Chapter 1: Participatory Radio Campaigns and Small-Scale Farming Innovations: Promoting Learning and Uptake

(Excerpt from Part One: The Educational Potential of Community Media)

Kevin Perkins’ chapter (1) gets to the heart of a key question confronting community radio advocates: the generally poor evidence of impact of educational communication. He presents compelling results from a large-scale study of participatory radio campaigns conducted in Sub-Saharan Africa to increase knowledge and promote the uptake of agricultural innovations. In the process, he also addresses the criteria for quality and success: learning and change outcomes and cost.

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COL’s Healthy Communities programme: www.col.org/HealthyCommunities
Small-scale farmers produce approximately 70 per cent of the food consumed in Sub-Saharan Africa. Yet, despite being the primary food producers, small-scale farmers are more likely than any other segment of the population to be impoverished and to suffer the effects of hunger and malnutrition. An important way to change this situation is by providing small-scale farmers with the supports they need to improve their productivity, enhance their resiliency and connect more successfully with markets.

Many agricultural innovations have been developed — by researchers and by small-scale farmers themselves — that, if adopted on a wide scale, would make a significant contribution to increasing food security and reducing poverty. Too often, these innovations are hidden in a localised development project or stuck on a library shelf. The challenge is to find a way to communicate these ideas to hundreds of thousands of farmers in an effective and affordable way. Agricultural radio has long been used as an extension strategy, but, until recently, very limited evidence was available to confirm that farmers listen, learn and act as a result of hearing radio broadcasts, and little was known about best practices.

The African Farm Radio Research Initiative (AFRRI) was an unprecedented investigation of the effectiveness of radio in addressing the food security and agricultural goals of resource-poor farmers in five African countries: Ghana, Malawi, Mali, Tanzania and Uganda. The project started in 2007 and ended in September 2010. AFRRI was implemented by Farm Radio International in partnership with World University Service of Canada, and with funding from the Bill & Melinda Gates Foundation.

A participatory, multi-stakeholder programme, AFRRI aimed to discover, document and disseminate best practices for using radio-based communications to enhance food security in Africa.
A key impetus for AFRRI was to gather evidence on the changes in farmers’ knowledge, attitudes and practices that occurred as a result of specific farm radio programmes.

To this end, AFRRI co-ordinated the development, broadcast and evaluation of a new and specific approach to farm radio called *participatory radio campaigns*. Two sets of participatory radio campaigns were planned and aired in partnership with 25 radio stations (five per country) and reached about 40 million farmers. The first round of 24 campaigns was completed in mid-2009, and the second round of 25 concluded in June 2010. Outcome evaluations were conducted in January 2010 and July 2010, respectively.

**Why “campaigns”?**

The AFRRI project design anticipated implementing a series of radio campaigns that would be broadcast over a defined period with a specific and measurable set of objectives. It was believed that the efficacy of radio campaigns could be more readily evaluated than other approaches to farm radio because they were time-bound and focused on particular, observable changes in behaviour that could be anticipated as a result of the radio programming.

Participatory radio campaigns offer an effective and cost-efficient means of encouraging farmers to adopt new and improved agricultural practices.
After reviewing traditional approaches to campaigns, the AFRRI team and its partners agreed that a new model was needed. The traditional approach to radio campaigns did not seem well suited to the particular challenge of helping farmers learn about and adopt new agricultural practices relevant to them. Historically, radio campaigns have used marketing principles to convince large numbers of people to adopt a new behaviour and usually better practice (such as being immunised or wearing a seat belt). However, in the case of farmers, the behaviour or practice that they have been encouraged to adopt has not necessarily been one that they identified or even considered a priority. The messages are often created and delivered in a top-down fashion by expert outsiders.

AFRRI created a model that put the participation and dialogue with farmers at its centre — one that valued farmers as decision-makers rather than as passive recipients of diffused information. It is for this reason the model is called a participatory radio campaign. The defining principle was that campaigns aimed at farmers should be more bottom-up in nature, with a clear focus on helping farmers make informed decisions about practices that matter to them. This approach acknowledges that farmers understand and can express their own needs: that if they have the right information, they can evaluate their options and make reasonable decisions to adopt — or not to adopt — a particular agricultural practice.

For the AFRRI programme, Farm Radio International defined a participatory radio campaign as:

“A planned, radio-based activity, conducted over a specific period of time, in which a broad population of farmers is encouraged to make an informed decision about adopting a specific improvement selected by their peers, based upon the best available information, to improve the food security of their families. It then provides the adopting farmers with the information and other support they require to implement the improvement.”

Participatory radio campaigns have a useful role to play in rural radio. They are special tools for a special purpose. They can be used in conjunction with other forms of agricultural radio that smallholder farmers need, such as marketing information service, weather forecasts and weekly agriculture shows.

A participatory radio campaign:

- is produced by trained and experienced radio station staff as a special service of the station to the community;
- is carefully planned through a participatory formative research and campaign design process;
• assures the participation of farmers and broadcasters in all stages of the campaign;
• features the voices of farmers;
• gathers continuous feedback from listeners;
• engages and entertains listeners using a variety of effective radio formats, including mini-dramas, music, interviews, community debates, panel discussions, phone-in and phone-out shows, and field reports;
• involves close collaboration among broadcasters, farmers and their organisations, agricultural extension officers, researchers, non-governmental organisations (NGOs) working in the area, and others; and
• uses a “core story” to provide a common thread through the campaign, keeping it focused and engaging.

Participatory radio campaigns engage farmers as active participants from day one. The focus of the campaigns is farmer-approved; the time of day and day of the week of broadcast is farmer-selected; and farmers are intimately engaged in the knowledge-sharing process throughout. The purpose of the campaign is to help farmers evaluate and make an informed decision about a new practice that could help them. The farmers are provided with the best information from reliable sources to help them navigate and implement these practices.

**Do participatory radio campaigns have an impact on learning?**

Participatory radio campaigns are designed to have a measurable impact. Did the campaigns do this? Did they increase farmers’ knowledge and adoption of practices that could improve the farmers’ resiliency and productivity?

In August 2010, AFRRI carefully evaluated 15 participatory radio campaigns (three per country) to find out whether:

a) farmers listened to the campaigns (and, if so, how frequently);

b) the campaigns resulted in increased knowledge about the improved practice; and

b) the campaigns resulted in adoption of the improved practice by farmers.

In total, the survey reached 4,800 randomly selected farmers in 90 different communities across the five countries. One-third of the interviews were conducted in *active listening communities*. In active
listening communities residents could listen to broadcasts and they were active participants in planning and giving feedback to the programmes. They were also frequently interviewed. Another third of interviewees were in passive listening communities. Passive listening communities were able to listen if they chanced on the programme by themselves, but otherwise they did not have other contact with the programme. The passive listening communities are typical of the majority of the people reached by the radio station’s broadcasts.

A final third of interviewees were in control communities. Control communities could not receive broadcasts and were not aware of the participatory radio campaigns.

The figure below presents the main findings from this evaluation. (Note: PRC is an abbreviation for participatory radio campaign.)

This rigorous study revealed that two out of three residents of passive listening communities listened to at least half of the episodes in a participatory radio campaign, and that one in three listened to nearly all of them. Across the 15 radio stations that were studied, at least 22 per cent and up to 97 per cent of community members — male, female, young and old — received 7–15 hours of extension services through each participatory radio campaign over the airwaves.
By itself, the number of farmers reached has little meaning unless that number results in measurable changes in smallholder farmers’ knowledge and practice. AFRRI proved that changes take place in both these areas — and both in impressive numbers.

The figure below clearly shows the impact of participatory radio campaigns on the knowledge level of farmers. The 4,800 surveyed farmers completed a quiz designed to test their knowledge of the agricultural improvement featured in the participatory radio campaign. Over 80 per cent of respondents who listened to all of the campaign demonstrated detailed knowledge of the improvement, and another 17 per cent had good knowledge. None had little or no knowledge.

At the other end of the spectrum, 98 per cent of respondents who did not listen to any of the participatory radio campaign had little or no knowledge of the improvement, and only 2 per cent had good knowledge. In short, the more farmers listened, the more they learned.

**Do participatory radio campaigns have an impact on behaviour?**

Farmers may have learned more by listening to the participatory radio campaigns, but did this knowledge lead to uptake of the new practice? It did. In fact, 39 per cent of the members of active listening communities and 21 per cent of those in passive listening communities started practising the agricultural improvement after the start of the radio campaign. By comparison, only 4 per cent of respondents in control
communities adopted the practice, in spite of the availability of conventional extension services. Thus, farming families in passive listening communities were about five times more likely to adopt a recommended new practice than were farmers who had not been exposed to the campaigns. The most effective participatory radio campaign — Radio Ada’s campaign on the production of compost manure to enhance soil fertility in Ghana — resulted in 48 per cent of members of passive listening communities adopting the new practice. There was no uptake in Radio Ada’s control communities.

The study’s findings showed that participatory radio campaigns affect practice in much the same way they affect knowledge: the more that farmers listened, the more likely they were to adopt the new agricultural practice featured in the participatory radio campaign. Fifty per cent of respondents who had listened to 100 per cent of the participatory radio campaign episodes started practising the featured improvement after the campaign began. By comparison, only 9 per cent of those who had not listened to any of the campaign adopted the practice.

In terms of cost effectiveness, the average per-adopter price of this methodology ranges from $0.30 to $3.00 (CAN), with an average cost of about $1.00 per adopter.

Based on these results, Farm Radio International is now working with a range of partners — from the International Centre for Research in the Semi-Arid Tropics in Mali to the International Livestock Institute in Ethiopia — to employ this methodology as an effective way to help farmers make informed decisions about a variety of agricultural practices that can improve their family’s food security.

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Farm Radio International is a Canadian charity that supports radio broadcasters in Sub-Saharan Africa to provide small-scale farmers and rural communities with effective communication services. The organisation develops and distributes radio scripts, produces an electronic news service, offers distance and in-station training services, and implements communication projects with partner radio stations.
While conventional approaches to agricultural extension prioritised the knowledge of experts, participatory communication programmes give equal or greater significance to the voices of target audiences and the community at large. In addition to making programmes attractive to local audiences, field-based content gathering among citizens also acknowledges that local contexts are critical if health and farm radio are to succeed, and that target audiences are experts in their own right.

For further reference, see:

- [www.farmradio.org](http://www.farmradio.org)