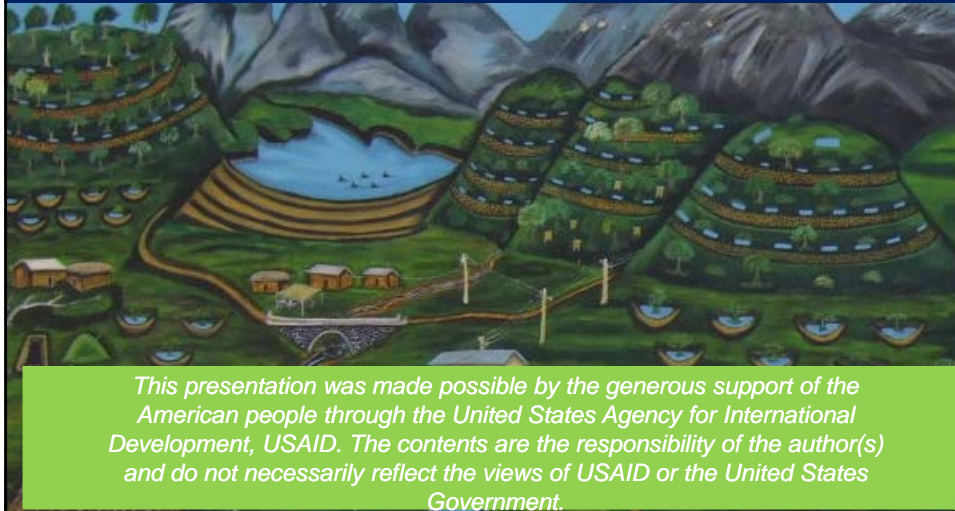
## Farmbook

- ICT tool to record extension work, track farm level data, help with farm business planning and gross margin analysis, feeds into M&E system
- Catholic Relief Services ICT tool developed over about 10 years
- Used in Malawi, Zambia, Kenya and other countries

## Your experiences



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