



INFORMATION COMMUNICATION TECHNOLOGY – AGRICULTURE SECTOR

FTF QUARTERLY LEARNING MEETING

CAPITAL HOTEL, ADDIS ABABA

30 MARCH 2016

The AKLDP provides coordination and technical support to guide improvements in USAID agricultural programming and support national development policies and strategies in Ethiopia. As part of this, the AKLDP facilitates the USAID Feed the Future Quarterly Meetings, each of which focuses on a specific theme.

In March 2016 the theme of the meeting was Information Communication Technology for the Agriculture Sector. This report includes summaries of the detailed presentations that were made during the meeting held at the Capital Hotel, Addis Ababa, and highlights the key outputs of the group discussions.

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Report of the meeting

Meeting purpose and agenda

For the Feed the Future quarterly meeting of March 2016, USAID selected Information Communication Technology as the theme. An increasing number of USAID funded pilot projects were focusing on ICT and it was thought that a number of agencies would benefit from improved information sharing on this topic. A list of participants is included at Annex 1 and the draft meeting agenda at Annex 2. The agenda was later expanded to include two presentations by the USAID Livestock Marketing Development (LMD) project.

The meeting began with USAID welcoming all the participants and providing a brief update on USAID Feed the Future activities. The International Food Policy Research Institute (IFPRI) then began the presentations by providing an overview of the results of the FTF mid-line survey. Six PowerPoint presentations then covered some of the key areas of work and programs in Information Communication Technology for the Agriculture sector in Ethiopia. After each presenter responded to specific questions raised about their presentations, a Listening Exercise session was undertaken to allow for group discussion on the most notable issues related to ICT as whole, and how the Feed the Future community in Ethiopia might address them.

Feed the Future in Ethiopia Midline Overview (2015)

International Food Policy Research Institute, Ethiopian Central Statistical Agency

Objectives of the FtF surveys

1. Collect data in a sample selected from among the 149 *woredas* that make up the USAID/Ethiopia FTF Zone of Influence (ZOI) in order to estimate the levels of a set of key indicators
2. Establish statistically significant control groups and collect data that will be used to conduct an impact evaluation of the FtF in Ethiopia.

FtF Zone of Influence: The total ZOI population is 16.8 million individuals, residing in 3.58 million rural households. 149 *woredas* in five regions: Amhara, Oromia, SNNP, Somali & Tigray

Sampling design: 84 households per *woreda*, with 28 households per enumeration area (EA);

7,056 households; 4,704 households in the ZI (56 *woredas* x 3 EAs per *woreda* x 28 households per EA); and a control group: 2,352 households outside the ZOI (28 *woredas* x 3 EAs per *woreda* x 28 households per EA).

The FtF Indicators:

1. Prevalence of Poverty: Percent of people living on less than \$1.9/day
2. Daily per capita expenditure of targeted beneficiaries
3. Prevalence of underweight children under five years of age
4. Prevalence of stunted children under five years of age
5. Prevalence of wasted children under five years of age

6. Prevalence of underweight women
7. Women's Empowerment in Agriculture Index
8. Prevalence of households with moderate or severe hunger
9. Prevalence of children 6-23 months receiving a minimum acceptable diet
10. Women's Dietary Diversity
11. Prevalence of exclusive breastfeeding of children under six months of age

Assessing impact

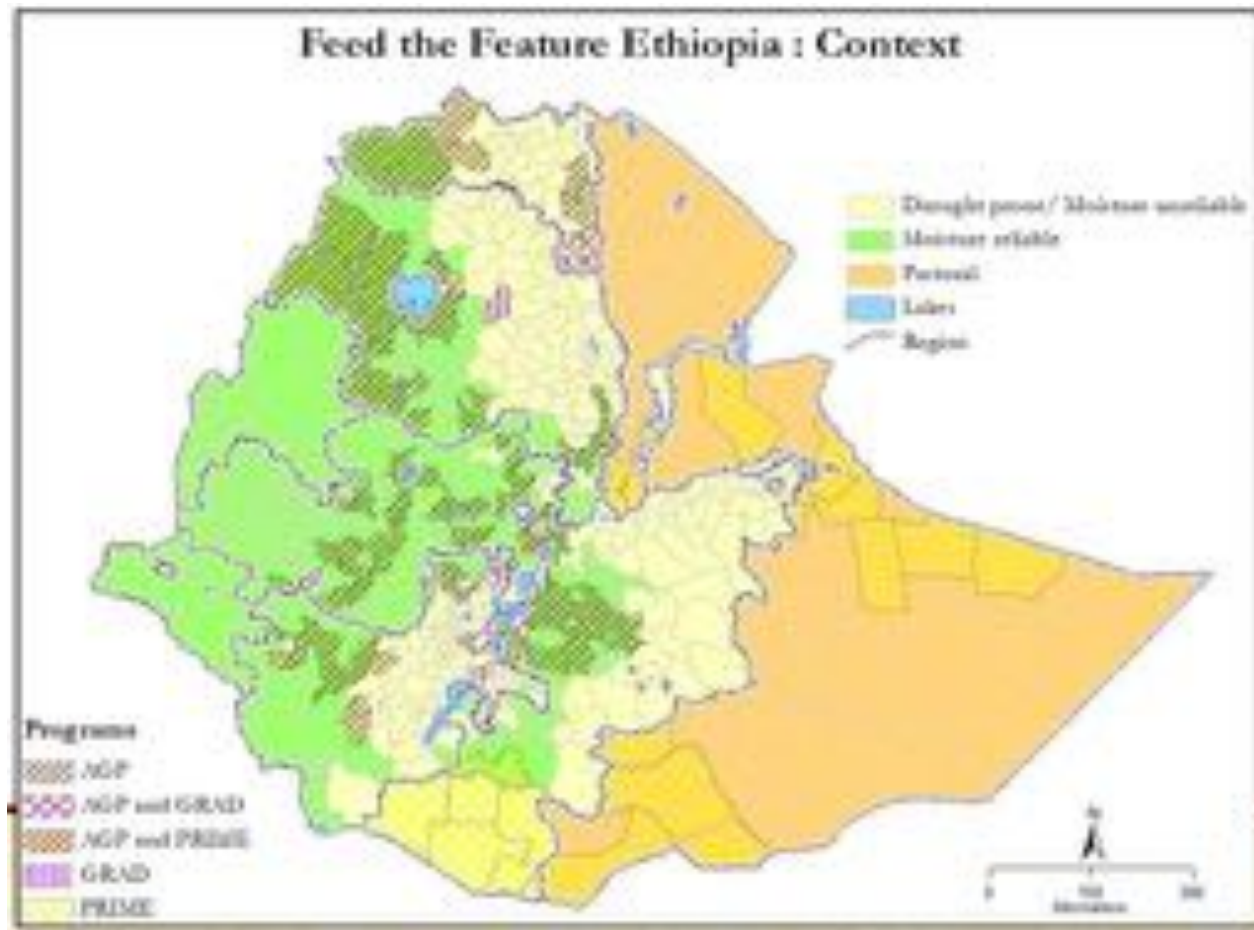
Designed to assess the impact of the whole FtF program in the whole ZOI. Not suited to study the impact of individual projects, or impact at specific sub-areas (regions/zones/*woredas*). Carefully selected control groups. Difference-in-difference analysis combined with state-of-the-art matching techniques to further establish valid counterfactuals. But most FtF projects operational for 2 years (since 2013). Achieving statistically detectable impacts take time, cf PSNP, AGP.

Midline Impacts:

Poverty and Expenditures in ZOI: The estimated impact of FtF on these indicators is not statistically different from zero. In other words, the change in poverty or per capita expenditures cannot (yet) be causally attributed to the FtF investments.

Nutrition and Food Security in ZOI: We find suggestive evidence that the FtF is reducing underweight prevalence. The estimated impact is 4.4 percentage points and the estimate is statistically significant at 10 % level. The estimated impacts for other indicators are not statistically significant.

Women's Empowerment in Agriculture in ZOI: Cannot be tested in the same way.



PPT Presentation 1. Interactive Voice Response - Short Message Service

Agriculture Transformation Agency (ATA)

The second presentation, by the Ethiopian Agriculture Transformation Agency, explained how the ATA's Interactive Voice Response (IVR) Short Message Services (SMS) system is being used as a tool to disseminate year-round agronomic advice to farmers and development agents in Ethiopia. The IVR/SMS system distributes agronomic best practices to improve the flow of information between stakeholders implementing farmer-targeted interventions, and to the farmers that these interventions are intended to benefit.

The system provides agronomic information to farmers in multiple ways:

- A call-in automated hotline
- A push-based alert system using IVR/SMS
- A pilot interactive helpdesk

Through this project the ATA aims to be able to disseminate agronomic best practices, make information transparent and accessible to everyone, and evaluate the impact of interventions.

The ATA successfully piloted the system through the Household Irrigation team, with the pilot implemented across 21 *woredas* in Ethiopia's four main regions. The pilot focused on high value horticultural crops, e.g. potato, carrot, onion, under various soil types and agro-ecologies. The outcomes to February 2014 included: 500 calls per day from 7,700 unique callers making a total of 57,400 calls. Women were 27% of the callers. An IVR/SMS dashboard recorded the number of calls each day and each week, by region and by user group. Challenges included awareness creation of the service and only 6 analog lines for the calls.

By March 2016 the outcomes were as follows: 1.3 million registered callers of which 936,000 identified themselves as farmers including 21% women. The IVR/SMS had issued 3 alerts to 750,000 farmers on wheat rust, maize lethal necrosis disease and unseasonal rainfall. The service was operating on 210 lines – 120 in-coming, 60 'pushing' and 30 'survey'. Addition information - including more localized advice and information on weather, livestock, rural finance and market information - is slowly being added.

The IVR/SMS system notifies extension workers and smallholder farmers of pertinent agricultural related issues and can:

- Send both IVR and/or SMS messages through the 'Push with Filter' feature.
- Send messages to selected individuals through the 'Manual Push' feature.
- Allow users to record and upload voice recordings directly from the system.
- Provide administrators with detailed logs/reports on the status of messages.

Lastly, the IVR/SMS System is also piloting an interactive helpdesk that will enable extension workers and smallholder farmers to ask questions directly to experts. In the first month of the pilot the helpdesk received 100 questions. The questions are being carefully monitored to learn more about the types of questions being asked by different users groups in different areas, and how the IVR/SMS system can be adapted and developed accordingly.

PPT Presentation 2. Improved Information Communication Technology (ICT) Services for Agriculture Extension

Digital Green

The focus of the first presentation was the work of Digital Green whose program objectives include: firstly, strengthening the capacity of development agents and community-based service providers to engage farmers and accelerate the adoption of new practices; secondly, improving the content and quality of ICT services for agriculture extension by creating a multi-media platform that integrates national research centers with farmer feedback; and thirdly, building the evidence to expand the work of Digital Green to new content areas and through new modalities.

An online, publically available dashboard (analytics.digitalgreen.org) displays information captured on videos produced, disseminations and adoptions. From Jan 2015-March 2016 across 4 regions of Ethiopia over 140,000 farmers have been engaged, over 240 videos produced, 20,000 disseminations held, and there have been over 103,000 adoptions. In the 2015 summer *meher* cropping season, Digital Green videos were screened to more than 70,900 farmers in 5,640 screenings, which was more than 50% of the total number of viewers reached in the year. The videos included information on cereal production – row planting, use of fertilizer in different regions and the benefits of crossbred cows. It is estimated that there is a 60% adoption rate.

The challenge ahead is to embed Digital Green into the formal agricultural extension system. It is proposed that this be done through:

Processes: Video dissemination and adoption verification incorporated into the job descriptions of development agents; video production and quality assurance visits carried out by senior *woreda* extension staff; data management and review conducted by *woreda* and regional ICT officers.

Institutional development: Regions to establish a project management committee and a technical advisory committee, to contribute to the purchase of equipment and to determine where engagement should be.

ATVETS: Centers of ATVET excellence supporting training on video production and dissemination in Tigray and Amhara.

The video-based approach is being coupled with other complementary ICT-enabled services:

- Participatory radio campaigns (Farm Radio International)
- Localized IVR content through ATA line
- Question and Answer Forum on ATA IVR line
- Development Agent-led data entry on mobile phones.

Digital Green is also carrying out a number of studies as follows:

- Ways to accelerate mainstreaming within the extension service and the respective appropriate levels of farmer and DA engagement, including impacts on levels of performance and motivation
- Level of localization required to ensure effective communication of extension messages
- Improved gender-sensitive approaches and information
- Levels of effectiveness of different services - video and IVR, video and radio, radio and IVR - including controlled trials across different wealth groups and regions.

PPT Presentation 3. Innovation Through Technology

USAID Agriculture Growth Program - Agribusiness and Market Development (AGP-AMDe)

The third presentation focused on AGP-AMDe's project for Technology Based Financial Services. The project was implemented in partnership with Kifiya Financial Technologies in a pilot project delivering financial services through branchless banking services. The pilot was conducted in SNNPR Gorche *woreda* with the Sidama Micro-Finance Institution (S-MFI). The project's objective was to provide access to formal financial services to farmers securely through digital devices, with biometric enrollment and authentication.

Activities included the following:

- Conducting institutional assessments
- Developing manuals and delivering training
- Procurement and deployment of trained staff and technology devices
- Awareness creation campaigns
- Launching digital financial services at 7 account service points

The pilot phase enrolled some 756 people, including 136 women, in branchless banking during the period October to December 2015, of which 248 were new S-MFI customers. The users deposited an estimated Eth birr 30,300 from the customers. The existing 508 members of S-MFI saved 20% more than their previous savings. The awareness creation and financial literacy campaigns reached 30,000 people.

PPT Presentation 4. Technology Based Extension and Scaling Approaches

USAID Agriculture Growth Program - Livestock Market Development (AGP-LMD)

The fourth presentation looked at National Livestock Market Information System (NLMIS) and the Animal Disease Notification and Investigation System (ADNIS)

National Livestock Market Information System (NLMIS)

As part of the USAID funded AGP-LMD and PRIME project, technical and financial support is provided to the Ministry of Trade (MoT) to re-launch the previously financially unsustainable NLMIS. The NLMIS is again being implemented in 47 livestock markets across 6 regions, with AGP-LMD and PRIME training 11 MoT staff to support the rollout of the system.

SMS-based market price collection training has been provided to 92 data collectors, and 66 women entrepreneurs in the livestock value chain have had ToT training on NLMIS application. As a result of the training, the marketing directorate is able to operate the system with limited external support. Each week trained data collectors send real-time market price information from 47 markets. Livestock keepers/sellers and traders routinely use this information, and mind-sets are changing among stakeholders as the NLMIS provides an alternative source of price information.

As a result of the progress made, the Ministry of Livestock and Fisheries (MoLF) plans to scale-up the coverage to 90 markets and to broadcast the information on local FM radio networks, and potentially to other social media systems. Diversified dissemination channels are required (e.g. community radio, Interactive Voice Response System, and TV). See also: www.lmiset.net

Animal Disease Notification and Investigation System (ADNIS)

ADNIS is led by the Veterinary Services Directorate and is simple to use and implementable in real-time. AGP-LMD, together with FAO and the LVC-PPD, provide significant technical and financial support. The program objective is to improve livestock reporting and response. It is being piloted in 60 *woredas* across 6 regions, and complements national efforts to comply with OIE regulations (World Organization for Animal Health).

Under this pilot program, 240 regional animal health assistants and MoLF IT staff have been trained in the use of the service, through disease notification application training. In addition, mobile literacy training has been provided to 80 women entrepreneurs. The result has been a pro-active increase in livestock disease reporting, with some animal health assistants reporting daily. Such has been the increase that the Directorate of Veterinary Services has agreed to transition from paper-based to electronic reporting, and the MoLF plans to scale-up coverage to 85% of the country by 2020.

PPT Presentation 5. Mobile and Agent Banking in Somali Region

PRIME, Mercy Corps, Belcash

HelloCash is a tri-partite initiative between Mercy Corps – which implements the USAID PRIME project – Somali Micro-Finance Institution (SMFI) and Belcash. The overarching development objective is for HelloCash to expand the number of economically stable households in Somali Region. The specific objectives include allowing 50% of mobile phone owners in Somali Region to gain access to financial services, ensuring that 1,145 jobs are created, and that 65% of the account holders use one additional service through their mobile bank accounts.

Banking services are offered in Amharic, English and 3 local languages. Accounts can be opened at any SMFI branch or agent, with both systems allowing deposits, transfers and withdrawals. Mobile banking is possible using voice-based IVR, USSD menu based application, SMS or web-based interface.

In under 12 months, the following progress has been made: 65,000 customers - 18% women; 126 agents – 11% women; and a value of transactions of almost US\$3.5 million through 38,000 transactions - with the most active day being transactions totaling US\$100,000. As a result of the initiative the SMFI has reached 5 times the number of customers they previously had. Plans for the coming 3 years include: increasing the number of SMFI branches to 42 and the agents to 4,500. It is also planned to expand the customer-base to more than 700,000.

PPT Presentation 6. Technology Based Nutrition Services

ENGINE, Save the Children

The specific objectives of the program 'Empowering New Generations to Improve Nutrition and Economic Opportunities' include to:

- Improve dietary diversity for pregnant/lactating mothers and children 6-24 months
- Encourage families to consume and not sell more of the foods they grow
- Promote the purchase of nutritious foods not produced on the farm
- Strengthen family engagement around positive nutrition practices and outcomes
- Improve household-level WASH practices.

The technology aids and services used by the program cover:

- Improved community dialogue using audio players
- The use of mobile phones to receive nutrition information and skills based tips to help communities
- Job aids for DAs to promote agriculture related skills and behavior.

The audio players are used to facilitate Enhanced Community Conversation and contain pre-recorded content that acts as a 'virtual facilitator', thereby enhancing the consistency and quality of information and learning activities, and making the work of CCAs easier. When prompted, CCAs turn off the audio player and lead their participants through the activity or discussion introduced by the recording. There are some challenges with the limited functions of the audio players, which do not allow playback when details are missed.

The mobile nutrition service (mNutrition) allows frontline workers to receive twice weekly text messages with key information, and which 'trigger' the workers to call in to the IVR service for further content. During phase one 240 frontline workers received 4,500 messages. This has increased during phase two. Challenges include the slowness of Ethio Telecom and mobile phones not having Amharic text capability.

Demonstration videos are produced and sent to DAs/AEWs who have mobile phones, allowing them to easily integrate them into their work as an interactive job-aid. They are kept simple – 1-2 minutes long, with little or no text/voiceover and just a background nutrition song. The mini videos focus on linking agricultural practices to improve dietary diversity of mothers and children of 6-24 months, for example:

- Preserving vegetables through solar drying
- Hand washing demonstrations
- How to build a tippy tap

Summary slides from the six PPT presentations are presented at Annex 3.

Responses to the presentations:

IFPRI – Presentation of Feed the Future Mid-line Survey Findings

Q: The household interviews were carried out in 2015 in June and July after a failed *belg* and the onset of the La Niña. Are there concerns that La Niña might have impacted on the results?

Q: The Feed the Future operates in a Zone of Influence that includes pastoral and agriculture based livelihoods. To what extent might the mixture of these livelihoods impact on the results?

Q: Are *woredas* the best unit of measurement? Specifically if the control group sample is taken in the same *woreda* but quite some distance from the Feed the Future group, might not different agro-ecologies be being monitored that might skew the findings of the impact of the intervention?

Q: On the nutrition findings, might not boys' and girls' nutrition be very different?

The questions promoted an interesting and wide-ranging discussion on the guidance that IFPRI received within the Scope of Work and associated strengths and possible weaknesses.

ATA Extension Call Centre

Q: How interactive is the service – how for example does it respond to farmer feedback?

A: The content is developed by the MoA through the Development Agents. Senior extension staff then review the material. Then monitoring was done with farmers. It was found for example that there were too many question prompts in the initial service. As a result changes were made to make it more accessible for farmers. The service should also get better as more themes are added including prices and weather.

Digital Green – Videos for Extension

Q: The video technology looks promising but how does the system manage location-specific extension messaging? To what extent might 'generalized' video messaging do harm?

Q: To what extent do the extension messages speak to the 'here and now' and to what extent are they tailored for long-term climate change trends?

In response Digital Green stated that they had started small and had tried to stay focused on key and straightforward messaging for which there was clear need. What was encouraging was that the service was constantly being over- as opposed to under-subscribed which suggested that the service was meeting real need. Also follow-up monitoring on levels of satisfaction and use of information were all strongly in favor of the system.

USAID AMDe – Commodity Exchange

Q: Is it expected there will be price differences between the tagged and non-tagged coffee?

A: It is interesting to note that tagging has been taken up by the most expensive coffee brands as it is here where the best returns can be made. Also, as no other country has full traceability in place, Ethiopia might secure a competitive advantage at least in the short-term. Tagging/ traceability may also help support sustainable coffee production that has lower impact on the environment.

USAID AMDe – Mobilizing Rural Savings Using Technology

Q: What was the cost to the farmers of this pilot?

A: No cost as it was only a pilot and the costs borne by the MFI partner organization.

Q: Will it be expanded and rolled out across the country?

A: At this stage this is a pilot. It is hoped the learning will be taken up by MFIs and rolled out across the country but AMDe cannot lead on this as the project is coming to an end.

USAID PRIME – Mobile Banking

Q: How were local traders/ agents selected?

A: Local traders were selected carefully based longevity in the community – a solid history of providing a service – and official registration.

Q: Is it planned to expand to other MFIs?

A: At this point there are no plans to scale-up to other MFIs, but this is something that the banks might decide to do.

FTF LISTENING SESSION

Looking backwards, looking forwards:

1. What approaches were successful and should be continued?
2. What approaches should be modified for Feed the Future moving forward?
3. Was the Feed the Future focus on a large number of value chains and geographic area positive or too broad?
4. What should Feed the Future consider as future opportunities in the agriculture sector?
5. What are potential pitfalls for Feed the Future implementation in the future?
6. How can Feed the Future better engage with partners?

Plenary discussion:

There was widespread agreement that successes associated with ICT included the following:

- ICT could capitalize on social capital that Feed the Future was developing through some of its work, including USAID GRAD, as there were efficiencies associated with linking ICT to groups that could share the information and use it collectively.
- ICT projects were all involved in capacity development and that this was encouraging
- Most of the pilots had the capacity to be taken-to-scale.
- The pilots were highlighting opportunities for further innovation including water management and potentially adaptive research with the LAND project that could result in policy gains. To make the most of these opportunities however it would be necessary to build and sustain good relations with regions.
- The pilots showed application for expanded use in better understanding and developing Feed the Future value chains.

However, the following was also noted:

- It was important to demonstrate the benefits for poorer households as the primary Feed the Future client group. It therefore needed to be demonstrated that there were real benefits of supporting the private sector/ service providers to expand services to the poor.
- There are inevitably increased costs associated with coordination but so too are there costs associated with duplication. A minimum level of coordination is required to ensure that pilots are innovative and not duplicative.
- At some point efforts needed to be made to recover costs as continued full subsidies would undermine potential associated business development.
- There needs to be increased investment in capacity building as this is an essential component of policy review and revision that is required to improve the incentive structure in Ethiopian agriculture that will result in increased investment and improved competitiveness.

Last word:

Finally, as this was Gary Robbins - EGTE Office Head - last meeting before moving to his next post with USAID, the meeting gave Gary Robbins a warm send-off, thanking him for his leadership and oversight of the Feed the Future portfolio in Ethiopia. Gary offered a few personal insights into his time in Ethiopia including the following – the need to take pilots to scale; the need for more flexible funding that could respond to locally emerging crises and challenges; the need to reduce the number of indicators; the time and emergency required to support positive policy change – but that good progress is being made.

Annexes

- 1. List of participants**
- 2. Meeting agenda**
- 3. Summary slide handouts of the PowerPoint Presentations:**
 - a. ATA**
 - b. Digital Green**
 - c. AGP-AMDe**
 - d. AGP-LMD**
 - e. Prime, Mercy Corps, Belcash**
 - f. Engine, SC**

1. Participants List

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2. Draft Meeting Agenda

Feed the Future – Quarterly Meeting Capital Hotel – 29th March 2016 Program Agenda Technology for Extension

| Session | Lead | Time |
|--|-----------------------------|--------------|
| Arrival and coffee | Capital Hotel | 8.30 |
| Welcome and Up-dates | USAID | 9.00 |
| Introductions | Facilitators | 9.20 |
| Presentation 1: Feed the Future Mid-line Overview | IFPRI | 9.30 |
| Presentation 2: Extension Call Centre | ATA | 10:00 |
| Presentation 2: Videos for Extension | Digital Green | 10.20 |
| Coffee Break | | 10.45 |
| Presentation 4: Mobilizing Rural Savings Using Technology | USAID-AMDe – ACIDI- VOCA | 11.00 |
| Presentation 5: Mobile Banking | USAID-PRIME, Mercy Corps | 11.20 |
| Presentation 6: Technology-based Nutrition Services | USAID-Engine, SCI | 11.45 |
| Feed the Future – Listening Exercise | USAID | 12.05 |
| Wrap-up | USAID | 1.35 |
| Lunch | | 1.45 |

3. Presentations – summary slide handouts

a) ATA

The ATA IVR/SMS system is a tool to disseminate agronomic advice to farmers/ development agents (DA) year round throughout Ethiopia.

The IVR/SMS system distributes agronomic best practices to improve the flow of information:

- Between stakeholders implementing farmer-targeted interventions
- The farmers that these interventions are intended to benefit.

This system provides agronomic information to farmers in multiple ways:

- A call-in automated hotline
- A push-based alert system using IVR/SMS
- An interactive helpdesk (Pilot)

Through this project, the ATA will be able to:

- Disseminate agronomic best practices
- Make information transparent/accessible
- Evaluate the impact of the intervention

The ATA successfully piloted this IVR/SMS system through the Household Irrigation (HHI) team and scaled up to other areas

HHI IVR Pilot Project

- Objective was to provide agronomic advice to farmers on HHI related activities through IVR/SMS
- Pilot took place in 21 woredas, in the four main regions
- Focus on high value horticultural crops, e.g. potato, carrot, onion under various soil types and agro-ecologies

Outcomes Feb, 2014

- Successes:**
 - 500 calls per day
 - 7,700 unique callers
 - 57,400 calls into the system
 - 27% callers were female
- Challenges:**
 - Awareness creation
 - Only 6 analog lines

Outcomes Sep, 2014

- Successes:**
 - 1.2 million calls (nov)
 - 259,000 unique callers
 - Cereal crops, PWD Crops and HHI Crops
 - Integrated Reporting tool
- Challenges:**
 - ET infrastructure related problems (Shortage in Lines & Poor signal)
 - 90 Digital Lines

Outcomes March, 2016

- 230 Lines (120 incoming calls, 60 pushing, 50 Survey)
- Of the 1.2 million regional callers, 938,000 identified themselves as farmers (22% identified as female)
- Broadcasted three IVR alerts to ~750,000 farmers on wheat rust (2007 & 2008 EC), JMVLD (2007 EC) and unseasonal rainfall (2008 EC)

Planned Expansion

- Adding an interactive helpdesk and interactive IVR/SMS surveys to get real-time information in woredas
- Localizing the contents and providing specific information to the DA's
- Incorporating weather information, livestock, Rural Finance (RPS) and market information

Overview of the 8028 Agricultural Information Service
A free resource for extension workers and smallholder farmers to get agronomic best practices

1 Dial from any phone to launch the program.
Calls are always free. Choose Amharic, Oromiffa, or Tigrinya.

2 Tell us about yourself and what you are looking for.
We will ask about your name, gender, and farming experience

3 Choose your topic of interest

- (1) Pre-planting
- (2) Planting
- (4) Fertilizer Application
- (7) Pre-harvest
- (*) Go to the main menu

4 The system will provide tailored information from national agronomic experts

| Cereal Crops | High-value horticulture crops | Pulses/Oil Seed Crops |
|--------------|-------------------------------|-----------------------|
| (1) Barley | (1) Potato | (1) Chickpea |
| (2) Maize | (2) Carrot | (2) Sesame |
| (3) Sorghum | (3) Onion | (3) Peas |
| (4) Teff | (4) Garlic | (4) Fava Beans |
| (5) Wheat | | (5) Cotton |

The IVR/SMS system has a dashboard that will provide administrators with real-time statistics of the users calling into the system.

The IVR/SMS dashboard provides:

- Real-time data on the system usage
- Number of simultaneous calls
- Information on calls per region and users registered per language
- Additional data on rain-fed and irrigation requested information.

The IVR/SMS System has a push-based IVR and SMS alert system, to notify extension workers and smallholder farmers of any pertinent agricultural related issues

The IVR/SMS system can also:

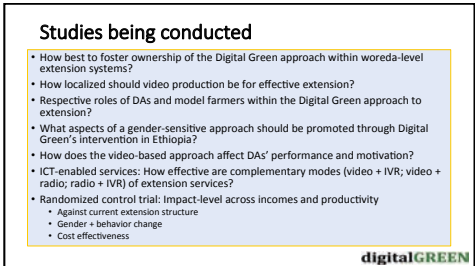
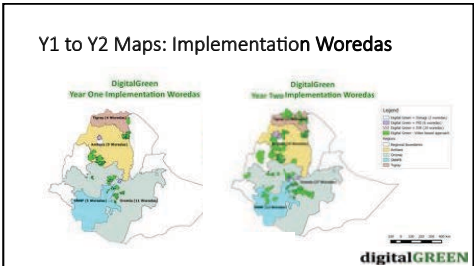
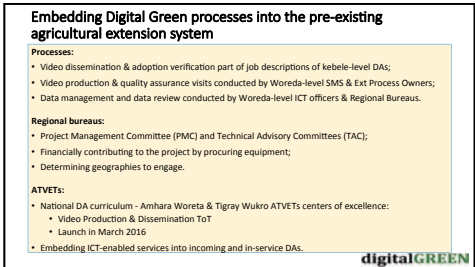
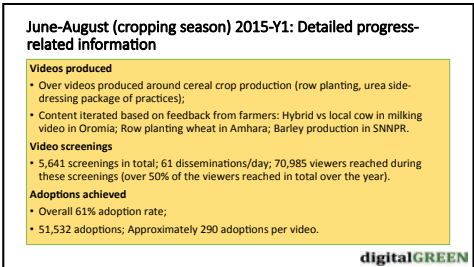
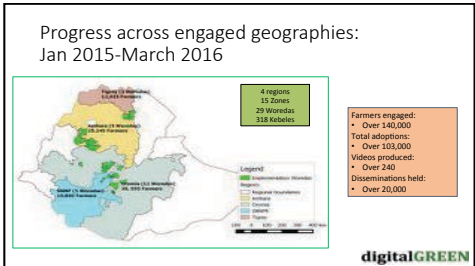
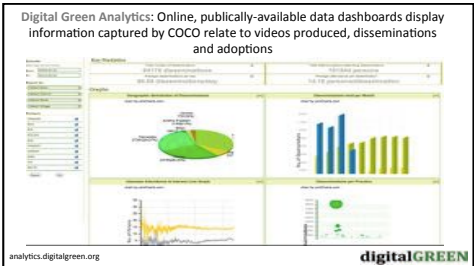
- Send both IVR and/or SMS messages through the "Push with Filter" feature.
- Send messages to selected individuals through the "Manual Push" feature.
- Allow users to record and upload voice recordings directly from the system.
- Provide administrators with detailed logs/reports on the status of messages.

The IVR/SMS System is piloting an interactive helpdesk that will enable extension workers and smallholder farmers to ask questions directly to experts


The IVR/SMS interactive helpdesk:

- Received more than 100 questions in its first month of piloting
- Will enable admins to identify trends/gaps with regards to the types of questions being asked.
- Will enable callers to sort through questions and solutions from other callers in their area.


b) Digital Green




c) AGP-AMDe



ETHIOPIA





USAID AGP-AMDe

Innovation through Technology



ETHIOPIA



Technology Based Financial Services

USAID partnered with Kifiya Financial Technologies in a pilot project delivering financial services through Branchless Banking (BB) services. The pilot was conducted in SNNPR Gorche woreda with Sidama MFI. Objective of the project was to provide access to formal financial services to farmers securely, through digital devices with biometric enrollment and authentication.



2



ETHIOPIA




Technology Based Financial Services

To meet the objectives following activities were undertaken –

- Conducting institutional assessments
- Developing manuals, delivering trainings
- Procurement and deployment of technology devices, human resources
- Awareness creation campaigns
- Launch of digital financial services at seven Account Service Points (ASPs)



3



ETHIOPIA



Technology Based Financial Services

A total of 756 people (136 women) enrolled in BB system electronically across seven ASPs, within the project time period between October and December, 2015. Out of these 248 were new customers. Sidama MFI collected around 30,300 ETB deposits from 756 customers. The existing 508 members of Sidama MFI were reenrolled electronically using BB technology and saved 20 percent more than previously. 30,000 people were reached through awareness creation and financial literacy campaigns




4

d) AGP-LMD

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NATIONAL LIVESTOCK MARKET INFORMATION SYSTEM



- USAID's AGP-LMD and PRIME projects provided technical and financial support to the MoT to implement the NLMIS system. MoT lead the process
- The support was given to re-initiate the system that was financially unsustainable
- Implemented in 47 potential livestock markets across 6 regions
- 11 federal MoT staffs trained

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SMS - BASED MARKET PRICE COLLECTION TRAINING FOR 92 DATA COLLECTORS



AGP-LMD gave ToT training on NLMIS application for 66 women entrepreneurs in LVC

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OUTCOME OF THE TRAINING & IMPLEMENTATION




- The marketing directorate enabled to manage the system with less support
- Trained data collectors are capacitated to send a real-time market price information on weekly basis from 47 markets
- Livestock traders, buyers/sellers are well aware of the system and its application
- Mind-sets among stakeholders are changing as NLMIS can be take as an alternative source of price information

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ANIMAL DISEASE NOTIFICATION AND INVESTIGATION SYSTEM




- The DVS lead the implementation of a real-time and simple to use ADNIS. AGP-LMD jointly with UNFAO and LVC-PPD projects provided significant technical and financial support.
- It's piloted in 60 woredas across 6 regions
- Complements to the country's effort to comply to the OIE (World Organization for Animal Health) requirements

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OUTCOMES OF THE TRAINING AND IMPLEMENTATION



- Knowledge transferred to regional animal health assistants and MoLF IT experts
- Pro-active disease outbreak intervention
- Animal health assistants started reporting on daily basis
- DVS office is in pre-transition period to change from paper-based reporting to the new electronic system
- MoLF plans to up-scale the coverage to 85% by the end of GTP-II

Please visit: <http://notification.systems>

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OUTCOMES OF THE TRAINING AND IMPLEMENTATION



"After taking the training on mobile usability, I have been able to use my mobile to greater purpose than I used to. Even though I had a mobile phone, I needed to carry an address book for my contacts. Now I can save them on the phone for convenient access. I even have speed dial shortcuts. Furthermore, I can record meetings on my phone while the secretary is absent and take notes as a reminder for necessary issues like loans provided for a member of association. Usually when I change phones, I find it really hard to get used to it, but after the training I had to buy a new phone to replace the last one and I managed to use it without much help from my kids."

Organisation: Hizbalem and Friends Animal Rethinking and Dairy Farm in Arba Mena region
Title: Chair Women

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e) Prime, Mercy Corps, Belcash

FEED:FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

helloCash **ሃኤሽ**

Wakiilka HelloCash የሃላ-ክሽ ወኪል Somali Microfinance Institution S.C.

Mobile and Agent Banking in Somali Region of Ethiopia

03/30/2016/Bethel Tsagaye/Innovation Investment Fund Manager/Mercy Corps Ethiopia

Photo credit: Tewodros T. Belcash

USAID **MERCY CORPS**

FEED:FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

PASTORALIST AREAS RESILIENCE IMPROVEMENT THROUGH MARKET EXPANSION (PRIME)

Livestock Productivity
Nutrition
Learning / Knowledge Management
Climate Change Adaptation
Alternative Livelihoods

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HELLOCASH

About the project
Goal:
Economically stable population in the Somali Region of Ethiopia

Objectives:

- 50% of mobile phone owners in Somali Region have access to financial services
- 1,145 jobs created
- 65% of the HelloCash account holders in Somali region use one additional services through their mobile bank accounts

Implementing partners and project cost-share

Cost share %

25% 41% 34%

SMFI
Belcash
PRIME

USAID **MERCY CORPS**

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helloCash

HOW DO I TRANSFER MONEY FROM MY HELLOCASH ACCOUNT?

Services

- Account opening at branch and at agent,
- Deposit at branch and at agent,
- Transfer/withdrawal at branch and at agent.

Services are offered in;

- Somali
- Amharic
- Oromifa
- Tigrinya
- English

Channels

- IVR – voice based
- USSD – menu based application
- SMS – Short message service
- Web – web based interface

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PROGRESS TO DATE

No. of customers: 65,371

Agents: 126

Female 18% Male 82%

Female 11% Male 89%

Value of transactions: \$3,476,165

Number of transactions: 38,188

Highest transaction per day: \$100,000

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HELLOCASH

Impact

- In less than a year SMFI has been able to provide financial services to 65,371 users through its branches and agents.
- The mobile and agent banking has enabled SMFI to reach 5 times the number of customers they had 3 years ago.

Targets for the next 3 years

Main focus will be having a total coverage of the SMFI all over the Somali Region:

- Branches / Satellites (42)
- Agents (4,568)
- End users (730,057)

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f) Engine, Save the Children

Technology-based nutrition job aids & services

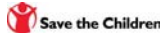
SBCC Activities:

1. Enhanced Community Conversation (ECCs)
 - Improved community dialogue using audio players
2. mNutrition SMS and IVR service for frontline workers
 - Use mobile phones to receive nutrition information and skills-based tips to help communities
3. Mobile Phone Demonstration Videos
 - Job aids for DAs to help them promote agriculture related skills and behaviors

“Virtual Facilitator” Approach


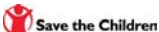
Using audio recorded content to conduct ECCs

- Convenient
- More interesting, more participatory, more interactive, and more fun
- Enhances the consistency & quality of the information and the learning activities
- Adds value to the work of the CCAs
- CCAs don’t have to memorize health information
- Cost-efficient


Features of the Audio Player

- Built-in Microphone / Headphones
- USB / SD card receptor slots
- External Charger / Power cord
- Alkaline battery port
- Play / pause
- Next / Previous
- Volume control

How ECC facilitators Use the Audio Player

- Turn on the audio player to listen to the audio-recorded information, instructions, drama etc.
- Turn off the tape player whenever they hear a special sound (a bell) on the audio-recording.
- Turning off the audio-recording allows CCAs to lead participants through the discussion or activity that was introduced by the “Virtual Facilitators”.



 

Community Perceptions – Pros & Cons

- Like the interactive nature of the ECCs
- Like the ‘Virtual facilitators’ friendly banter
- Feels like listening to the radio
- Like the songs, dramas, easy explanations
- Length of ECCs – CCAs don’t time discussions, games, role plays
- CCAs are used to talking – often paraphrase VFs and keep participants longer than necessary
- CCAs wait for late-comers – frustrates others

Issues/Challenges of using audio player

- Each ECC session is recorded as one track to minimize errors
- CCAs can’t play back missed information
- Noise level and young children at mothers’ meetings can be distracting
- Few audio buttons have double functions – eg. the next and volume control button is the same – needs care

mNutrition Service



HEALTH EXTENSION WORKER

Know more.
Be more.

Call 0935 988280
0935 988281




AGRICULTURAL EXTENSION WORKER

Know more.
Be more.


Call 0935 988282
0935 409184




SMS Service – How it works


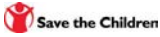


ENGINE SBCC team
sends out weekly text
messages



AEWs and HEWs
receive text
messages
prompting the to
call into the IVR
service

Sample SMS: "Dear HEW - Do you know why the First 1000 Days are important? Pls call 0935988280 or 0935988281 for the answer + chance to win airtime!"

IVR Audio Messaging Example

Pre-Recorded Audio Content Through Menu Options

General Welcome Message and Basic Info

Option 1: AEW
Welcome message for AEWs
Asks AEW to select Option 1A or 1B
- Encourages AEWs to leave a recorded voice message at the end of the call

Option 1A:
Visit your client
Parents should keep
children on **READY**
& **EAT**

Option 1A.1:
How can I help
families to **READY**
poultry and eggs

Option 1A.2:
Help families to
GROW collard greens,
GP-S, carrots and

Option 2: HEW
Welcome message for HEWs
Asks HEWs to select Option 1A or 1B
- Encourages HEWs to leave a recorded voice message at the end of the call

Option 2A:
Nutritious foods
for mothers and
children 6-24
months to **EAT**?

Option 2A.1:
Talk to families about **READY**,
SHARP & **EAT** practices
during the first 1,000 days?

Option 2A.2:
Address advice about women
EATING more quality foods
while pregnant or lactating

Issues/Challenges using mNutrition

- Sending bulk SMS through Ethio Telecom is slow
- Frequent power cuts – stops the transfer of SMS data - even with UPS
- Frontline workers have to be compensated for airtime lost –
- Mobile phones don't have Amharic text capability
- Limited SMS characters (160) – difficult to do in Oromiffa – SMS is sent in English
- Had to do English language comprehension test to gauge level of comprehension

Mobile Phone Demonstration Videos



- 1-2 minutes long
- Little to no text or voice over
- Background nutrition song
- Interactive job-aid for most DAs/AEWs who have mobile phones and can easily integrate these videos into their work




Mobile Phone Videos - Content

Mini videos always link agricultural practices on improving dietary diversity of mothers & children 6-24 months. Examples of videos:

1. Preserving vegetables and other foods through solar drying
2. Hand-washing demonstration
3. How to build a Tippy Tap
4. How to add "STAR" foods to enrich thick porridge for children 6-24 months
 - Responsive feeding
 - Meal quantity and frequency