



# Farmer Voice Awards 2010

## FRI Participatory Radio Campaign Case Study

Issue 1.3

### Executive Summary

Participatory Radio Campaigns (PRCs) are an approach to using radio as a form of agricultural extension with an increased emphasis on involving farmers in the choice of new technology introduced, the way radio programmes are designed and delivered and the content of the radio shows themselves. With the objective of increasing successful adoption, the PRCs seek to make the technology more relevant to farmers' needs and tailor the information about them to farmers' preferences.

This case study describes Farm Radio International's (FRI) experience of Participatory Radio Campaigns that were implemented as part of the African Farm Radio Research Initiative<sup>i</sup> (AFRRI) in five African countries in 2008-2009. It documents how AFRRI and its PRCs supported farmers' own efforts and self-reliance, listened and responded to their priorities, and helped farmers improve their influence with powerful actors. Results indicate that farmers' involvement in key project decisions and a farmer focused and entertaining style of programme contributed to increased adoption of new technologies. Whilst there are some key challenges to implementing a radio campaign, the learning from this case study identifies some valuable lessons which can contribute to the success of agricultural extension programmes.

The case study is based on secondary sources, using the extensive research and evaluation documents that have been developed through AFRRI by FRI and its partners. As such it is

dependent on the quality of FRI documents, which was generally seen to be of good quality due to AFRRI's nature as an action research project. Although ALINE's objectives are not always the same as that of AFRRI, we can say a lot about the effectiveness of the participatory element of the PRCs and of AFRRI as a whole through this material. As such, this case study should be seen as a summary of AFRRI activities to date, jointly produced by ALINE and FRI.

### Context

Over the last decade, there has been an explosion in the number of radio stations across Africa – particularly community and commercial FM stations. Techniques such as phone-in shows, live community forums, and radio diaries are making radio an interactive medium, providing farmers with a real voice. In comparison to other means of communication (such as TVs, newspapers, telephones, mobile phones, internet) radio ownership is by far the most widespread. For instance, in Malawi, for every 1000 people, 499 own a radio, whereas only 4 own a TV, 5 a telephone or 5 a mobile phone).<sup>ii</sup>

FRI's mission is to support broadcasters in developing countries to strengthen small-scale farming and rural communities. They argue that radio is one of the best mechanisms for communicating with smallholder farmers. Radio is accessible to rural populations, its messages can be easily adapted to local context and it can overcome the barriers of distance, illiteracy and language diversity better than any other

medium. Radio programming also builds on African storytelling and oral traditions and is a culturally resonant means of knowledge sharing. Although the reach of radio is undisputed and there is plenty of anecdotal evidence of impact, the effectiveness of radio in improving food security has not been adequately documented and there is a lot to learn about best practices.

The African Farm Radio Research Initiative (AFRRI) was launched in 2007. It is supported by the Bill & Melinda Gates Foundation and is being implemented by FRI in partnership with the World University Services of Canada. AFRRI aims to assess the effectiveness of farm radio on meeting the food security objectives of rural farming households in Africa. It implements Participatory Radio Campaigns in five countries: Mali, Malawi, Ghana, Tanzania and Uganda, working in partnership with 25 radio stations - five in each of the five countries (see Annex 1 for a complete list of radio stations).

The five countries were selected for three reasons:

- a. existing FRI partnerships with broadcasters,
- b. FRI's partner World University Service of Canada has field offices in two of the countries,
- c. the variety of agro-ecological zones<sup>iii</sup>.

These countries face similar issues in agriculture, food security and gender:

- Agriculture comprises a large part of GDP (around 40%), total employment (between 60-85%) and export earnings (90% in some cases),
- Heavy reliance on rainfall, as most agriculture is rain fed,
- Issues with soil erosion and deforestation, depletion of water resources, and
- Cases of high female illiteracy and school enrolment.

### Approach

The first round of PRCs was implemented in 2008-2009. There were 25 campaigns on 15 different agricultural topics, totalling 501 hours of farm radio programming (an average of 20 hours/station).

PRCs have similar features to traditional radio campaigns in that they have a clear purpose and goal: a specified time frame, clear message, specifically created programming, involve pre-campaign research about listeners, use a range of different media, use feedback to correct problems, and evaluate achievement post campaign.

PRCs differ in that they use a participatory approach and value farmers as agents of their own change, rather than passive recipients of 'diffused' information.<sup>iv</sup> This means that they encourage and facilitate farmers to make an informed choice on whether or not they should implement the recommendations of the radio campaign based on their own circumstances. They also support adopting farmers to implement new practices.

PRCs are designed to introduce a single 'improvement' (a specific agricultural practice that can improve a family's food security)<sup>v</sup> that is demand-driven, in the sense that it had been identified by participants and tailored to fit local conditions. As such, they are a form of social marketing, encouraging farmers to trial a specific innovation that has been selected using participatory methods.

**Photo 1: Farmers from Kitete, Tanzania, record the phone numbers for the on air studio at Sibuka FM.**



Photo credit: Bart Sullivan

## Selection of improvement and the design of the campaign

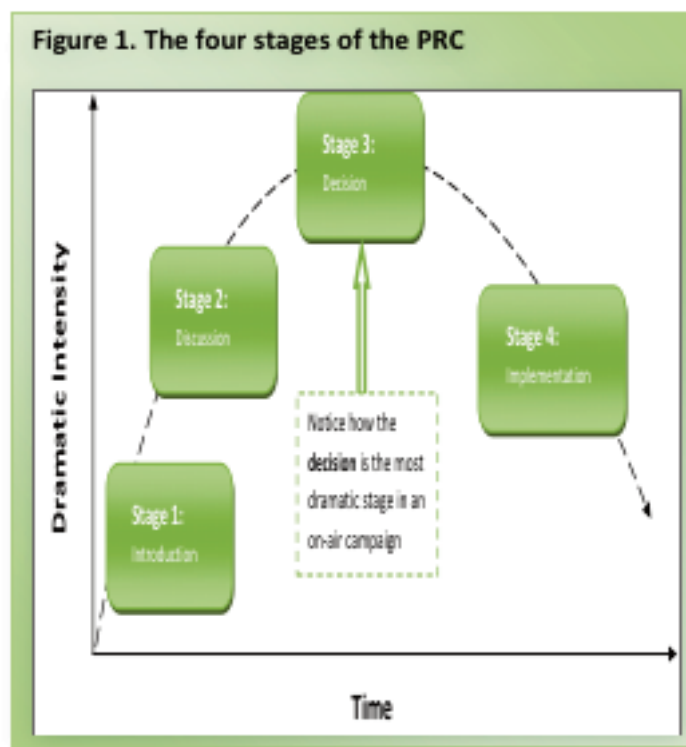
For PRC1, the selection of the ‘improvement’ and the design of the individual PRCs was done through a participatory and formative research process<sup>vi</sup> that involved a number of different stakeholders, including AFFRI staff, broadcasters, farmers from communities actively involved in the project, extension workers and other government staff, community development workers, agricultural researchers, knowledge partners, and general listeners of the radio stations<sup>vii</sup>. This process attempted to balance the perspectives of the farmers’ priorities with the recommendations of other stakeholders. In practice this meant that the influence of farmers on the selection of the improvement varied between the five AFFRI countries. In some countries NGOs or ministries of agriculture had stronger interests in AFFRI than others where farmers’ priorities did not have to compete for influence. Each improvement had to match three criteria:

- a. It must be able to produce a significant, measurable improvement to food and nutrition security for rural families if it were adopted widely. This means that its effectiveness must be proven.
- b. It must benefit the majority of farmers and particularly be applicable to the poorest of smallholders. This means that it needs to be simple, fit a variety of agri-ecological zones and cannot focus on expensive inputs.
- c. It must fit the agricultural calendar so that information provided can be adopted immediately if farmers choose to.<sup>viii</sup> It also had to fit the timing of AFFRI itself<sup>ix</sup>.

## Stages of the PRC

Each identified improvement was the central feature of a weekly series of radio programmes of 30 minutes duration that extended over a period of four to six months. The programmes were broadcast in farmers’ languages at a time

when farmers were available to listen to them. These programmes were structured into four stages<sup>x</sup>:



Source: AFFRI Manual for Participatory Radio Campaigns

**Stage 1: Introduction:** Farmers and others launch the campaign and identify and explain the improvement.

**Stage 2: Discussion:** Farmers and others discuss the improvement in relation to the needs and practices of local farmers at this time.

**Stage 3: Decision:** Farmers are encouraged to make an informed decision about adopting the improvement.

**Stage 4: Implementation:** Farmers and others discuss how to implement the improvement and troubleshoot any problems encountered. Successes are highlighted and lessons learned are discussed and shared.

The programmes also aimed to be interesting and provide entertainment. They included features such as:

- A sympathetic, well-liked and recognised, host,
- Local music, including theme music,

- Dramatic elements,
- Competitions: quizzes, poems, songs, etc.

Importantly, they featured farmers' voices, whenever possible, together with other people involved through:

- studio and field interviews and phone-outs to farmers and extension workers,
- studio interviews and phone-outs to other knowledgeable people and to people with authority and responsibility whose input will be respected by listeners,
- phone-ins by farmers,
- panel discussions,
- village debates,
- letters from listeners, and
- radio diaries kept by farmers as they tried the improvement<sup>xi</sup>.

### Monitoring the Participatory Radio Campaign

The PRCs undertook a number of different monitoring activities. The monitoring team included AFRRRI staff, broadcasters, extension workers, case farmers, and listeners. Monitoring was largely based on feedback from various stakeholders and involved a monthly meeting with the monitoring team to discuss the radio campaign and make changes to programming, where necessary, to better fit listeners' needs and priorities. Various feedback tools were used, such as:

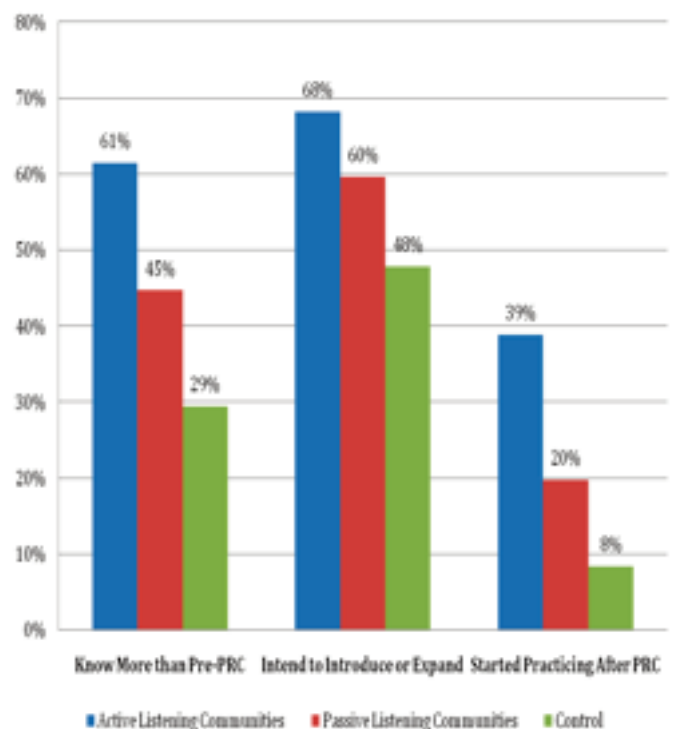
- case farmer diaries,
- listener feedback forms,
- SMS, phone-ins and letters to the stations,
- radio listening groups,
- monthly extension reports (based on observation during field visits or diaries),
- monthly radio station log sheets, and
- monthly focus group discussions with farmers in Active Learning Communities (ALCs) and control communities (by gender).<sup>xii</sup>

### Results

AFRRRI evaluated 14 PRCs from the first round of campaigns. Figure 2 shows that changes in knowledge, intentions and practices were

considerably higher in Active Learning Communities (ALCs)<sup>xiii</sup> (61%, 68% and 39% respectively) than in Passive Learning Communities (PLCs)<sup>xiv</sup> (45%, 60% and 20%), and that changes in both types of listening communities were higher than the control communities<sup>xv</sup> (29%, 48% and 8%)<sup>xvi</sup>.

**Figure 2: Percentage of respondents who increased knowledge of, intend to practice or expand, and started to practice specific improvements after the PRC**



Source: AFRRRI (2010) Major Outcome Evaluation: Participatory Radio Campaign

These figures are broken down in greater detail in the AFRRRI outcome evaluation report, which also analyses changes in relation to a number of other variables and finds that:

- Female farmers' knowledge and intentions do not differ much from men's. But there is a significant differential impact on women's practice of the improvement. This may be due to deeper gender dimensions related to the control of land or other household decisions, although this finding does seem to support the findings from the summative

evaluation of the need to incorporate gender dimensions better into the radio campaigns.<sup>xvii</sup> FRI make the point that it is important to test the PRC model on improvements that are of exclusive relevance to female farming objectives.

- Community stations appear to be more effective than other types of stations.
- More complex improvements (such as introduction of a new seed) were not as easily adopted as simpler improvements (such the promotion of a traditional crop).
- Radio ownership has a significant impact on the effectiveness of the PRCs, although that does not mean that farmers cannot benefit from a PRC without owning a radio, as evidenced by the fact that non-owners in listening communities had greater changes in knowledge, intentions and practices than farmers in control communities.
- PRCs are helpful to both younger and older farmers. Although, younger farmers seem more likely to gain knowledge and have intentions to practice, but seem less likely to actually adopt practices.<sup>xviii</sup>

Also, farmers were beginning to demand more of extension services and there were signs of increased farmer to farmer learning and sharing of information to non listeners.

### Costs

AFRRI cost approximately \$200,000 per country, per year and each radio station received \$5,000 for each campaign including training in the PRC method. Although the \$5,000 might not seem that much, financing for farm radio is a key challenge and, considering this is just a once a week 30 minute show, this is a substantial sum for many of the radio broadcasters involved, which operate at a modest scale. The high cost of the PRC is partly due to the rigorous evaluation that has been a core component of

AFRRI. AFRRI acknowledges that that the PRC model is expensive and not a sustainable way of approaching farm radio in the longer term.

As part of AFRRI, FRI commissioned an economic study that aimed to identify the levels of investment required for running PRCs and related activities. The study found great variability in costs and revenues associated with radio programming for farmers, depending on the type of station, and the policies and broadcasting culture of the country. It recommended that AFRRI should explore cost effectiveness and sustainability in more detail. This has been included in current plans for AFRRI and is a focus for FRI.

Considering that the AFRRI evaluation activities seem to suggest that farm radio, without additional support, can be very effective, the question is whether the AFRRI approach is better compared to traditional extension, instead of comparing it to other types of radio. That would need a different type of comparison of cost-effectiveness that is not within the scope of this case study.

### Scaling Up

The PRC approach has notable learning (see below) that could be scaled up to reach more farmers. However, as the costs are high for the campaign model as compared to standard radio programming FRI is investigating models of regular, participatory programming that incorporates learning from PRCs. FRI argues that this would be the best way to achieve cost effectiveness and sustainability in farm radio. The next phase of AFRRI will be focused on drawing out standards, best practices and cost models for regular programming that can be streamlined and scaled up.<sup>xix</sup>

FRI has already developed some broadcaster standards for effective farm radio. These V.O.I.C.E. (Value, Opportunity, Information, Consistency, Entertainment) standards aim to provide broadcasters with guidance on how to change their regular farm broadcasts in relation to their listeners' needs. <sup>xx</sup>

## Key Learning

### The involvement of farmers in key decisions contributed to increased adoption

The higher adoption levels in ALCs indicates that farmers' influence over the type of innovation introduced and the ways it was introduced and discussed at the beginning and throughout the campaign was an important contributor to successful adoption. It enabled the innovation to be both more relevant to farmers' preferences and the ongoing effective provision of useful and actionable information to tackle any concerns or issues farmers had with it.

### The participatory and dynamic formatting of the shows helped maintain interest

Having one core story that dramatised the adoption of the 'improvement' and ran throughout the campaign helped maintain the focus of the programmes. Farmers were eager to tune in and listen to programmes because the programmes addressed issues that concerned them, featured recognisable voices and entertaining segments with drama and music, and used traditional language. They were also aired at a suitable time. However, there were frequent requests for increases in broadcast time and frequency. Some also preferred live broadcasts, whereas others wanted a copy<sup>xxi</sup> of the programme to play whenever they were free.<sup>xxii</sup>

## Radio and extension models work well together

Farmers, extension agents and other stakeholders argued that the agricultural information disseminated through radio reached many farmers and played a key role in food security. Stakeholders also emphasised that radio and extension services must work together and that radio should supplement extension not replace it. The radio programmes provided the theoretical information and extension workers the practical part of the same information. The suggestion was for more extension, and exchange visits and field days to allow farmers to learn from each other. <sup>xxiii</sup>

*"[C]ombining broadcasting from the studio with field work, even using mobile phones from the field at times to communicate with farmers, is a step forward in my job as an agricultural extension officer" (Extension Officer from Ghana)<sup>xxiv</sup>*

## Challenges<sup>xxv</sup>

### Gender

Although women were given equal opportunity to participate in AFRRI, there is more to be done to encourage their participation. FRI reports that they are still more passive in relation to their participation in the entire campaign process. A number of barriers hindered their participation:

- Women consider men to be the heads of the family and are therefore reluctant to voice out their concerns. There is also the presence of fear due to past marginalization.
- Women are very reluctant to open up when dealing with men who are also the facilitators of the focus group discussion and interview sessions.
- Most women do not have access to radio sets hence affecting their listenership and participation level.
- They have limited time to listen to the radio or participate in other ways.

Suggestions for remedying this included allocating exclusive phone in and phone out segments of shows for women and involving more women as experts

### **Technical issues**

All the country reports mention technological issues, particularly around lack of access to phones by farmers, radio stations having problems with equipment and internet connection, power black outs and the reception of radio stations in villages. It is difficult to assess the scale of these and to what extent they presented significant barriers to successful implementation of the campaigns.

### **Financial issues**

All country reports mention some problems with lack of financial resources, particularly around a lack of funding to support logistical costs such as field visits and monitoring activities, the financial sustainability of radio stations after campaigns, and for the possibility of scaling up the approach.

### **Capacity development and learning**

Although AFRRRI provided capacity development support to radio broadcasters that was greatly appreciated, the summative evaluation uncovered a number of capacity issues: Inadequate training or skills to produce programs, e.g. script writing among broadcasters.

Inadequate training on use of computers and the internet which hindered research and access of FRI's online resources.

Poor command of English.

### **Technical inputs**

AFRRRI did not provide any assistance for farmers to purchase the technical inputs needed to adopt the improvement (such as seeds or fertilizer), nor did the programme include support for radio sets, mobile phones or other ICT equipment. This was mentioned frequently by farmers as a weakness. It is not clear to what extent it hindered the effectiveness of the programme.

### **Awareness raising**

There were some problems with awareness of the campaigns. Some farmers had not heard of the campaigns and more could have been done to launch the campaigns with a bit more of a fanfare. It was observed by stakeholders that continuous awareness raising is key to sustain the audience listening throughout the campaign as opposed to seeing awareness raising as only a pre-campaign activity.

### **Conclusion**

AFRRRI appears to provide important lessons for other agricultural development programmes around using radio to support extension and adoption. The participatory method helped ensure that innovations were grounded in farmers' realities (and were often identified by farmers themselves, rather than by external actors), building on indigenous knowledge. AFRRRI seems to have been able to achieve high rates of adoption – something often elusive in agricultural development programmes – and supported FRI's (and other participatory development practitioners' and academics') rejection of more traditional 'technology transfer' approaches.<sup>xxvi</sup>

There are questions about (a) how participatory the selection of improvements was, and particularly the extent to which the process was co-opted with political interests; (b) how cost-effective PRCs were, particularly in comparison to other farmer outreach methods; and c) how the PRCs can be designed to better be able to respond to women's needs and priorities. There is a risk that the level of participation during PRCs could slip from 'joint design' to 'involvement in an externally led process', which would undermine the extent to which PRCs empower farmers. These issues would benefit from further research.

Unfortunately, due to limits of the programme, it was impossible to create a complete control for the evaluation of the initiative: a control group that listened to farm radio that was designed in a more traditional way without extensive inputs from farmers. Without that it is difficult to say for

sure whether the observed changes in PLCs were partly due to programming being much better than traditional farm radio, in the sense that it promoted a level of trust and featured farmer voices and that it was more relevant and entertaining because of the fact that farmers had helped design it. However, ALINe believes that it is highly likely that this was the case, particularly considering the aspects of the programmes that farmers highlighted in the summative evaluations.



## Annex 1 : AFRRRI radio stations for PRC1

COUNTRY	RADIO STATION
Malawi	<ul style="list-style-type: none"> <li>• Malawi Broadcasting Corp</li> <li>• Zodiak Broadcasting</li> <li>• Dzimwe Community Radio</li> <li>• Nkhotakota Community Radio</li> <li>• Mchinji Mudzi Wathu Community Radio</li> </ul>
Ghana	<ul style="list-style-type: none"> <li>• Radio Ada</li> <li>• Radio Afram Plains</li> <li>• Simli Radio</li> <li>• Classic FM</li> <li>• Volta Star</li> </ul>
Mali	<ul style="list-style-type: none"> <li>• Radio Banjo de Kayes</li> <li>• Radio Banguine Badiangara</li> <li>• Radio Rurale Nationale</li> <li>• Radio Jigiya</li> <li>• Radio Fanaka Fana</li> </ul>
Uganda	<ul style="list-style-type: none"> <li>• UBC</li> <li>• CBS</li> <li>• KKCR</li> <li>• Mega FM</li> <li>• Voice of Teso</li> </ul>
Tanzania	<ul style="list-style-type: none"> <li>• FADECO</li> <li>• Radio Tanzania</li> <li>• Radio Maria</li> <li>• Sibuka FM</li> <li>• Lorkonerei (ORS FM)</li> </ul>

## Further reading

### Farm Radio International resources

#### [The Economics of Rural Radio in Africa \(2008\)](#)

An Introductory Study into the Costs and Revenues.

#### [Communicating With Radio: What Do We Know? \(2008\)](#)

Findings from a review of selected rural radio effectiveness evaluations.

#### [Participatory Radio Campaign Manual \(2010\)](#)

A manual developed by Farm Radio International on how to run a successful participatory radio campaign (PRC). This document was used in the design and implementation of the first and second PRC's in the African Farm Radio Research Initiative.

#### [The Effect of Participatory Radio Campaigns on Agricultural Improvement Uptake \(2010\)](#)

A preliminary case study assessment of the results of Participatory Radio Campaign 1 (PRC 1), which was part of the first phase of AFRRRI. This report examines the effect of one PRC from each of the five partner AFRRRI countries during this phase.

### AFRRRI photos:

<http://picasaweb.google.com/AFRRRIphotos>

### Farm Radio International's Youtube Channel:

<http://www.youtube.com/user/FarmRadioInt>

## Cited references

Chambers, R. (1997) *Whose Reality Counts? Putting the First Last*, Oxford: ITDG Publishing

Scoones, I and Thompson, J (2009) *Farmer First Revisited: Innovation for Agricultural Research and Development*, Oxford: ITDG Publishing

<sup>ii</sup> <http://www.farmradio.org/english/partners/afrrri/research.asp>

<sup>ii</sup> FRI and WUSC proposal to the Bill and Melinda Gates Foundation.

<sup>iv</sup> AFRRRI (2010) Major Outcome Evaluation: Participatory Radio Campaign 1

<sup>iv</sup> Examples include: intercropping cereals and legumes; producing compost; and introducing a disease-resistant variety of cassava. See below how the selection process is implemented.

<sup>vi</sup> This process included community rapid appraisals to assess the priorities of communities and subsequently further participatory assessment of farmer listening preferences (AFRRRI (undated) Rural Rapid Appraisal Synthesis Paper).

<sup>vii</sup> Summative evaluation reports from Tanzania, Uganda, Malawi and Ghana

<sup>viii</sup> Doug Ward (2010) Manual for Participatory Radio Campaigns; Doug Ward (2010) Farmers First: the Participatory Radio Campaigns of Farm Radio International, IDS seminar

<sup>ix</sup> Doug Ward (2010) Farmers First: the Participatory Radio Campaigns of Farm Radio International, IDS seminar

<sup>x</sup> These stages are built on learning from FRI's own research about the costs, benefits and good practice of using radio in achieving poverty reducing outcomes. See

<http://www.farmradio.org/english/partners/afrrri/info.asp>

<sup>xi</sup> Doug Ward (2010) Manual for Participatory Radio Campaigns

<sup>xii</sup> Summative evaluation reports from Tanzania, Uganda, Malawi and Ghana

<sup>xiii</sup> Active Learning Communities: Three communities per radio station (75 in total) were actively involved in the action research and were visited during the rapid appraisals. They worked with AFRRRI partners to select the 'improvement' and design aspects of the programme. They were also visited throughout the campaign for monitoring and feedback and had their voices featured on the radio.

<sup>xiv</sup> Passive Listening Communities: Two communities per radio station (50 in total) were comparable communities that had no contact with the radio station or project. These were included to investigate whether changes in adoption might be due in part to heightened levels of participation rather than hearing the radio campaign.

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<sup>i</sup> AFRRRI's aim was to assess the effectiveness of farm radio for meeting the food security objectives of rural farming households in Africa.

<sup>xv</sup> Control communities. One community was selected for each radio station (25 in total) that could not access the radio programming either because the signal did not reach their community, or community members did not understand the language of the broadcast.

<sup>xvi</sup> These findings were supported by summative evaluation and case study research using participatory methods and interviews in four countries. However, the rates of adoption were sometimes higher in PLC indicating that whilst being a member of ALC facilitated knowledge uptake and adoption, there are other factors that are important to consider.

<sup>xvii</sup> For a detailed discussion of the issues see, ALINe 'A Guide to Integrating Gender into Monitoring and Evaluation', *forthcoming* and Kabeer, N 'Women's empowerment, development interventions and the management of information flows', ALINe Practice Paper, *forthcoming*.

<sup>xviii</sup> AFRRRI (2010) Major Outcome Evaluation: Participatory Radio Campaign 1

<sup>xix</sup> Doug Ward (2010) Farmers First: the Participatory Radio Campaigns of Farm Radio International, IDS seminar

<sup>xx</sup> Doug Ward (2010) Manual for Participatory Radio Campaigns

<sup>xxi</sup> Either tape or written

<sup>xxii</sup> Summative evaluation reports from Tanzania, Uganda, Malawi and Ghana, and Doug Ward (2010) Manual for Participatory Radio Campaigns

<sup>xxiii</sup> Summative evaluation reports from Tanzania, Uganda, Malawi and Ghana

<sup>xxiv</sup> From testimonials of extension officers.

<sup>xxv</sup> These challenges were primarily identified through the summative evaluation process at the end of PRC1 which brought together all stakeholders (Summative evaluation reports from Tanzania, Uganda, Malawi and Ghana).

<sup>xxvi</sup> FRI's motivation behind AFFRI was that a participatory research and implementation process would be more likely to produce widely known and understood outcomes, respond to the needs and priorities of the people affected, and generate greater support for increased investment in radio broadcasting. The principle is also the result of a rights-based perspective to development, whereby FRI is committed to ensuring that smallholder farmers become agents of their own change.