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# INTERACTIVE RADIO FOR AGRICULTURAL DEVELOPMENT PROJECTS

**A TOOLKIT FOR PRACTITIONERS**



BY JOSH WOODARD, FHI 360, DECEMBER 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 reflect the views of USAID or the U.S. Government.





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ISBN: 089492-188-6

### DISCLAIMER

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## ACKNOWLEDGEMENTS

This toolkit was developed by U.S. Agency for International Development's (USAID) Fostering Agriculture Competitiveness Employing Information Communication Technologies (FACET) project being implemented by FHI 360 under award number EPP-A-00-09-00007, which is an associate award under the FIELD-Support LWA (EEM-A-00-06-00001-00).

The original concept for this toolkit was proposed by Judy Payne, e-Business Advisor and ICT Advisor for Agriculture at USAID. It is the result of growing opportunities that now exist for Feed the Future (FTF) and other USAID-funded projects to interactively engage with farmers over the radio by integrating information and communication technologies into their work.

This toolkit was developed around the same structure as the Integrating Low-Cost Video into Agricultural Development Projects: A Toolkit for Practitioners that was written by Josh Woodard in April 2012 under the FACET project. Many of the worksheets in this toolkit were originally produced as part of the low-cost video toolkit. In addition, some language from the low-cost video toolkit has been used in this toolkit in instances where the same text was relevant to interactive radio (particularly in Component 2, but in other components as well).

Dustin Andres, communications specialist at FHI 360, deserves recognition for his substantive contributions to this toolkit, including researching most of the organizations featured in Component 1, drafting significant portions of that component, and for his feedback on other toolkit components.

Particular acknowledgement also goes to Judy Payne at USAID for her support of the development of this toolkit; Kevin Perkins and Mark Leclair at Farm Radio International for their insight and feedback, particularly in regard to content development and interactivity; and each of the following individuals for their input: Amy O'Donnell of FrontlineSMS, Katharine Tjasink of Farmer Voice Radio, Brenda Burrell of Kubatana.net, Pareshbhai Dave of Development Support Centre, Neil Patel of Awaaz.De, Zahir Koradia of Gram Vaani, Revi Sterling and Kevin McElhinney at the University of Colorado, and Nicholas Garnett and Graeme Fawcett at BBC Radio.

Additional acknowledgement goes to Stefanie O'Brien and Melanie Tingstrom in the FHI 360 Design Lab for designing and laying out the toolkit, and Kaaren Christopherson at FHI 360 for editing the final version of the toolkit.

## 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) and 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 Josh Woodard at [jwoodard@fhi360.org](mailto:jwoodard@fhi360.org).

## ABOUT THE AUTHOR

Josh Woodard is a project manager in FHI 360's Information Technology Applications Department and has managed the FACET project since its inception in 2009. He has been experimenting with using affordable ICT tools to improve communication and enhance impact for more than a decade. 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

<b>AFRRI</b>	African Farm Radio Research Initiative
<b>dB</b>	decibel
<b>GMO</b>	genetically modified organism
<b>ICT</b>	information and communications technology
<b>ICT4D</b>	information and communications technology for development
<b>IVR</b>	interactive voice response
<b>kHz</b>	kilohertz
<b>mAh</b>	milliamps hour
<b>RRA</b>	rapid rural appraisal
<b>SMS</b>	short message service
<b>SNR</b>	signal to noise ratio
<b>SWOT</b>	strengths, weaknesses, opportunities, threats
<b>UPS</b>	uninterruptible power supply
<b>USAID</b>	U.S. Agency for International Development

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# INTRODUCTION

For decades now, radio has been a dominant source of information for farmers in much of sub-Saharan Africa. Although the reach of radio varies from country to country, it is estimated that between 80 and 90 percent of households in Africa have access to a functional radio. The liberalization of regulatory environments in a number of countries has further increased the number of independent and community radio stations broadcasting over the airwaves.<sup>1</sup> Given the fact that adult literacy rates in sub-Saharan Africa are just over 60 percent and that electricity in many rural communities is non-existent, battery-powered radios are often the most affordable and practical way for rural farmers to access information.

Yet for the most part, traditional radio promotes a one-way flow of information from the broadcaster to the listener. This can be effective for the passive consumption of information, such as weather reports or price information, but is not necessarily the best medium to foster active learning, such as promoting changes in farming practices. Radio as

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<sup>1</sup> Myers, M. "Why Radio Matters: Making the case for radio as a medium for development." (Developing Radio Partners, 2010)

**INTERACTIVE RADIO** is defined here to mean radio that leverages other ICT tools to create a two-way communication exchange between radio stations and listeners.

a primary conduit of information is also at risk from the growing prevalence of two-way communication channels, like mobiles phones and the internet. Not to mention the challenge it faces from the television, as increased access to television often correlates to a reduction in radio listenership.

All of that said, for the time being radio continues to be the best way to reach sizeable portions of rural smallholder farmers in Africa. Furthermore, advances in information and communication technologies (ICT) have made it significantly easier and more affordable to engage and interact with listeners over the radio. By using new technologies, it is possible to enhance the potential of radio as a powerful distribution channel beyond what had ever been possible. Radio stations and development organizations working with farmers now have a number of options available to them for converting traditional broadcast-only radio into what has become known as interactive radio.

### **WHAT IS THE PURPOSE OF THIS TOOLKIT?**

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This toolkit is designed to help USAID projects and other implementing organizations use interactive radio to augment the traditional agricultural extension services they are providing. In addition, it aims to provide practitioners with a foundational understanding of what is needed to create compelling radio programming. It is important to stress that this toolkit does not assume that radio is the most appropriate solution for disseminating agricultural information. Rather, given the fact that radio continues to be the most readily accessible communication tool in much of sub-Saharan Africa, this toolkit aims to enable practitioners to develop a more systematic approach to using interactive radio as one medium through which they share information with farmers.

## WHY SHOULD YOU CONSIDER USING INTERACTIVE RADIO?

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In response to the question “Why do you rob banks?” the infamous American bank robber Willie Sutton was purported to have replied, “Because that’s where the money is.” Although it is unlikely that Sutton actually uttered these words, the rationale for why you should consider using interactive radio is similar: Radio is likely where most of your audience is. It is still the most commonly accessible communications medium for significant segments of the rural population, including farmers, in many African nations. In fact, in the majority of developing countries more than 75 percent of households own a radio, and at least 95 percent of the globe has access to a radio signal.<sup>2</sup> Moreover, effective radio programming has the capacity to present itself as an extension of the long and established practice of oral arts and spoken word in many traditional African cultures. The potential impact of radio is further heightened through the incorporation of interactive elements, which has been shown to lead to positive increases in listenership, recall of information, and adoption rates. We know that radio can be extremely effective when used appropriately—the key is making sure you are using radio in a way that connects to listeners.

## WHAT IS THE INTENDED AUDIENCE OF THIS TOOLKIT?

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The primary audience of this toolkit is USAID implementing partners and other development organizations that are using or planning to use radio to enhance the impact of their agricultural and rural development project. It does not assume any level of prior knowledge of interactive radio from the reader.

The toolkit will primarily appeal to practitioners who are planning to work through established radio stations or disseminate audio recordings independently of radio (i.e. MP3 players or mobile phones). It is not

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<sup>2</sup> World Telecommunication/ICT Development Report (WTDR 2010), Target 8: Ensure that all of the world’s population have access to television and radio services (ITU, 2010)

intended to be a guide to establishing a radio station from scratch, although you will likely still find much of the content relevant even if that is your main objective. If you are planning to help start a radio station, UNESCO's Community Radio Handbook is a good resource, despite being slightly dated.<sup>3</sup>

## WHAT WILL I FIND IN THIS TOOLKIT?

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There is no one-size-fits-all solution or approach to using interactive radio. What works well in one context or situation could fail to achieve its objectives 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 design an interactive radio 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. By the time you have finished using the toolkit, you will have developed an implementation plan for integrating interactive radio into your agricultural development work.

The toolkit is divided into the following six components:

- **COMPONENT 1: How is interactive radio currently being used for agricultural development?**

This component provides an overview of how interactive radio is currently being used for agricultural development. It includes illustrative examples from organizations both in Africa and elsewhere, along with contact information, websites, and other resources that you can use to follow up directly to learn more about a given approach.

- **COMPONENT 2: Is interactive radio an appropriate way to achieve our objectives?**

Before you begin using interactive radio, it is important for you to assess if it is really one of the most appropriate means to address the

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<sup>3</sup> [http://www.unesco.org/webworld/publications/community\\_radio\\_handbook.pdf](http://www.unesco.org/webworld/publications/community_radio_handbook.pdf)

challenges you are trying to overcome or objectives you are trying to achieve. It is also important to assess whether you currently have the capacity to work with interactive radio, 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 interactive radio is indeed a good fit based on your own organizational, technical, and financial capacity. It also includes some suggestions for identifying and working with appropriate radio stations.

- **COMPONENT 3: How can we create our own agricultural radio programming?**

This component will help you to identify how to create your own agricultural radio programming. It aims to help you create compelling scripts for original content and adapt other types of content for the radio that meet a baseline quality standard. In addition, it includes technical tips for effectively recording and editing your radio segments. Finally, it includes suggested techniques for lowering barriers to entry so that your team is more likely to produce its own content for radio, including simple ways to provide incentives.

- **COMPONENT 4: What are the different approaches that can be used to make our radio programming interactive?**

There are a number of different ways that you can build interactivity into your radio programming. This component highlights the most promising approaches that are currently available, what is needed to integrate them into your programming, and how to effectively implement them. In addition, it includes suggestions for other ways that you can disseminate your radio programming without relying on radio airwaves.

- **COMPONENT 5: How can we track the impact that our radio programming is having on farmers?**

Once your radio segments have been produced and broadcast, 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 listenership and measure impact. It also includes suggestions for how to capture farmer feedback to better inform the creation of new content.

- **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 actually begin creating your own radio programming. This component includes overviews of the different types of low-cost audio recording devices, their strengths, weaknesses, and examples of situations for which they may be most appropriate. It also covers devices that support interactivity, peripheral devices, audio 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?

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In each component, you will find helpful worksheets and templates, which are also included in soft copy on the accompanying CD. 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 interactive radio 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 radio 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.

