

# **Final Report**

## **Expert Consultation on the G8 New Alliance for Food Security and Nutrition ICT Extension Challenge**

**October 11 - 12, 2012**

**Washington, D.C.**

### **Background**

The 2007/2008 food price crisis drew attention to the stresses and strains affecting the global agricultural system. More than 800 million people worldwide lack access to affordable and sufficiently nutritious food. Within a few decades an additional 2 billion people worldwide will need to be fed, exacerbating the current impacts of rising prices on food insecurity and increasing competition for scarce natural resources. It is becoming a global priority to develop a highly productive and sustainable agriculture and food system.

The 2009 L'Aquila Food Security Initiative is an important response to these challenges and has resulted in a substantial increase in public investments in agricultural development by both the international donor community and national governments. The G8 meeting in Camp David in May 2012 reaffirmed these commitments and engaged both national governments and private businesses in a New Alliance for Food Security and Nutrition to accelerate agricultural growth and productivity.

### **The G8 New Alliance and the ICT Extension Challenge**

At Camp David, G8 and African leaders launched the G8 New Alliance for Food Security and Nutrition<sup>1</sup>. The goals of the New Alliance are to increase responsible domestic and foreign private investments in African agriculture, take innovations that can enhance agricultural productivity to scale, and reduce the risk borne by vulnerable economies and communities. As part of the New Alliance commitments, G8 and African leaders pledged to support policy changes and “enabling actions” aimed at meeting these goals, and international and local businesses have signed letters of intent to invest in agriculture in the initial New Alliance countries: Ghana, Ethiopia, Tanzania, Burkina Faso, Mozambique, and Cote d'Ivoire.

### **G8 New Alliance Technology and Innovation Enabling Actions**

The G8 and African countries have agreed to support a set of four integrated enabling actions aimed at significantly improving agricultural productivity.

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<sup>1</sup> Details are provided in the White House Fact Sheet on the New Alliance: <http://www.whitehouse.gov/the-press-office/2012/05/18/fact-sheet-g-8-action-food-security-and-nutrition>

## 1] 10-Yr Targets in Partner Countries

Goal: Determine targets for sustainable agricultural yield improvements, adoption of improved production technologies, including improved seed varieties, and measures to ensure ecological sustainability and safeguard agro-biodiversity. CGIAR/IFPRI is the designated institutional lead for this action.

## 2] Technology Platform

Goal: Assess the availability of improved technologies to achieve sustainable yield, resilience, and nutrition impacts, identify current constraints to adoption, and create a roadmap to accelerate adoption of technologies. The Forum for Agricultural Research in Africa (FARA) is the lead institution and is mobilizing relevant national partners from research, extension and education to select appropriate expertise required for implementation of the technology platform

## 3] Scaling Seeds & Other Technologies

Goal: Strengthen the seed sector and promote the commercialization, distribution and adoption of key technologies as related to seeds. The Alliance for a Green Revolution in Africa (AGRA) is the lead for this activity.

## 4] ICT Extension Challenge

The ICT Extension Challenge will be launched on October 30 at the Second Global Conference on Agricultural Research for Development (GCARD) in Uruguay.

Goal: Address the issue of improving extension and information systems for smallholder farmers, farmer organizations and agribusinesses so that they can make informed and effective decisions about technology adoption, harnessing developments in ICT and technology and information platforms. At GCARD, the G8 will announce the establishment of an ICT Innovation Challenge Fund. The Fund will operate with two windows.

**Window #1** will fund creative approaches to using ICT through public and private sector channels to deliver specific extension messages **at scale** in New Alliance countries. Ten-year yield targets and priority technologies for key commodities are now being identified in all New Alliance countries. This window will fund creative, integrated ICT-based approaches to wide dissemination of information on targeted improved technologies, meeting scaling targets, tracking farmer response and uptake, and include concrete plans for sustaining the service approach after the Alliance project ends.

**Window #2** will fund proposals aimed at making global databases relevant to agriculture and food security more accessible and useful in digitized formats to developing country researchers, farmers, extension agents and the private sector.

## The Context for the Consultation

For each of the first three enabling actions institutional leads have already been identified and work towards achieving the objectives is underway. To advance the ICT Extension Challenge, USAID convened an expert consultation on October 11-12 in Washington, D.C.

The participants of the expert consultation were invited from the community of thought leaders and practitioners related to innovative extension services in the public and private sectors. They included representatives from the donor community, research institutions, NGOs, and service providers (Annex A). Prior to arriving, the participants were provided with the questions in Annex B.

**The expert consultation focused on providing advice related to the development of Window #1 of the ICT Extension Challenge.** Specifically, the goals of the consultation were to:

- Map out the various approaches to ICT in extension currently in use
- Discuss the characteristics of success demonstrated by these approaches; Identify the potential for scaling up promising approaches to dramatically increase the number of farmers reached
- Provide recommendations on design principles for organizing the ICT Innovation Challenge.

## The Consultative Process

The two day consultation was broken into four segments:

1. The first segment set the scene by mapping out and categorizing the promising innovations in extension services.
2. The second segment was a review of issues and challenges that are most common across such innovative approaches or for specific innovations.
3. The third segment aimed at prioritizing the promising innovative and scalable approaches and defining the specific critical success factors to take into account.
4. The fourth segment focused on developing design principles and guidelines for challenge grants under Window 1.

The consultation began with two brief background presentations by Mark Bell of University of California, Davis, and Judith Payne, USAID. Highlights are provided below.

### Background presentation - Mark Bell, University of California, Davis

While there is no standard definition for extension, one can simply say that “extension is getting knowledge to farmers so that they will make a positive change.” For extension to be successful, it needs to include credible content, effective delivery, as well be relevant (to the client) and applicable (client needs to be able to act on the advice). Good extension involves a relationship of trust between client and messenger, good two-way communication (audience- centric, not sender- centric), continuity of effort, and the opportunity for the client to see or test the recommendation. Further, the process of change requires more than just increasing access to information such as technical knowledge. If there is no market for the agricultural product to be sold profitably, or if production does not otherwise improve the household’s livelihood, then the behavior change does not benefit the client (Figures 1 and 2).

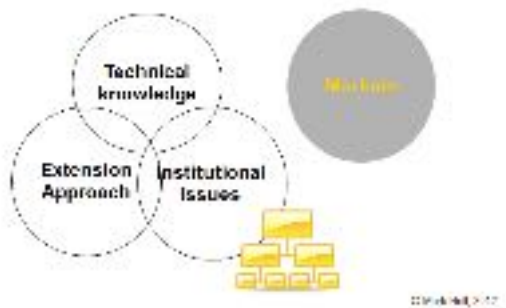


Figure 1: Needs for Successful Extension



Figure 2 Moving from information to Adoption

ICT can improve message delivery, but the content and the delivery system still need to be aligned with farmers' needs and priorities, to be credible (trustworthy), to be relevant (link to field application, locally adapted), and to allow for feedback. Bell warned of getting caught up in the bells and whistles of ICT; while it has tremendous potential, it may not be the simple fix (silver bullet) that many seek to address extension challenges. Human interaction will often still be required.

### Background presentation - Judith Payne, USAID

Good extension is recognized as a key to agricultural development yet too few farmers have access to the extension services they need and extension workers themselves (private and public) cannot easily tap all the information they need to help farmers.

ICT offers great potential to solve this two-pronged problem, because of the dramatic increases worldwide in affordable and accessible telecom services. Cell phones handle text, data, and video, and smart phones even give access to the Internet and the global positioning system. Affordable devices and software allow for low-cost video production for mobile and web-applications and village screening. Multinational companies see profit potential in using mobile-enabled AG services. Further, ICTs offer opportunity for real-time feedback from the farmer about what the farmer doesn't understand or about what the farmer wants to learn.

The challenge before us in shaping the G8 New Alliance ICT Challenge is to ensure that ICT approaches:

- Engage and leverage public extension systems as well as private ones
- Adapt as tech options –and prices—change
- Tap proven social marketing approaches from health
- Can truly scale to a MILLION+, not 20,000 or 30,000 farmers and pastoralists
- Keep focus on contributing to the specific G8 New Alliance yield targets
- Move beyond project mentality to something that is sustained for 10+ years
- Have the right mix of incentives for different players
- Tap the interests of mobile network operators, agrodealers, insurers, and other key stakeholders.

What has shown promise so far? A few examples include:

- Radio, especially using participatory approaches (e.g., sending out SMS, getting feedback from the audience, farmer listening groups).
- Short text messaging, e.g., for pest alerts
- A variety of voice services, including Interactive Voice Response (IVR) systems
- Use of higher end phones and hand sets by intermediaries serving groups of farmers to provide information to farmers and to extension agents
- Low-cost video using trusted local farmers or agents as video actors coupled with a strong feedback loop.

### **Defining Success (for the Challenge): Behavior change that leads to adoption and yield/productivity increases at scale**

In sessions with the convened experts, several key success factors were identified, including:

- Trust in information source is critical to change behavior
- Using ICT for feedback in the form of both quantitative usage patterns as well as qualitative user feedback which can inform interventions and improve targeting
- Focused message (customized)
- Integration/combine approaches, i.e., communications “channels”
- Cultivate community
- Content is key
- Country ownership
- Turning info into actionable knowledge
- Incentives – both monetary ones as well as non-monetary/social incentives

Two challenges identified were to (1) draw upon lessons from how social marketing is used in the health sector and (2) to figure out how to attract private sector engagement.

### **Design Principles and Recommendations**

The participants worked in four groups to identify design principles and recommendations for organizing the ICT Innovation Challenge. Briefly summarized, the principles included:

- Build the program on the basis of a thorough scoping study of what is working well in extension services and mapping of stakeholders by country.
- Award grants by country and encourage alliances across organizations, across public and private sectors (for-profit and not-for-profit), and across ICT approaches, and help facilitate match making between potential partners.

- Vary co-investment requirements based on size of grants so that local grantees that might be less able to co-invest could be encouraged to participate and larger grantees with more capacity to co-invest could be required to do so.
- Encourage strong trust or accountability of extension agents with the communities they serve.
- Carefully consider monetary and non-monetary incentives for stakeholders to engage in the ICT Challenge, to leverage existing resources and to collaborate.
- Go for large scale from the start. The proof of concept should already be there (among the grant applicants, for the proposed system—the grant is the means to scale it).
- Encourage the use of social marketing and mass media approaches and strive for popularity and everyday use. This may make it attractive for the private sector to contribute and may offer revenue generation options through sponsorships and advertising. Also the private sector may want to participate because of benefits of better linkages to producers, greater quality control and increased transparency.
- Fully understand the barriers to behavior change. Lack of access to information is likely to be just one of several factors (see Figure 2). Note that the ICT Challenge is one of four enabling actions aimed at significantly improving agricultural productivity. The technology platform and the strengthening of the seed system are aimed at removing some of the barriers.
- There need to be feedback mechanisms between the components of the G8 New Alliance.
- Consider the information needs of both farmers and the extension agents/intermediaries that work with them. Certain types of information, and the ICT tool used to communicate that information, lend themselves to direct use by producers, others are targeted for use by intermediaries.
- Ensure that the needs of all farmers are met, not just the larger more advanced ones. Account for gender issues and lack of education and literacy. Build in feedback loop from farm-level.
- Approach needs to reflect government buy-in.
- Strengthen/invigorate /empower existing field level extension /rural development staff (public, private, CSO).
- Build capacity, possibly through the use of ICT, among farmers and intermediaries not just in terms of production knowledge but also in business planning and marketing. Provide tools that facilitate informed decision making.
- Design the system to work for broad range of crops and livestock although the focus of the Challenge has been predetermined as being on production intensification of 1-3 crops/livestock. Consider the larger farming systems and the need/opportunity especially for small scale farmers to diversify for risk management, meet household food needs and generate income through high value crops and products.
- Plan for effective monitoring and evaluation. Make results public and easily accessible practically in near real time. Assess what works and what doesn't and share both widely. Making this information public can increase cross-pollinating learning across programs and borders, identify opportunities for convergence between complementary interventions, and perhaps even spur competition across programs.

- Measure multiple metrics (number of people reached, adoption rates/costs/barriers, develop metric(s) for cost per behavior change). Design for continuous learning and sharing, also beyond the national context. Collect data that is also useful for the farmers themselves (e.g., for business planning). Track impact on small farmers and landless.
- Encourage an adaptive implementation approach/continuous adaption. The target is clear (achieving yield increases in key crops and livestock also among small holders through support from large scale ICT applications) but the path toward that may have to change based on continuous feedback (M&E). Build in the opportunity to change course, to put more emphasis (funding) on what is working and to start using ICT that were not available or affordable at the start of the New Alliance.

## Conclusions: Agreed Action and Next Steps

All participants were thanked for their insights and encouraged to continue to provide advice as the New Alliance ICT Extension Challenge is announced and implemented. The outcomes from the workshop will inform the design process for the Challenge.

For questions or comments on this report, please contact Julie Howard, Chief Scientist, Bureau for Food Security, and Senior Advisor to the Administrator, USAID at [juhoward@usaid.gov](mailto:juhoward@usaid.gov).

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## Annex A

### List of Consultation Participants

Dwight Allen, Eminent Scholar of Educational Reform, Farmer Voice Radio/Old Dominion University

Dustin Andres, Communications and social media Specialist, USAID FACET Project, FHI 360

Mark Bell, University of California at Davis, Facilitator

Andrea Bohn, MEAS Project Manager, Co-Facilitator, University of Illinois at Urbana-Champaign

Caitlyn Boller, Program Development Associate, TechnoServe

Greg Crosby, Program Leader for Sustainable Development, NIFA/USDA

Natalie DiNicola, Sustainable Agriculture Partnerships, Monsanto

Shaun Ferris, Senior Technical Adviser for Agriculture and Environment, Catholic Relief Services

Rikin Gandhi, CEO, Digital Green

Aparajita Goyal, Economist, Agriculture and Rural Development, World Bank

David Hegwood, Senior Food Security Advisor, USAID Bureau for Food Security

Julie Howard, Chief Scientist, Bureau for Food Security, and Senior Advisor to the Administrator, USAID

Raj Khosla, Colorado State University and Jefferson Fellow, State Department

Mark Leclair, Senior Program Officer, Farmradio International

Tjada McKenna (FTF) (external panel member for afternoon session on October 12)

Patricia Neenan, Head of Business Development, North America, CABI

Judith Payne, e-Business Advisor, E3 Bureau and ICT Advisor, Africa Bureau, USAID

Suzanne Poland, Country Strategy and Implementation Office, Bureau for Food Security, USAID

Rikka Rajalahati, Senior Agricultural Specialist, Agriculture & Rural Development, World Bank

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Jean Beagle Ristaino, North Carolina State William Neal Reynolds Distinguished Professor, Jefferson Fellow, USAID

Jill S. Shemin, Associate ICT Advisor, Africa Bureau USAID

Jonathan Shrier, State Department (external panel member for afternoon session on October 12)

Fiona Smith, Director, mAgri Programme, GSMA Development Fund

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Stephen Wardle, Africa Regional CEO, Grameen Foundation

John Zoltner, Director, Information Technology Applications Department (ITAD), FACET/FHI 360



## Annex B     Guiding Questions for the Consultation

In preparation for the consultation, the participants were asked to reflect on the following questions.

- 1] What are the most interesting lessons from your work/experience implementing projects involving ICT-enabled tools/services for effective extension?
  - What are the main things you would change about the implementation of past projects if you could – given the experience you've now had?
  - How can we combine different ICTs and use them better for effective extension and advisory, at scale? Examples?
- 2] What is needed and what conditions are necessary to take ICT-enabled extension and rural advisory services to scale?
  - What are the key critical success factors or prerequisites to use the approaches effectively?
  - Extension and rural advisory needs that can be met with ICT tools and platforms?
  - Entry points for ICT tools in agricultural extension & advising?
  - In the New Alliance countries, how can we increase the likelihood that key prerequisites or success factors are met?
- 3] Given the New Alliance will leverage governments' efforts in providing extension services, what are key success factors in integrating public and private efforts to use ICT-enabled tools in extension services?
  - Are there examples of success public-private engagements in this space? Pilots that have been scaled?
  - Or not, and failed -- And what can we learn from these?
- 4] What would you want to see in a Challenge—to ensure that grantees build on the good practices and focus on using ICT-enabled tools and services to contribute substantially to meeting the yield targets?
- 5] What are the most important design implications for ICT rural advisory tools/services?
- 6] What lessons can we learn about marketing/social marketing from public health campaigns, to generate awareness and ultimately uptake of ICT tools by farmers?