

ANALYSIS OF CAPACITY-BUILDING NEEDS OF  
AGRICULTURAL BROADCASTERS IN MALAWI

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ABSTRACT

In Malawi, 90% of foreign exchange comes from agriculture and small-scale farmers constitute 85% of the workforce. The major challenge that has constrained government's effort in the agricultural sector has been the limited human resources to provide adequate, effective agricultural extension and advisory services to over 3 million small-scale farmers. The current ratio of government extension workers to farmers is 1:3,000 against the recommended ratio of 1:500. An earlier study by the African Farm Radio Research Initiative showed that radio has the capacity to improve food security and was an effective tool in agricultural extension advisory services. However, it did not explore the challenges faced by broadcasters in producing radio programmes for small-scale farmers.

Consequently, the African Rural Radio Programme Analysis aimed to discover how radio stations produce farm radio programmes and to determine how best to support the broadcasters in meeting farmers' needs. The study used qualitative methods to gather data. The research team conducted investigative radio-station research with the station managers, producers and presenters. The study also conducted focus-group discussions with farmers (men and women separately). Four of the five organisations that took part in the study indicated the need for training because they had limited skills in programme production and use of modern technology, such as information and communications technologies. The study identified constraints, the major one being lack of capacity among agricultural

broadcasters, that need to be addressed in order to contribute to producing quality content to achieve the desired impact of farm radio programming.

**KEY WORDS:** *SMALL-SCALE FARMERS, INTERACTIVE, EFFECTIVE TOOL*

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## INTRODUCTION AND OBJECTIVES

Agriculture continues to be the main source of livelihood for many people in Africa. In Malawi, 90% of foreign exchange comes from agriculture and small-scale farmers constitute 85% of the workforce. The major challenge that has constrained the government in the agricultural sector is the limited human resources to provide adequate, effective agricultural extension and advisory services to over 3 million small-scale farmers. The current ratio of government extension workers to farmers is 1:3,000 against the recommended ratio of 1:500 (GoM, 2011).

African broadcasters face challenges in producing farm radio programmes resulting from the limited capacities at both individual and institutional levels. A message that could have benefited a farmer ends up being just a talk show, without impact because of the way it has been packaged. Small-scale farmers, the majority of whom farm for subsistence, face many challenges. The extension messages therefore have to be well packaged to respond to their diverse needs. The farmers need more interaction than information; they need to participate in research, planning and implementation of farm radio programming. The African Farm Radio Research Initiative (AFRRI), implemented from 2007 to 2010 by Farm Radio International, showed that innovative radio programming such as participatory radio campaigns (PRCs) have a long-term impact,

leading to the adoption of agricultural improvements by small-scale farmers (FRI, 2011). The AFRRI report (FRI, 2011) also highlights the fact that broadcasters need training: all radio stations could produce effective PRCs if they had proper training and support. After the AFRRI study, another study – the African Rural Radio Program Analysis (ARRPA) – was conducted to discover how radio stations produce farm radio programmes and to determine how best to support the broadcasters in meeting the needs of farmers. Through the ARRPA it was observed that the broadcasters lack the skills to produce a radio programme that is farmer centred because of their limited knowledge and ability to use innovative farm radio programming, such as PRCs and information and communications technologies (ICTs) (Likagwa *et al.*, 2011). The major problem faced by most of the broadcasters is their lack of knowledge in innovative radio programming, lack of sustainability of programmes, and shortage of resources at institutional level to produce quality innovative radio programming that is effective. Building the capacity of agricultural broadcasters is a very efficient way to bring more effective extension services to farmers, as most of the small-scale farmers depend on the radio as their main source of agricultural information.

The United Nations Economic and Social Council defines ‘capacity-building’ as a long-term continual process of development that involves all

stakeholders, including ministries, local authorities, non-governmental organisations (NGOs), professionals, community members, academics and others. Capacity-building uses a country’s human, scientific, technological, organisational, and institutional resources. The Council says that capacity-building takes place at individual, institutional and societal levels (Committee of Experts on Public Administration, 2006). This paper propounds the need to build the capacity of broadcasters as individuals and the radio station as a whole, because building the capacity of the broadcaster when the radio station has obsolete equipment will not result in quality farm radio programmes. The extension workers who have the mandate to serve farmers also need the capacity to provide effective extension services.

‘Capacity’ in this context means not only strengthening the knowledge and skills of broadcasters and other key stakeholders, such as extension advisors and farmers, in innovative radio strategies and ICTs, but also allocating adequate resources (e.g., human, technical and financial) so that broadcasters and extension advisors can deliver timely, relevant and responsive information to farmers.

According to ARRPA (Likagwa *et al.*, 2011), one of the causes of poor-quality radio programming is that most broadcasters join radio stations as volunteers without prior formal training. This is especially common in community radio stations,



because some of these radio stations want cheap labour. Consequently, there are no standards for the production of agricultural programmes, so information may be distorted. Hence the need to build the capacity of agricultural broadcasters and other key players such as extension workers and farmers in order to have effective and efficient extension and advisory services to maximise farmers' benefits.

### Objectives

The objectives of the study were:

- to find out how radio stations produce farm radio programmes;
- to determine how best to meet the needs of broadcasters in order for them to meet the needs of small-scale farmers.

### MATERIALS, METHODS AND DATA SOURCES

The ARRPA study used both field and desk research to collect (mostly qualitative) information. The study purposively selected three radio stations – Zodiak Broadcasting Station (ZBS), a national private commercial radio in Lilongwe and Dzimwe Community Radio Station in Monkey-bay – and two production houses – Agriculture Communication Branch of the Department of Agricultural Extension Services of the Ministry of Agriculture and Food Security (MoAFS) and Story Workshop, a local media NGO whose programmes are aired on the national

broadcaster, Malawi Broadcasting Corporation (MBC). ARRPA used key-informant interviews with station managers and focus-group discussions with farmers. The study conducted a pre-investigation exercise in order to have a profile of the radio stations. The researcher then listened to the agricultural radio programmes produced by the radio stations and production houses, analysing them using the VOICE<sup>2</sup> standards. A questionnaire was used to interview the managers, producers, presenters, reporters and other key staff. The researcher also conducted community inquiry by having focus-group discussions with farmers on what they thought of the farm radio programmes. The data from the radio stations and communities were subjected to qualitative analysis. The study also used information from secondary sources (books, papers and the internet).

### RESULTS AND DISCUSSION

There were seven key findings.

#### Need for capacity-building at individual and institutional levels

The study established that a majority of producers learn on the job. This is more common in community radio stations as they attract volunteers who have no formal training in journalism because they do not pay salaries. The radio stations have insufficient production

equipment such as recorders to enable them to record programmes simultaneously. The producers were at times forced to repeat programmes because they did not have the transport to go and record programmes in the field. There is a high staff turnover at community radio stations due to the lack of financial incentives (among other things). The broadcasters have problems maintaining the technical equipment. As a result, the farmer is the one who loses out (i.e., he or she does not receive information). For example, Dzimwe Community Radio was off air for 4 months due to a transmitter problem. They did not have a technician to fix the problem and had to hire a technician. If the staff had been trained in how to maintain the equipment, they would not have been off the air for that long.

The broadcasters interviewed indicated the need for training in using innovative radio strategies such as PRCs, interactive voice response (IVR) and FrontlineSMS. The training of African broadcasters led to the successful implementation of Farm

<sup>2</sup> VOICE – a method developed by Farm Radio International to analyse farm radio programmes they pioneered: V stands for Value for farmers, O stands for Opportunity for farmers, I for Information that is timely and sensitive for farmers, C for Convenience for farmers and E for Entertainment for farmers.



Radio International’s innovative approaches. The following gives a brief description of each strategy.

### **Participatory Radio Campaigns**

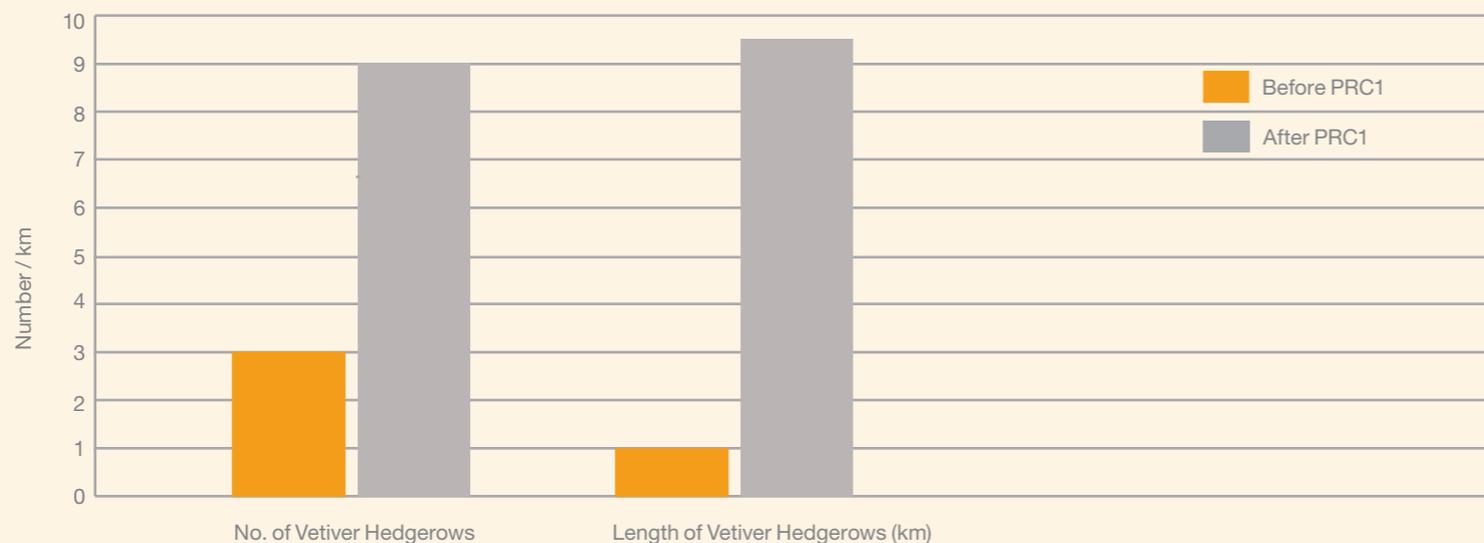
A PRC is a planned, radio-based activity, conducted over a specific period of time, in which a broad population of farmers is encouraged to make an informed decision about adopting a specific improvement, selected by their peers on the basis of the best available information, to improve their livelihoods (FRI, 2011). The methodology has been tried, tested and proved to be successful in improving the food security of small-scale farmers through the adoption of

improved technologies. The impact of the PRC methodology was carefully evaluated by the implementation of the 2007–2010 AFRRRI. PRCs are powerful because radio has the widest reach and most people in the rural areas have access to a radio, unlike other ICT facilities like TVs, cell phones and internet. Farm Radio International evaluated a variety of approaches such as market information services, short message services (SMSs), voice-based services, call-outs and call-ins, and internet access for radio stations. Through 49 PRCs implemented in partnership with 25 radio stations in five sub-Saharan African countries (Ghana, Malawi, Mali, Tanzania and Uganda), Farm Radio

International learned that the strategies strengthen conventional extension systems, and contribute to more demand-driven services by giving farmers a stronger voice. This is the strategy that needs to be promoted at local, national and global levels because it is cost effective – it cost \$0.50 per farm, as compared to the higher cost the government would spend using extension workers. Figure 1 shows how PRCs impacted a community in Mvera, Dowa, Malawi: they adopted the new technology of vetiver-grass hedging (which is used as a soil- and water-conservation measure). The farmers who listened to well-produced farmer-sensitive radio programmes were encouraged to plant more vetiver grass. The graph shows that radio had some influence in creating awareness about this ‘new’ technological innovation. The internal evaluation highlighted the fact that when broadcasters are trained in how to carry out quality farm radio programming the approaches make an impact.

### **Interactive voice response system**

IVR is a technology that allows a user to call, enter or say specific numbers and listen to or contribute audio content. AFRRRI introduced Freedom Fone<sup>3</sup> at Radio Maria in Tanzania and Volta Star Radio in



Source: FRI (2010).

**FIGURE 1: CHANGE IN NUMBER AND LENGTH OF VETIVER GRASS HEDGEROWS IN ACTIVE LISTENING COMMUNITIES IN MALAWI**

<sup>3</sup> Freedom Fone is an open-source software platform developed by Kubatana for distributing news and information through IVR technology.



Ghana. In Tanzania, IVR was used as a voice-mail service. Broadcasters announced an upcoming competition and asked for the best story (lasting from 10 seconds to 3 minutes) of how listeners were using the technology. They received a total of 2,499 calls to the hotline, with 1,448 unique callers during the month; they also received a total of 297 SMSs (Ulbricht, 2010). The success of this technology depended on the training of the radio station staff. Bartholomew Sullivan, AFRRI's Regional ICT Officer for FRI based in Tanzania, says it is important to be able to train local employees to continue to use the IVR technology after the project concludes, 'Because it means when something comes up they can handle it on their own' (Sullivan, 2011).

### **FrontlineSMS**

FrontlineSMS is an ICT package used for text-messaging of alerts from the broadcasters to the intended target audience. The package requires a computer, a Java-enabled cell phone and cell phone credit. Farm Radio Malawi used this service in 2009 under the AFRRI programme and results showed that it has great potential to boost listenership and interactivity at farmer level. For example, SMS alerts were sent by MBC to two communities: Benadi village (3 km west of Bvumbwe trading centre, Dwale Extension Planning Area, Thyolo district, southern Malawi) and Maggie (4 km north west of Bvumbwe trading

centre, Thyolo district). The main objective of the alerts was to determine the impact of SMS alerts on the listenership of an agricultural radio campaign. Mahwayo (2010) attributes the increase in listenership and interactions between extension workers and farmers to the FrontlineSMS technology. The technicalities of the FrontlineSMS required the broadcaster to be trained to use the facility, so the broadcasters were trained and are still using the facility which enables them to get feedback from listeners.

### **Non-sustainability of the farm radio programmes**

One of the major weaknesses identified in the study was the reliance on donor funding for agriculture programmes. A radio programme costs an average of MK 40,000 (\$247). Most farm programmes lack sponsorship, as a result of which some have ceased after the phasing out of donor funding because of high operating costs. Some radio programmes start with no proper exit strategy and in the end it is the farmer who suffers from lack of information. There is therefore a need to shift from dependency to sustainability. The radio stations should be trained how to mobilise resources so that the production of farm radio programmes becomes sustainable. The study recommends that radio stations should have sustainability plans so that they run smoothly even after donor-funded projects are phased out. Best

practices were captured at Dzimwe Community Radio Station. Dzimwe has an internet café, which is being used as an income-generating activity.

### **No network for broadcasters in farm radio industry**

Broadcasters in the farm radio industry do not have a forum – a group to which they could go and share their experiences. A network would also help them to share agricultural information and ideas for programmes. It was observed that some broadcasters are keen to set up such a forum. The broadcasters therefore need support from radio-station management to facilitate the establishment of such a network, which would also help improve the linkage with extension workers, agricultural research organisations and NGOs. This would improve access to information in the long term. Community radio stations in Malawi have formed what they are calling the Community Radio Station Association of Malawi aiming at joint programme developments for resource mobilisation for radio programming.

### **Solo production of programmes**

Due to the shortage of staff at some radio stations, one person was recording, editing and presenting the programmes alone. This would at times compromise the quality of the programmes, because he or she may not make critical judgement of the technical problems. Some producers said this was more



**FIGURE 2:** ZODIAK BROADCASTING STATION PRODUCER, GEORGE KALUNGWE INTERVIEWING SALOME BANDA, A FARMER



**FIGURE 3:** ONE OF THE FARMERS FROM DOWA SHOWING HOW VETIVER GRASS HAS HELPED IN PREVENTING SOIL EROSION IN HER MAIZE GARDEN AFTER LISTENING TO ZODIAK BROADCASTING STATION

effective than producing the programmes with colleagues. Others said teamwork ensures quality programmes are produced. The study recommends that a radio station needs to have adequate human resources to produce quality programmes.

### Limited incorporation of emerging issues

Agro-information is typically technical and scientific. The technical and scientific basis of it puts farmers off from wanting to use even the little information that they receive. This means that broadcasters need a tailor-made short course in agricultural broadcasting. The broadcasters lack the knowledge to cover emerging issues such as

climate change, HIV and aids, and biotechnology. Climate-change issues are not given much attention by the media. At the Second Annual Farm Radio Symposium – organised by Farm Radio International, the Department of Agricultural Extension Services of MoAFS, Total Land Care, ZBS and Bunda College of Agriculture – delegates observed that radio programmes use jargon that can only be understood by scientists and therefore miss the target audience, the farmers (FRM, 2010). In view of these challenges, the broadcasters need specialised training in farm radio programming so that they can disseminate clear, accurate and simplified information to farmers.

### Lack of information due to the unavailability of extension workers

During the focus-group discussion, farmers said that the major challenge they have is the lack of information due to the unavailability of extension workers. Extension workers visit just once a month due to the high demand for their services. Although most broadcasters keep telling farmers, ‘you will get more information from your extension worker in your area’, the extension workers are not always available to provide the information. The only alternative source of agricultural information is through radio, so broadcasters need to be knowledgeable, so that they can give detailed information to farmers.

### Best practices in capacity-building

During the ARRPA study, the researchers identified some potential opportunities for capacity development.

- Bunda College of Agriculture has conducted a short training course for reporters on biotechnology, though it was not specifically for broadcasters.
- Some organisations are incorporating capacity-building for broadcasters and agricultural extension officers in impact farm radio programming<sup>4</sup>. For example, the Farmer Voice Radio project being implemented by Farm Radio Malawi conducted a short training course for broadcasters and government extension workers.



## CONCLUSION, RECOMMENDATIONS AND IMPLICATIONS

The role of broadcasters and extension advisors in the promotion and dissemination of existing technologies to farmers to improve food production is inadequate due to the lack of knowledge in innovative radio impact programming and ICTs. The radio stations and extension offices have inadequate resources (human, technical, financial), which hampers extension-service effectiveness. Meanwhile, farmers need to be trained in the use of ICTs to be able to give feedback to the broadcasters and extension workers.

The importance of building the capacity of broadcasters, farmers, lead farmers, agricultural extension workers, advisors and agents cannot be over-emphasised. The radio stations need to have exit strategies, so that when donor funding is phased out there is continuity in agricultural programming. As much as the government, private sector, NGOs and international organisations do consider funding capacity-building of broadcasters and key partners, radio station managers should take the initiative to run short courses on agricultural programming for broadcasters.

The radio stations should invest in training for their staff; they should also invest in other key stakeholders such as extension officers. The involvement of all these stakeholders would ensure the participation of all of them and strengthen the

linkages which are essential in the provision of extension and advisory services.

In view of the challenges, the following recommendations are suggested:

- The radio stations should have exit strategies so that there is sustainability of agricultural programming even after donor funding of agricultural programming is phased out.
- There is a need to build the human, financial and technical capacity of the broadcasters and extension advisors to carry out the extension services effectively.
- Government, governmental organisations and private companies need to scale up support to capacity-building of agricultural broadcasters.
- Networking and coordination is required among academic training institutions, to standardise training in agricultural programming.
- Include innovative farm radio programming and ICTs in the curricula of tertiary training institutions, so that agricultural broadcasters have prior knowledge of and experience in using innovative radio strategies.
- Coordination of the agricultural organisations and broadcasters is needed, to ease access to agricultural information.
- A network for broadcasters in Africa is needed, for them to be able to mobilise resources, to share farm radio programmes and to enhance their production skills.

Extension and advisory services play a very

important role in the growth of the agricultural sector, and therefore have a very strong bearing on the economic growth of any country. The agricultural extension policy document of Malawi (GoM, 2000) clearly states that poverty reduction calls for improved food security and increased on-farm and off-farm incomes for farmers in Malawi. High-quality extension services can make an important contribution to achieving the objective of poverty reduction.

Addressing the capacity challenges that broadcasters face at individual and institutional levels can lead to quality, effective and efficient extension and advisory services. If the challenges are not addressed, the quality of radio programmes will be compromised and farmers might not get the relevant information that can help them improve their farming. It is therefore recommended that radio stations invest in building the capacity of agricultural broadcasters. We cannot talk of innovative agriculture without building the capacity of the broadcasters who are the key to quality information, which is essential for

4 'Impact farm radio programming' is a farm radio programme that is produced to transform or improve the life of a small-scale farmer from the past undesired state to the desired state. The programme should lead to a change in knowledge, attitude or practice (or a combination of these).



farmers to improve their prospects of achieving improved income and food security.

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