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INTEGRATING LOW-COST VIDEO INTO AGRICULTURAL DEVELOPMENT PROJECTS

A TOOLKIT FOR PRACTITIONERS

BY JOSH WOODARD, FHI 360, APRIL 2012

This toolkit was prepared for the U.S. Agency for International Development by FHI 360 as part of Associate Award EPP-A-00-09-00007-00 under the FIELD-Support Leader Award EEM-A-00-06-00001-00. It does not necessarily reflect the views of USAID or the U.S. Government.

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DISCLAIMER

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The original concept came from discussions between Judy Payne (e-Business Advisor and ICT Advisor for Agriculture) and Josh Woodard at FHI 360, with input along the way from numerous USAID missions and implementing partners. It is the result of conversations with an increasing number of Feed the Future (FTF) and other USAID-funded projects that are struggling to effectively integrate information and communication technologies into their work with farmers. Many of these projects expressed interest in using low-cost video, although few of them had the know-how to do so on their own.

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ABOUT FACET

FACET is funded by USAID's Bureau for Africa, Office of Sustainable Development, Economic Growth, Environment and Agriculture Division (AFR/SD/EGEA). The project works closely with USAID's Economic Growth and Trade unit (USAID/EGAT), USAID missions, as well as implementing partners, governments,

and the private sector to provide technical assistance to better enhance the competitiveness and trade in the agriculture sector across Sub-Saharan Africa. Designed to be interactive and collaborative, FACET provides technical assistance to improve competitiveness and productivity across agriculture sub-sectors through the use of ICTs as tools to enhance the functioning and competitiveness of agricultural value chains and facilitate trade in agricultural products across Sub-Saharan Africa.

To achieve its objectives, FACET has two components:

- Knowledge sharing across missions regarding sustainable and scalable approaches to using ICT to increase the success of Feed the Future activities.
- Short-term technical assistance to projects to help them improve their uses of ICT, especially in ways that may be helpful to other projects as well.

Numerous briefing papers and application profiles produced by FACET, along with other resources related to ICT and agriculture, can be accessed online at: http://www.ICTforAg.org. USAID-funded agriculture projects working in sub-Saharan Africa can request short-term technical assistance by contacting the FACET team directly at facet@fhi360.org.

ABOUT THE AUTHOR

Josh Woodard is a program officer in FHI 360's Information Technology Applications Center and has managed the FACET project since its inception in 2009. He has been experimenting with video and other forms of low-cost ICT tools for more than a decade. Josh has facilitated workshops on the subject for rural schools in Indonesia, local project staff in Macedonia, Farmer to Farmer implementing partner staff, and high school students in Washington, DC. Prior to joining FHI 360, he worked for Thailand's Board of Investment, researching and writing articles on industries targeted for investment promotion and value chain enhancement, including agriculture and ICT. As a Peace Corps volunteer in a rural community in Thailand, he also worked closely with farmer groups to help them improve the marketing of their products and to employ computer-based accounting systems.

ACRONYMS

COCO	Connection Online | Connect Offline
FPS	frames per second
FTF	Feed the Future
GMO	genetically modified organism
HD	high definition
ICT	information and communications technology
ICT4D	information and communications technology for development
IVR	interactive voice response
POV	point of view
PV	participatory video
PVP	portable video player
RCT	randomized controlled trial
SWOT	strengths, weaknesses, opportunities, threats
USAID	U.S. Agency for International Development
VCD	video compact disc
VVC	Video Viewing Club
ZIZO	zooming-in, zooming-out

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INTRODUCTION

For thousands of years, farmers have had extremely limited access to information sources, which has consistently reduced agricultural productivity. Agriculture is fundamentally important to human existence, not only so the population can eat, but also because the majority of the world's poor engage in agriculture.

To maximize their productivity and earnings, farmers need a complicated mix of information resources for accurate and actionable information on topics such as planting methods, inputs (such as seeds or fertilizers), weather, disease, and markets to improve their yields and profit. Information can lead to synergies and cooperation between farmers, resulting in strengthened farmer organizations, such as cooperatives, associations, and self-help groups. It is important to remember, though, that information alone may be insufficient. Farmers also need linkages to other players in the value chain, including savings and credit providers, input dealers, aggregators, and individuals involved in markets, storage, and transportation. Without these linkages, information alone may have limited impact in boosting the earning and productivity of farmers.

Traditionally, farmers relied upon inherited practices and their personal networks for this information. The introduction of agricultural extension agents who bring expert knowledge directly to the fields of smallholding

farmers over the past century in sub-Saharan Africa vastly improved upon these informal networks, but the method is expensive and difficult to scale. Whether informally through friends, publicly funded agricultural extension programs, or private agri-dealers, farmers rely on expert information to successfully cultivate their land. This need for expert information is more important than ever in the 21st century if farmers are to successfully adapt to quickly changing climates and market demands.

For agricultural development practitioners, the challenge is often how to best deliver this information to farmers. We know that agricultural extension services delivered through face-to-face training and demonstration plots results in improved farmer productivity when they are well executed. Many agricultural development projects have increased the number of farmers served by leveraging their trainers through a variety of train-the-trainer approaches, such as training "expert" farmers or farmer associations to train other community members. These approaches can be effective, but they risk potentially diluting the clarity of the message.

Complicating this further is the fact that the most efficient and cost-effective way to deliver information to farmers often varies not only from region to region, but also from person to person. While some farmers may be more likely to act on information they receive from an agricultural extension agent, others might be more comfortable with advice from friends or farmers of a similar background. Recognizing this complexity, therefore, it is important to consider a wide range of options for sharing agricultural information with farmers. Perhaps more so than ever, modern information and communication technologies (ICTs) provide farmers with the opportunity to have their voices heard. This is a break from traditional methods of sharing information, which were essentially one-way, top-down channels from providers to the farmer. Modern ICTs present an opportunity to better align information to the needs and interests of individual communities.

New ICTs — especially mobile technologies — also create a tremendous opportunity for communicating in a personalized manner to individual farmers on a massive scale, though they can often be difficult for rural, low-literate farmers to understand and use. Also, the myriad new technologies available are difficult to assess and evaluate. Some of these technologies, like radio, have been around in one form or another for decades. Others, like mobile phones, computers, and video have only recently begun to appear in any noticeable concentration in rural communities around the world, particularly in sub-Saharan Africa.

WHAT IS THE PURPOSE OF THIS TOOLKIT?

USAID projects and other implementing organizations provide training to farmers and other parties along the agricultural value chain on a wide range of topics. This toolkit is designed to help these projects and organizations use low-cost video to augment the traditional agricultural development activities and extension services they are providing. It is important to stress that this toolkit does not assume that video media is the most appropriate solution for disseminating agricultural information. Rather, given its growing accessibility due to the increasing availability of low-cost digital video cameras and editing software — and the increasing use of video media in donor-funded agricultural development projects — this toolkit aims to enable practitioners to develop a more systematic approach to using low-cost video as one of the mediums through which they share information with farmers.

WHY SHOULD YOU CONSIDER USING LOW-COST VIDEO?

Using low-cost videos within your agricultural development project can be an effective way for increasing the scale of your activities by leveraging the expertise of local experts and farmers for a broader audience. Since

LOW-COST VIDEO is defined here to mean short, modular videos that are produced by local players using basic equipment and often free editing software.

It is important to always consider the total cost, quality, and potential benefit of any video intervention. For example, a low-cost video that costs $2,000 to produce but only impacts 200 farmers may be less cost effective than a $10,000 professionally produced video that impacts 1,500 farmers.

Your final decision regarding how to structure any use of video should be made based on the likelihood of achieving your objectives, balanced by cost and quality, and not just one of those criteria taken in isolation.

the videos may be created in the field by your staff, the cost will be lower than professionally produced videos, and the turnaround time from concept to final product will likely be much faster. Given the cost and time benefits, you will also likely be able to create many more videos than you would be able to do otherwise. Also, if you find that one of your videos is not having the desired impact, it is much less expensive to create a newer, more effective video than it would be using a professional videographer. Last, producing videos with local stakeholders will likely increase local ownership of content, empower local farmers by giving them a voice, and increase local exposure to ICT tools. Of course, it takes more than just providing hardware to achieve any of these things. By the time you have finished using this toolkit you will not only be able to create low-cost videos, you will be able to incorporate a structured and effective low-cost video activity into your agricultural development project.

WHAT IS THE INTENDED AUDIENCE OF THIS TOOLKIT?

The primary audience of this toolkit is USAID implementing partners and other development organizations that are using or planning to use video to enhance their agricultural and rural development project impacts.

Although a number of different video production models exist, this toolkit focuses specifically on low-cost video created by local field staff, farmers, and local experts. Preference in the toolkit is given to creating content that farmers may find helpful in their everyday work rather than creating cinematic masterpieces. That said, you will still likely find value from this toolkit even if you are planning to hire a production company or professional videographer to produce your videos.

By the time you have finished using the toolkit, you will have developed an implementation plan for integrating video into your agricultural development work.

WHAT WILL I FIND IN THIS TOOLKIT?

There is no one-size-fits-all solution or approach to using low-cost video. What works well in one context or situation could fail to generate interest elsewhere. As such, this toolkit will not provide you with a prescribed model. Instead, it aims to guide you through a series of questions that will help you and your team to design a low-cost video activity that best suits your own objectives, beneficiaries, and project realities. To facilitate this process, each Component of this toolkit begins with learning objectives and ends with critical success factors that you will need to consider when implementing your activity.

The toolkit is divided into the following six components:

- **COMPONENT 1: How is low-cost video currently being used in agricultural development?**
  This Component provides an overview of some of the ways that video is currently being used in agricultural development, particularly for extension services. It includes illustrative examples from organizations both in Africa and elsewhere, along with contact information, websites and other resources that you can use to learn more about a given approach.

- **COMPONENT 2: Is low-cost video an appropriate way to achieve our objectives?**
  Before you begin using low-cost video, it is important to assess if video is really one of the most appropriate means to address the objectives you are trying to achieve. Once you decide that video is an appropriate means, you will need to determine which type of video is best suited to your context and objectives (i.e., low-cost,

professional, etc.). It is also important to assess whether you currently have the capacity to work with video, and if not, what steps you can take to develop that capacity. This Component will guide you through a process of assessing the appropriateness of a variety of ICT and traditional solutions to determine if video is, indeed, a good fit based on your own organizational, technical, and financial capacity.

- **COMPONENT 3: How can we create our own agricultural extension videos?**
  This Component will help you to identify who you will want to train and determine what capacity they will serve in the process. It includes suggested techniques for producing videos that meet a baseline quality standard, with a focus on drafting, recording, and editing your video. Finally, it includes suggested techniques for lowering barriers to entry so that your team is more likely to produce its own videos, including simple ways to provide incentives for video production. It is not meant to be a comprehensive technical guide on how to create videos, although technical tips and references are included.

- **COMPONENT 4: What is the best way to disseminate our videos?**
  The means through which you disseminate your videos will vary depending on your target audience and the local context. It is important to develop a dissemination process that is appropriate to the context you are working in if you want to maximize the likelihood of the videos having an impact. Otherwise, even the best videos could end up being relegated to the virtual dustbin. This Component includes suggestions for different dissemination methods, including both technical and social considerations. It will help you to assess which method(s) might be most appropriate for your needs and how to use continuous feedback to improve your dissemination approach.

- **COMPONENT 5: How can we track the impact that our videos are having on farmers?**
  Once videos have been produced and shared, it is important to learn how they are being used and what, if any, impact they may be having. This Component highlights various ways that you can track video usage and measure impact. In addition, it includes suggestions for how to capture farmer feedback to better inform the creation of new content development.

- **COMPONENT 6: What are the technical considerations we need to keep in mind?**
  There are a number of technical choices that need to be made before you can begin shooting or disseminating any video. This Component includes overviews of the different types of low-cost video recording devices, their strengths, weaknesses, and examples of situations for which they may be most appropriate. It also covers peripheral devices, editing software, and other important technical choices. This section will not make recommendations for the best devices. Instead, it aims to inform you of likely technical considerations, so that you can assess what is most appropriate for your situation.

HOW SHOULD I USE THIS TOOLKIT?

In each Component, you will find helpful worksheets and templates, which are also included in soft copy on the accompanying DVD. These are meant to help you tailor the design of your implementation plan to your specific situation. It is recommended that you read each Component sequentially prior to implementing any video activity. Doing so will enable you to develop a detailed plan that is more likely to address most of the issues you will encounter during implementation. That is not to say that your plan should remain static. Once you have begun to implement your activity,

you may find that certain assumptions you made have changed or that the realities of implementation are different than you had imagined. That is perfectly normal and to be expected. Make sure to revisit your plan along with relevant Components throughout the implementation phase and revise it as necessary.

If you have already started implementing an activity with farmers using low-cost video prior to reading this toolkit, first write down the main challenges you are experiencing. Then, read through the toolkit (or relevant Components) with these in mind and make adjustments to your current activity as appropriate. Before making any significant changes to what you are already doing, you may want to consider conducting a small pilot activity with your intended beneficiaries to ensure that the changes will actually address the challenges you are facing.

Component and Worksheet Overview