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FARM RADIO INTERNATIONAL

USING ICTs TO PROVIDE INFORMATION FOR FARMERS IN ETHIOPIA

A Farm Radio operator. Photo credit: Farm Radio

EXECUTIVE SUMMARY

Farm Radio International supports African broadcasters to provide radio services that share knowledge with and amplify the voices of small-scale farmers, their families, and their communities. It has been operational for 36 years. The organization helps African radio broadcasters meet the needs of local small-scale farmers and their families in rural communities through interactive radio programs. The organization currently works with more than 700 radio partners in 40 sub-Saharan African countries to fight poverty and food insecurity through providing high-quality resources for broadcasters, resources that help small-scale African farmers help themselves. Originally from Ethiopia, the organization has offices in Malawi, Uganda, Ghana, Mali, Burkina Faso, and Mozambique. There are currently 36 impact projects running in seven countries, with over 40 national and international partners. Through its work with broadcasters and impact projects, FRI reaches tens of millions of small-scale farmers with agricultural information and opportunities to have a stronger voice in their own development.

Keywords: multiple media, interactive voice platform, radio, agriculture, farmers, Africa

CONTEXT

Ethiopia's main economic sector is agriculture, accounting for 37.2 percent of gross domestic product (GDP) in 2016, according to the World Bank. Agriculture is envisioned in the country's second Growth and Transformation Plan (GTP II) as one of the major factors leading the growth of the economy, and helping Ethiopia become a middle-income country by 2025, according to the United Nations Food and Agriculture Organization (FAO).

According to FAO, about 12 million smallholder farming households account for approximately 95 percent of agricultural production and 85 percent of all employment in Ethiopia. Traditionally, these farmers, especially those in rural areas, had very limited access to news and updated agricultural information. Today, an increasing number of farmers have access to mobile phones and radio sets, which brings them useful information to increase yields and improve market efficiency.

Despite having one of the countries with the lowest ICT penetration in Africa, Ethiopia had more than 25 million mobile subscribers in 2013, according to analyst group TradingEconomics – a number that is growing especially rapidly in rural areas. Since 2014, more than 3 million farmers have used their mobile phones to access the hotline service provided by the Ministry of Agriculture, the Ethiopian Institute of Agricultural Research, and Ethio Telecom for agriculture information and to increase productivity.

Ethiopia			
Population (UN, 2015)	98,942,102	**Fixed broadband subscriptions (%) (ITU, 2016)**	0.55
Population density (people per sq.km) (UN, 2015)	89.6	**Mobile cellular subscriptions (%) (ITU, 2016)**	50.51
Median household income (Gallup, 2006-2012)	N/A	**Individuals using the Internet (%) (ITU, 2016)**	15.4
Education (Mean years of schooling) (UNDP, 2013)	Male: 3.6 Female: 2.4	**Individuals using the Internet by Gender (%) (ITU, 2016)**	N/A

PROJECT DESCRIPTION

Farm Radio International was founded after a Canadian journalist traveling in Zambia spoke with local broadcasters about how to ensure the content of their radio shows was relevant to listeners' needs and demands. On returning to Canada, he sourced and distributed radio scripts containing agricultural information to radio broadcasters for shows around Africa and in other continents. In addition to distributing scripts and other resources, FRI now has various approaches to reach farmers around Africa.

Now that mobile phones are much more widespread, FRI uses tools such as interactive voice response (IVR) and SMS to reach out to and hear from listeners on a regular basis. FRI also

uses radio to poll listeners and collect data for organizations and communities. This interactivity enables listeners and communities to shape future radio programing and content. Users in the targeted project areas are rural farmers who listen to radio.

ICT Delivery and Development consists of three main work packages. The first is an interactive voice response platform. Uliza (Swahili for "ask") is a feedback-collecting mechanism. Mobenzi is a mobile data collection that uses Global Positioning System (GPS) tracking to locate the origin point of data from user survey submissions. They conduct baseline research before they launch a project to act as a reference point for future research. The organization uses Mobenzi to conduct impact assessments which measure changes in the knowledge, attitudes, and practices of listeners to radio programs on targeted issues. Sampling is based on household and geographic information; they then randomize the farmers by zones and districts.

Farm Radio offers broadcaster resources, including radio scripts, backgrounder information documents, a weekly electronic news service, and a special online community called Barza, and share them with thousands of African broadcasters. They, in turn, use these resources to research, produce, and present relevant and engaging programs for their audience of tens of millions of farmers. These resources are aimed at increasing food supplies and improving nutrition and health and encourage the use of farming practices that are ecologically sound and environmentally sustainable, are suitable for communication by radio, are useful and transferable within the developing world, and are appropriate for both female and male small-scale farmers.

Farm Radio's core work, begun in 1979, is focused on maintaining a network of existing radio stations. FRI partners with existing radio stations and distributes resources such as radio scripts and theme packs on different topics to serve as reference material for the station's own program development. FRI serves 40 countries in sub-Saharan Africa across a network of 690 radio stations. The other major aspect of the program is impact programming. FRI works with partners – industry donors, governments, ministries, nongovernmental organizations (NGOs), etc. – to develop participatory radio programs on specific topics which have a targeted and sustained impact on a particular development issue.

FRI provides training services to broadcasters who create programs for small-scale farmers. They focus on direct, in-station training using talented African broadcasters as trainers. Each trainer must complete an intense workshop on training methodologies and creating effective farmer-focused radio programing. Broadcasters who participate in the in-station courses can take advantage of long-term, distance mentoring from other professional broadcasters in Canada and across Africa. FRI also creates innovative distance education courses delivered over the Internet that can be completed online. Moreover, the organization designs and conducts custom workshops on specific topics to help broadcasters make the best possible farm radio programing. All of the training is designed to meet the real needs of African farm broadcasters. FRI gives radio stations and their staff tools to measure the quality of their farm radio services, and identify what must be done to improve them.

Project details			
Technology	Radio, interactive voice response platforms	**Training**	100 journalists received training in 2017
Year program started	1979	**Cost to users**	Free
Geography	Varied	**Total cost of program**	US$ 30,000-40,000 per participatory radio program per year Operational cost: approximately US$ 5.2 million
User profile	Ethiopia – more than 3 million 20-50 years old Low literacy level	**Associated organizations**	Awaaz.De, Digital Green, Dimaji, Gates Foundation, Global Affairs Canada, New Alliance Scaling, Seeds and Technologies Partnership – implemented by AGRA, USAID

PROGRESS AND RESULTS

Farm Radio has 690 radio partners, and projects in 9 different countries. One project of interest is in Ethiopia. Through more than 50 outcome evaluation surveys of African farmers in targeted intervention areas in Ethiopia, FRI has found that interactive farm radio programs are regularly listened to by 40 percent to 60 percent of potential listeners, and lead to an average of 20 percent of listeners applying new, more productive practices on their farms.

FRI has estimated that, across eight large multi-country projects, the cost saving is about US$ 0.75 for each farmer who applies a better practice on their farms as a result of listening to a FRI-supported educational radio series.

Farmers also demonstrate increased knowledge of recommended agriculture practices as a result of listening to programs created as part of Farm Radio International impact projects, with approximately 96 percent of some radio listeners scoring 60 percent or more on a follow-up knowledge quiz about the promoted farm practices.

FRI has also designed programs specifically for women through the Her Voice On Air approach. This approach that leverages the idea of community listening groups, equips them with mobile phones, and assigns each group one day of the week to produce a story of their own for broadcast. This produces demonstrable change in attitudes in those communities with regard to gender equality.

CHALLENGES

Lack of funding – Some projects can generate revenue through advertising, while the community of listeners can sustain other projects (where farmers pool their resources), but budgetary constraints continue to be a concern.

Lack of Internet access – The goal is to reach rural farmers, but the rural areas are precisely the areas most underserved by Internet service providers (ISPs) and infrastructure.

Timing of the program – Prime time ranges from 7:00 p.m. to 9:00 p.m., but prime listening times vary between men and women due to the gendered division of labor and differential rhythms of the work day. Programs that want to promote gender equity need to be broadcast across the appropriate times of the day to capture the whole public. Similarly, programs can be targeted to a core audience by broadcasting during particular demographic peak listening times.

FARM RADIO'S SUGGESTIONS FOR FUTURE PROJECTS

Multi-stakeholder approaches are helpful – Top-down approaches do not work in all cases. Complex agricultural issues often require sustained cooperation between many different stakeholders, regulating bodies, and fields of expertise over time. A multi-stakeholder approach serves to convene farmers, government ministries, scientists, and others.

Active community participation is necessary to ensure sustainability – FRI uses accessible, low or no-cost media like mobile calls in voice menu surveys. The organization designs programs with stakeholders in mind, and designs a space to facilitate farmer participation in the program and in the development of future programing. According to FRI's studies, farmers engaged in the design and development of farm radio programing were almost 50 percent more likely to take up agricultural practices deemed to improve their food security than passive listeners. Those in communities that could hear the radio programs were 10 times more likely to adopt the practice than those farmers who had no access to the farm radio programs.

New business models need to be experimented with in order to ensure sustainability – Funding is generated largely through advertising. Sustainability methods can be evaluated through the adoption of willingness to pay models as well as by proving the value of the program to the community such that they are willing to take on responsibility for sustaining the program. This can occur in several ways, including through advertising or resource pooling by farmers.

SOURCES

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Project website: www.farmradio.org