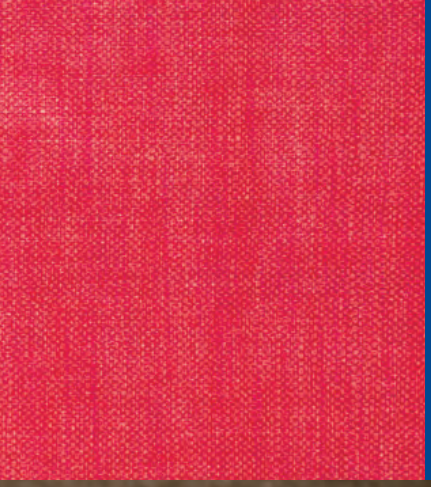

# 2

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 GOALS

**BY THE TIME YOU HAVE FINISHED THIS COMPONENT YOU WILL HAVE:**

- ✓ *Decided if video is an appropriate option to achieve your objectives.*
- ✓ *Developed a draft implementation plan for your video activity.*

WHEN USING TECHNOLOGY IN A DEVELOPMENT PROJECT, it is not uncommon to start with a technology solution in mind and then determine how to best use it to achieve our objectives. While this may result in the successful application of technology, it can also be highly limiting because it locks us into viewing the challenge through whichever technology lens we have chosen. As the old saying goes, 'if all you have is a hammer, everything looks like a nail.' This is why it is important to first assess which option — whether video or another method — is the most appropriate to address the challenges you are trying to overcome or objectives you are trying to achieve.

To do this, we need to take a step back. Instead of accepting video as a foregone conclusion, 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. It is possible that another ICT solution, or a more traditional solution, may be even more appropriate in your situation. If that is the case, you will be thankful to determine that before you have invested the time and resources into video. Conversely, if you determine that video is appropriate for your situation, the process will provide a foundation from which to build your own work with video.

## HOW DO WE ASSESS THE APPROPRIATENESS OF DIFFERENT ICT OPTIONS?

To start, you will want to write out your objective. It might be helpful to discuss this with your project team first to make sure that everyone has the same understanding of what you are trying to achieve. Depending on how broadly you have defined your objective, certain options may be more or less appropriate for different purposes or type of information. For example, information about agronomic practice may

be best communicated through visual means (e.g., demo plots, video, face-to-face exchanges), whereas price and weather information may be better provided using mobile phones or bulletin boards. Similarly, a public awareness campaign may be best done through mass media, whereas training may be best accomplished through mediated exchanges with farmers.

It is best, therefore, to make sure that your objective includes the type of information you plan to provide and the purpose of providing that information. Rather than saying, 'Improve agricultural extension services for smallholder farmers in Mali,' which could include dozens of specific activities, you might want to consider something more specific, like: 'Increase productivity of smallholder farmers in Gao region of Mali through expanded access to information on best farming practices.'

Once you have agreed upon your objective, it is important to lay out the context in which you are working. Although you have already most likely mapped out this context as part of your broader project design, it is helpful to do so again here, with a particular focus on the profile of your typical target beneficiary and the current ICT infrastructure in the area where you will be working. This information will be helpful when completing the **ICT Option Assessment Tool** found later in this Component.

Determining the profile of your typical beneficiary will help you to assess which ICT solutions will likely be most appropriate to their needs and capacity. For example, if your typical beneficiary is illiterate, then using SMS text messages to disseminate information to them may have limited impact, even if there is high mobile phone penetration in the area where you are working. Below is a list of questions that you may want to consider asking about your beneficiaries.

**NOTE**

If you have more time and the available resources, you may want to consider using the **ICT Infrastructure Questionnaire** found in the component worksheet section to survey a selection of beneficiaries you are working with. This will help you paint a more complete picture in response to the last question in the list on the following page. Not all of the questions on the questionnaire may apply to your situation, so you should select only the most relevant ones.

**SAMPLE QUESTIONS:**

- What is the average age of your typical beneficiary?
- What is the average level of education?
- What is the average level of literacy?
- What is the average socioeconomic status?
- What are their primary crops/commodities?
- Are there any cultural considerations or local beliefs that should be kept in mind?
- How do people tend to share information?
- What times of the day are people normally available?
- Where do people tend to congregate?
- Do most farmers participate in farmer or community groups?
- What types of ICT do people generally have access to?
- What is their level of knowledge of and comfort with each of these?

Think about each of these questions and write down your answers as a group on flipchart paper. Remember, the aim is to create a profile of a typical beneficiary. This may not apply to all of the farmers you work with, but it should generally apply to most of them.

Once you have finished answering these questions, you can synthesize your answers into a more concise profile like the one that follows.

| | |
|---|---|
| **Age** | 40 – 45 |
| **Education level** | 6th grade |
| **Literacy level** | Basic literacy. Limited time spent reading. |
| **Socioeconomic status** | Subsistence, smallholder farmer |
| **Primary crops** | Staple crops (maize, potatoes, onions, beans) |
| **Local beliefs** | Significant esteem placed in elders |
| **Information sharing** | Mostly word of mouth. Storytelling by elders. |
| **Availability** | Mostly in the evenings after sundown |
| **Main points of congregation** | Local market, village leader's house |
| **Group participation** | Monthly participation in farmer co-op meetings |
| **ICT profile** | Enjoys TV, although limited access. Access to a basic mobile phone. Owns radio, listens to it daily. Limited access to electricity. |

Using this information, the next step is to use the **ICT Option Assessment Tool** to determine the most appropriate means of achieving your objective given your local context. This tool is basically a modified strengths-weaknesses-opportunities-threats (SWOT) analysis that will help you to consider the potential benefits, costs, and staff capacity for each option. When considering strengths and weaknesses, it is

important to keep your beneficiary profile at the forefront when making your determinations. Often what may appear to be a strength when considered through our own lens of experience may have either limited impact or be a weakness given the local context. For staff capacity, make sure to consider both local and home office capacity. This should include both technical capacity and time available. You might find it helpful to divide technical capacity into four classifications, as follows:

| | |
|---|---|
| **None** | No current capacity |
| **Limited/basic capacity** | Can use basic features |
| **Intermediate capacity** | Able to use most features, but limited ability to train others |
| **Advanced capacity** | Able to create/manage content and train others |

Identifying your local and home office capacity in advance will help to determine whether it is possible for you to proceed with using a given ICT option even if all other signs point to yes. The fact that your staff may have only limited capacity does not, in and of itself, mean that you should not proceed. You may be able to hire external support or pay for technical training for your staff to bring them to a level where they are able to implement your proposed activity. In addition, the remaining components of this toolkit have been designed so that they can be used by both local and home office staff to develop their own capacity specific to using low-cost video and training others. Like any technical skill, it will require practice and experimentation first, but it is not as daunting a process as it may seem.

You can use these capacity considerations, along with equipment, material, and other potential costs, to help you determine whether the likely total costs of a given option fit within your available budget.

Based on your responses to these criteria, you should be able to determine which option is most appropriate. You may find that more than one option appears appropriate for achieving your objective. If this is the case, you may want to consider piloting activities using each appropriate option to determine which one actually achieves the greatest impact. Alternatively, complementary strategies can be used to further enhance outcomes. For instance, if you determined that both video and radio were appropriate options, it may be that using both mediums to reinforce messaging is the most effective option of all — assuming that you have the capacity and budget to do so. Regardless of which option you choose, you should build in a way to evaluate your methods to refine them over time.

A completed, sample **ICT Option Assessment Tool** has been included on the following page to give you an idea of what it may look like. A blank copy has also been included at the end of this Component. Before you write anything on the template, you may find it helpful to brainstorm ideas with your team so that you have more space. After you have made your final determination, consider sharing it with colleagues or other stakeholders who were not involved in the process to ensure that it makes sense to them. Ask them to evaluate your assessment by double checking assumptions you have made and providing their own recommendations for improvements. Use their input to strengthen your assessment.

**OBJECTIVE:** INCREASE PRODUCTIVITY OF SMALLHOLDER FARMERS IN GAO REGION OF MALI THROUGH EXPANDED ACCESS TO INFORMATION ON BEST FARMING PRACTICES

| | ICT OPTION | | | | | |
|---|---|---|---|---|---|---|
| **ASSESSMENT CRITERIA** | **Basic cell phone (voice + text)** | **Radio / Podcasts** | **Smart phones/ tablets** | **Video** | **Web** | **Other: Billboards** |
| **Strengths of each option** | Most farmers have access | High penetration, used by most farmers | Portable, large screen | Most farmers already enjoy watching TV and videos | Currently none in this case, as there is virtually zero internet access | Relatively easy to produce and distribute |
| **Weaknesses of each option** | Limited literacy levels | No project access to community radio, currently no mp3 players in community | Zero hardware penetration, concerns about network capacity | Currently TVs only exist in a couple of places in the community | Internet access extremely limited | This has been tried before with limited impact |
| **Current staff capacity** | Advanced | Intermediate | Limited | Intermediate, May need to involve training from home office | Advanced | Advanced |
| **Potential costs** | Would need to purchase or develop MIS program | Could be done by purchasing mp3 players for community | Would need to purchase devices and provide training on use | Would need to purchase devices and provide training on use | Would need to purchase computers and satellite internet | Cost of billboard rental and materials |
| **Is this an appropriate option? Why?** | No — due to limited literacy | Yes — for podcasts/ mp3 players, likely broader outreach than model plots or extension agents | No — lack of staff capacity and penetration | Yes — farmers enjoy this medium, likely broader outreach than model plots or extension agents | No — currently no internet access | No — have already tried this option with limited results |

Adapted from a table originally developed by Mark Bell and Judith Payne for the USAID-funded MEAS project (2011), which can be found online at: http://measict.weebly.com/extension-and-ict-options.html

## HOW CAN WE PLAN TO IMPLEMENT OUR ACTIVITY?

Once you have finalized your assessment, you may find it helpful to create a more detailed plan for carrying out your activity. One way to do this is by using the Implementation Plan Framework included in the worksheet section at the end of this Component. It will contain much of the same information you have already compiled, but it is designed to help you outline a roadmap for your activity that can be used as a common point of reference for all of your staff and partners. Unlike some planning tools that you may be accustomed to using, this one is likely different in that it starts with the desired consequences, or the 'Why?'

Using this framework you will develop an implementation plan for your video activity that focuses on outcomes, context, and beliefs, in addition to the mechanics of what, who, and how. It also builds in consideration for measuring impact directly from the start of your activity.

Before you read the rest of this toolkit, you should draft an initial implementation plan together with your team as a starting point. You will want to allot at least two hours for this activity to provide enough time for brainstorming and discussion. Make sure to use the framework from left to right. This will help to ensure that all of your decisions related to the mechanics and measurement of your activity are derived from your desired outcomes. As with the other exercises above, you are encouraged to use flipchart paper during this process so that you have enough space to write out everyone's ideas.

As you work your way through the rest of the toolkit, you are encouraged to improve and expand upon your initial draft based upon what you learn along the way. By the time you have finished using the toolkit, you should have a final implementation plan that you can use to guide your video activity.

**CRITICAL SUCCESS FACTORS**

- Select the most appropriate ICT option.
- Know your target audience.
- Develop a well-thought-out plan.

The following pages include a sample of what a completed plan might look like. This sample is for illustrative purposes and is therefore not too detailed. Your final plan will likely be more thorough than the sample. Remember, though, that this is not meant to be a step-by-step process for how you will implement your activity, but rather an overarching framework for you and your team to use. Take some time to review the sample and try developing your own draft now before continuing to the next Component.

## DECISION MAKING & PLANNING FRAMEWORK

| | |
|---|---|
| **1. WHY?**<br><br>DESIRED CONSEQUENCES: IMMEDIATE, MID-TERM AND LONG-TERM OUTCOMES & RESULTS | ***What changes do we want to achieve by the time the project is over?***<br><br>***Immediate changes/results?***<br>Farmer groups will be able to share knowledge and best practices with their members.<br><br>***Mid-term changes/results?***<br>Farmer groups and their members have created learning products that they can share with each other.<br><br>***Long-term changes/results?***<br>Positive changes in farming practices of farmers who use these products. |
| **2. CONTEXT?**<br><br>SITUATION & CHALLENGES;<br>• BARRIERS TO OVERCOME;<br>• ASSETS & OPPORTUNITIES | ***Characteristics of the situation in which we work? Barriers to overcome?***<br>Farmers groups that we work with are all rural. Access to electricity is sometimes sporadic.<br><br>***Characteristics of the target audience that we seek to help?***<br>Limited to no prior experience with technology. Many beneficiaries seem to enjoy watching TV shows and videos when they have access to them.<br><br>***ICT assets already present in the community?***<br>Most farmers groups have access to a TV and VCD player. Access to basic feature phones is common, although smart phones are extremely limited.<br><br>***Opportunities that exist within the environment and system that we can leverage?***<br>Enjoyment of TV shows and a strong tradition of storytelling can be leveraged to create engaging learning products using video. |
| **3. BELIEFS?**<br><br>CORE PRINCIPLES GOVERNING OUR DECISIONS & ACTIONS | ***What development principles and non-negotiable values do we have to consider in how we implement our approach?***<br>Any learning products must be locally driven and created by the farmers and farmer groups themselves. |

Adapted from a framework originally developed by Eric Rusten at FHI 360

CONTINUED →

## DECISION MAKING & PLANNING FRAMEWORK CONTINUED

| | |
|---|---|
| **4. WHAT?**<br><br>TECHNICAL APPROACH | ***Given our responses to sections 1-3, what approach will we take to best achieve our desired consequences?***<br>We believe that peer-created instructional videos are an effective way to share knowledge and best practices with farmers in a way that is engaging and likely to have impact. Videos will be shown to farmer groups on a weekly basis with facilitated discussion using a hub-spoke model. |
| **5. HOW?**<br><br>CRITICAL STRUCTURAL ELEMENTS, REQUIRED EQUIPMENT | ***How will it be implemented?***<br><br>*Training and technical support*<br>We will conduct a one-week workshop for district officers, farmer group representatives and select farmers on techniques for effectively creating story-centered instructional videos. District officers will also attend a one-week workshop on how to distribute them to their members. Additional technical assistance will be provided by the local technical lead on an on-going basis.<br><br>*Dissemination*<br>Videos will be housed at district offices and disseminated weekly at farmer group meetings. As most farmer groups already have access to TVs and VCD players, dissemination will primarily be done via a VCD library, supported by pico projectors in communities without access to DVD players.<br><br>*Required equipment*<br>We will need to purchase at least 1 pocket camcorder and accessories for each district hub. Pico projectors will be purchased as necessary. |
| **6. WHO?**<br><br>ESSENTIAL ACTORS | ***Who will be responsible for implementing this?***<br>The project's local technical lead and home office project director will be responsible for overseeing all technical support and training. District officers will be responsible for facilitating video screenings with support from the local technical lead as necessary. |
| **7. ARE WE THERE YET?**<br><br>INDICATORS AND MEASURES OF SUCCESS, ASSESSMENT METHODS | Our primary indicators will be the number of videos produced, the number of farmers who have viewed them, and the percentage change in knowledge and practice.<br><br>We will carry out baseline surveys with farmers to gauge their knowledge and practices at the start. Endline surveys will then be conducted after 6 months from the first video release to assess any change, disaggregated by whether or not they have created or viewed any videos and their frequency of participation.<br><br>This will enable us to measure whether or not there is a correlation between viewing the videos and positive changes in knowledge and practice. |

# NOTES

# 2

# WORKSHEETS

ICT Option Assessment Tool

ICT Infrastructure Questionnaire

Implementation Plan Framework

# ICT OPTION ASSESSMENT TOOL

**OBJECTIVE:**

| ASSESSMENT CRITERIA | ICT OPTION | | | | | |
|---|---|---|---|---|---|---|
| | **Basic cell phone (voice + text)** | **Radio / Podcasts** | **Smart phones/ tablets** | **Video** | **Web** | **Other: Billboards** |
| **Strengths of each option** | | | | | | |
| **Weaknesses of each option** | | | | | | |
| **Current staff capacity** | | | | | | |
| **Potential costs** | | | | | | |
| **Is this an appropriate option? Why?** | | | | | | |

Adapted from a table originally developed by Mark Bell and Judith Payne for the USAID-funded MEAS project (2011), which can be found online at: http://measict.weebly.com/extension-and-ict-options.html

# ICT INFRASTRUCTURE QUESTIONNAIRE



| QUESTIONS | OPTIONS | ADDITIONAL DETAILS/ INFORMATION |
|---|---|---|
| **What types of computers are being used?**<br>• How many computers do you have?<br>• How many are currently operating?<br>• How old are they?<br>• How do you primarily use this device? (play games, word processing, accounting, etc.) | • Desktop<br>• Laptop<br>• Netbook<br>• Thin client<br>• Low-cost PC – Classmate, XO, etc.<br>• Tablet – iPad, Samsung Galaxy, etc.<br>• PDA<br>• eReader – Kindle, Nook, etc. | |
| **What operating system is being used?** | • Windows XP, ME, Vista, 7, etc.<br>• Mac OS<br>• Linux – Ubuntu, Red Hat, CentOS, SUSE, etc. | |
| **What type of internet connection is being used?**<br>• How fast is your connection?<br>• Do you have any bandwidth restrictions?<br>• Is your connection set up for a single user or multiple users?<br>• How many computers are connected to the internet?<br>• How do you primarily use the internet (social media, news, educational resources, etc.)? | • Dial-up<br>• ISDN<br>• DSL/ADSL<br>• Cable<br>• WiFi/WiMax<br>• Cellular (GPRS, EDGE, EVDO, G3, etc.)<br>• Satellite - VSAT | |

**CONTINUED →**

# ICT INFRASTRUCTURE QUESTIONNAIRE



| QUESTIONS | OPTIONS | ADDITIONAL DETAILS/ INFORMATION |
|---|---|---|
| **What type of mobile phone do you use/have access to?**<br>• When did you buy it?<br>• Is it pre-paid or post-paid?<br>• If it is pre-paid, how frequently do you change SIM cards?<br>• Does it cost you to receive SMS messages?<br>• How do you primarily use this device (inbound/outbound calls, SMS, etc.)?<br>• Do you receive agricultural information on this device? If so, explain: | • Basic phone<br>• Feature phone<br>• Smart phone | |
| **If you have a smart phone, what operating system does it have?**<br>*(Note: the user may not know the answer to this question, so the enumerator will need to know how to check)* | • iPhone<br>• Android<br>• BlackBerry<br>• Windows Mobile<br>• Symbian<br>• Other | |
| **What is your primary source of electricity?**<br>• How reliable is your electricity source? (i.e., How frequent are blackouts? How many hours can you use it before power runs out?) | • Public utility<br>• Generator<br>• Solar<br>• Other | |

**CONTINUED →**

# ICT INFRASTRUCTURE QUESTIONNAIRE



| QUESTIONS | OPTIONS | ADDITIONAL DETAILS/ INFORMATION |
|---|---|---|
| **If you own a radio, what type is it?**<br>• How it is normally powered? (battery, solar, crank)<br>• How do you primarily use this device (news, entertainment, educational shows, etc.)?<br>• Do you receive agricultural information on this device? If so, explain: | • AM/FM<br>• Shortwave<br>• Satellite | |
| **If you own a TV, what type of connection do you have?**<br>• How do you primarily use this device (news, entertainment, educational shows, etc.)?<br>• Do you receive agricultural information on this device? If so, explain: | • Broadcast<br>• Cable<br>• Satellite<br>• None (used only with video player) | |
| **If you own a video player, what format can it play?**<br>• How do you primarily use this device (watch movies, educational videos, etc.)?<br>• Do you receive agricultural information on this device? If so, explain: | • DVD<br>• VCD<br>• VHS | |

**CONTINUED →**

# ICT INFRASTRUCTURE QUESTIONNAIRE



| QUESTIONS | OPTIONS | ADDITIONAL DETAILS/ INFORMATION |
|---|---|---|
| **If you own an MP3 player, what type of display does it have?**<br>• How do you primarily use this device (listen to music, educational programs, etc.)?<br>• Do you receive agricultural information on this device? If so, explain: | • Screenless<br>• Small screen (1-2 lines of text)<br>• Standard screen (monochrome or color?) | |
| **Do you own/use a gaming system? If so, what type?**<br>• How often do you use it? | • Playstation (1, 2, or 3)<br>• Xbox or Xbox 360<br>• Nintendo (Wii, GameCube 64, Super, NES)<br>• Handheld (Nintendo DS, Sony PSP, etc.)<br>• Other | |
| **Other:**<br>*(This is for additional information that you may want to collect specific to your project.)* | | |

# IMPLEMENTATION PLAN FRAMEWORK

| | |
|---|---|
| **1. WHY?**<br>DESIRED CONSEQUENCES: IMMEDIATE, MID-TERM AND LONG-TERM OUTCOMES & RESULTS | ***What changes do we want to achieve by the time the project is over?***<br><br>***Immediate changes/results?***<br><br>***Mid-term changes/results?***<br><br>***Long-term changes/results?*** |
| **2. CONTEXT?**<br>SITUATION & CHALLENGES;<br>• BARRIERS TO OVERCOME;<br>• ASSETS & OPPORTUNITIES | ***Characteristics of the situation in which we work? Barriers to overcome?***<br><br>***Characteristics of the target audience that we seek to help?***<br><br>***ICT assets already present in the community?***<br><br>***Opportunities that exist within the environment and system that we can leverage?*** |
| **3. BELIEFS?**<br>CORE PRINCIPLES GOVERNING OUR DECISIONS & ACTIONS | ***What development principles and non-negotiable values do we have to consider in how we implement our approach?*** |
| **4. WHAT?**<br>TECHNICAL APPROACH | ***Given our responses to sections 1-3, what approach will we take to best achieve our desired consequences?*** |
| **5. HOW?**<br>CRITICAL STRUCTURAL ELEMENTS, REQUIRED EQUIPMENT | ***How will it be implemented?***<br>*Training and technical support* *Dissemination* *Required equipment* |
| **6. WHO?**<br>ESSENTIAL ACTORS | ***Who will be responsible for implementing this?*** |
| **7. ARE WE THERE YET?**<br>INDICATORS AND MEASURES OF SUCCESS, ASSESSMENT METHODS | |

Adapted from a framework originally developed by Eric Rusten at FHI 360