

# Using Participatory Radio to Support Climate Change Resilience

In the face of climate change, access to relevant, timely and actionable information is fundamental to ensuring that rural communities can adapt and thrive. Working in partnership with the Walker Institute in Ghana and Uganda, the Lorna Young Foundation's participatory radio model, Farmers' Voice Radio, has increased understanding about how drought and flood-prone communities are experiencing climate change and provided a platform for the exchange of information on successful resilience strategies. The policy briefing note provides an overview of the Farmers' Voice Radio key principles and methodology, and shares some of the changes in knowledge, attitudes and practice that have resulted from the radio programmes – ultimately concluding that community voice must be central to this kind of communication for development intervention if lasting change is to be achieved.

## INTRODUCTION

Smallholder farming communities around the world are under huge pressure from climate change, with increasingly erratic rainfall and extreme weather events causing more frequent drought, flooding, and landslides. This climate instability combined with intensive cultivation and unsustainable farming practices have resulted in declining agricultural productivity and growing livelihood and food insecurity. Due to geographical constraints, social isolation and illiteracy, many smallholder farmers have neither the knowledge nor the resources required to make and implement informed decisions that will reduce their vulnerabilities. Smallholder farmers need appropriate and actionable advice on how to anticipate and mitigate climate change impacts, manage their land sustainably and improve crop quality and yields.

Radio is the most affordable and accessible communication medium in the world's poorest countries: it is trusted, inclusive and has a rapid, wide reach. It delivers knowledge to audiences in even the most remote communities in a range of local languages, and engages disadvantaged groups frequently excluded from other information sources, such as women, youth, people with disabilities and those with low literacy.



Since 2010, the Lorna Young Foundation (LYF) and its partners have implemented Farmers' Voice Radio projects across Sub-Saharan Africa, providing hundreds of thousands of farmers, particularly women, with new and improved access to relevant agricultural and climate information. Incorporating farmer listener groups, multi-stakeholder participation and mobile messaging, Farmers' Voice Radio combines indigenous knowledge with specialist expertise and uses the radio programmes to create a dialogue with the community. This adds value to traditional agricultural extension services and changes rural knowledge, attitudes and practices, resulting in stronger livelihoods and increased resilience to climate change.

The LYF began working with the Walker Institute in 2016, incorporating its Farmers' Voice Radio methodology into two interdisciplinary and multisector climate research projects, BRAVE<sup>1</sup> and NIMFRU<sup>2</sup>. In Ghana, BRAVE partners CARE International, extension officers from the Ministry of Food and Agriculture and Ghana Broadcasting Corporation's URA Radio facilitated 20 listener group meetings over a two-year period involving 24 farmers (15 women and nine men) in two target communities in the Upper East and Northern regions. Discussions focused on four pre-agreed themes of sustainable land management, water harvesting, health and nutrition and crop yields and quality, and were informed by analysis of historical rainfall data sourced from the Walker Institute's

<sup>1</sup> Building Understanding of Climate Variability into Planning of Groundwater Supplies from Low Storage Aquifers in Africa (<http://www.walker.ac.uk/research/projects/building-understanding-of-climate-variability-into-planning-of-groundwater-supplies-from-low-storage-aquifers-in-africa-brave/>).

<sup>2</sup> National Scale Impact-Based Forecasting of Flood Risk in Uganda (<http://www.walker.ac.uk/research/projects/nimfru-national-scale-impact-based-forecasting-of-flood-risk-in-uganda/>).

[RAINWATCH](#) platform. These listener group discussions were recorded for weekly radio programmes, and more than 150 individual episodes of 'The Farmer and the Water' were broadcast in two languages using the farmers' own voices by GBC-URA Radio, reaching an estimated 146,600 listeners.

In Uganda, the LYF worked with local conservation NGO [ECOTRUST](#), the Uganda National Meteorological Authority (UNMA) and community development officers from Katakwi District to organise monthly listener group meetings over a six-month pilot. This resulted in 24 individual episodes of the 'Farmers See the Light' radio programme, broadcast in the local Ateso language by media partner Etop Radio to approximately 67,000 people across the rural areas of Katakwi District. Topics covered by the radio programmes included weather forecasting, cattle diseases, post-harvest handling and storage of crops, nutrition, soil fertility, bush burning and the production of alternative crops such as mushrooms, upland rice, and sunflowers.

## PRINCIPLES AND APPROACH

Farmers' Voice Radio is an empowering and participatory approach to agricultural extension by ensuring that it is:

- Accessible because it is a community radio that is broadcast straight into the home, field or workplace, in local language
- Inclusive of women, isolated communities, people with disabilities and people with low literacy
- Fast, affordable and wide-reaching
- Challenging attitudes and perceptions
- Actionable by encouraging farmers to adopt practices that are realistic and appropriate
- Respectful of farmers' own expertise

Each Farmers' Voice Radio project is implemented in collaboration with local partners and is carefully tailored to the local context. However, there are some basic components that feature in all projects:

Figure 1: The Farmers' Voice Radio approach



Farmers' Voice Radio brings farmers together with relevant experts in community settings to discuss their challenges on the radio. They combine their knowledge and perspectives to find practical solutions.

These discussions are broadcast to hundreds of thousands of farmers in the most remote locations in local languages. Listeners can contribute to the conversation and ask questions via SMS and voice message, increasing participation.



The conversation continues off-air, building stronger connections between farmers, businesses, governments and consumers, and growing sustainable rural communities.

1. Identifying communities with a specific need that can be addressed through improved access to information. This is often associated with a particular value chain (previous projects have focused on tea, coffee and cocoa), although in the case of BRAVE and NIMFRU, the need was more generalised in relation to flood and drought risks.
2. Planning radio programme content around the agricultural and weather calendars, highlighting key messages to be delivered at specific points to address the identified needs.
3. Establishing farmer listener groups that represent a cross-section of the target communities—in the case of NIMFRU, this included ensuring that all wealth groups identified through the initial [Household Economy \(HEA\) and Individual Household \(IHM\)](#) surveys were represented—and facilitating regular meetings involving local extension officers and radio presenters to identify, record and provide feedback on radio programme content.
4. Bringing together organisations and individuals supporting, working with and buying from those communities into a multi-stakeholder group to review and contribute programme content.
5. Encouraging contributions and feedback from farmers through the listener groups and listeners through SMS and voicemail channels, with questions and comments responded to in later programmes.
6. Broadcasting the short (15-minute) programmes, pre-recorded in the field, on a weekly basis (repeated once) usually over a 12-month period, in local language on community radio stations.
7. Conducting community-level baseline and evaluation surveys to inform the project targets and measure to what extent the radio programmes have contributed to achieving the required changes in knowledge, attitude and practice.

comment, question or feedback in response to polls about groundwater usages, crop yields and agricultural practices.

### BRAVE Participant Profile



*“My name is Celestina Akundugu from the Tariganga community. Ever since [the LYF] set up the radio Listener Group, I have learnt a lot and it has improved my production. I used to get 1 or 2 bags of maize... then I started applying the information from the radio on different varieties of crops that suit the weather. This year I had 5 sacks of maize and I used the income to buy fertiliser. I have also learnt a lot about shea. I did not know that women could make a good living from shea and so I just left it for older women to collect.*

*“[The radio programme] is good because it is talking about the women... They are introducing us into business as women. I like that. I keep the income for myself. Women suffer a lot, we should organise and put ourselves into groups, so that we get more information and to support us in our households”.*

## EVOLUTION OF THE METHODOLOGY

In the case of BRAVE and NIMFRU, Farmers’ Voice Radio has evolved in response to project needs and operating context.

The BRAVE project baseline data highlighted that, although most farmers in northern Ghana have access to a mobile telephone, many are highly unlikely to communicate via SMS due to illiteracy and cultural norms. In response, the LYF collaborated with Canadian NGO [Farm Radio International](#) to use its [Uliza listener interactivity service](#), which invites farmers to call a toll-free number and record their comments and questions as voice messages. This system enabled the wider listenership to feed into the radio programmes, increasing its relevance and reach across the region. In addition, a polling function provided valuable monitoring data for the project team by evidencing the level of engagement by listeners and providing qualitative information relating to listeners’ experience and any changes in their knowledge and understanding. Over a 10-week period, the Uliza service received calls from 399 listeners, 301 of whom recorded a

In the NIMFRU project, a second, face-to-face information exchange platform called the Farmer Agri-Met Village Advisory Clinic (FAMVAC) was established by UNMA in three focal villages. These FAMVACs complemented and strengthened the Farmers’ Voice Radio broadcasts by providing a physical space for farmers to hold more expansive discussions on key topics and have their questions answered by climate and agricultural professionals. Regular stakeholder meetings at District level provided a critical coordination mechanism between the Farmers’ Voice Radio programmes and the FAMVACs, flagging any contradictions or information gaps that could be addressed by District officials. They also offered an important channel for escalating farmers’ concerns and needs raised during the FAMVACs and radio programmes at a policy level.

## NIMFRU Participant Profile



*“My name is Elungat Patrick, a farmer from Agule Village, Katakwi District. My village is affected by long droughts during the dry seasons and severe flooding in the rainy season. It is important for farmers to understand that with climate change everything has changed, and our practices must change to ensure a sustainable future.*”

*“This year, I started working with ECOTRUST and the Lorna Young Foundation as a leader of farmer radio listener group. We engage with Etop Radio staff to generate and inform content on agriculture, meteorology under the National- Scale Impact Based Forecasting for Flood Risk in Uganda (NIMFRU) project.*”

*“This information is shared on Etop radio, which is listened to throughout Teso region. I also mobilise other community members to listen and be able to use the information to better their lives in the face of climate change.”*

## RESULTS

Consultation with farmers involved directly in the BRAVE and NIMFRU listener groups (and FAMVACs, in the case of NIMFRU) and analysis of the feedback received from the wider radio programme listenership point to a number of shifts in knowledge, attitudes and practice that suggest greater resilience to climate change amongst target communities. These fall into four main categories:

1. Improved ability to anticipate changes in weather and extreme weather events based on a combination of climate science, historical data, and indigenous knowledge and to adjust agricultural activities to these new patterns.
2. Greater knowledge of effective resilience strategies in the face of changing and extreme weather threats, for example planting on higher land; using improved seed varieties for early maturing and drought resistant crops; constructing stronger houses using damp-

proof materials; building trenches and other water harvesting methods.

3. More sustainable land management practices, for example crop rotation, mulching, compost preparation, contour ploughing and tree planting, which help to prevent soil erosion and retain moisture.
4. Alternative subsistence and livelihood activities, such as mushroom growing and poultry keeping, to diversify food and income sources and reduce dependency on rain-fed agriculture. (See the BRAVE participant profile box for an example of how one listener group member turned to shea nut collection as a supplementary source of income.)

In addition, the participatory nature of the methodology succeeded in raising the voices of farmers in remote communities, many of whom face limited opportunities to make themselves heard. This has contributed to a greater understanding of farmers’ realities and needs in relation to groundwater usage (in the case of BRAVE) and flood response (in the case of NIMFRU) and has informed planning, decision-making and investment of resources by policy-makers at different levels. For example, NIMFRU listener group members Elugant Patrick (see the NIMFRU Participant Profile box) and Malinga Rose were selected by advocacy partners Climate Action Network Uganda to speak as ‘Climate Champions’ before the Parliamentary Forum on Climate Change. This action resulted in the acquisition of three new tractors for the Katakwi District and the construction of a valley dam.

The reach and impact of the approach has also attracted the attention of donors. The LYF has secured funding from UK Aid and The Body Shop for two follow-on Farmers’ Voice Radio projects that will build on the achievements of BRAVE in northern Ghana to deliver two new series of radio programmes targeted at shea nut gatherers and shea butter producers. This focus was determined by the radio listeners themselves, in particular women, who see shea harvesting and processing as an important alternative livelihood activity during the lean season and wished to maximise the value derived from it.

## CONCLUSIONS AND RECOMMENDATIONS

At the heart of the Farmers’ Voice Radio model is the idea of community voice; a concept vital in any development process to achieving lasting systemic change, for the following reasons:

- It contextualises and democratises knowledge, valuing indigenous wisdom alongside professional expertise.
- It provides a public platform for commonly excluded groups and perspectives to be heard.
- It connects people with similar experiences and shared challenges in a language that they understand, which builds trust and changes attitudes, knowledge and behaviour.

At its core, community voice is about empowerment: of remote rural communities within policymaking; of smallholder farmers involved in international commodity markets; of women living in the context of endemic gender injustice. Systemic change can only occur successfully *with* the inclusion of these people. It is never just about outcomes but also about the process.

Farmers' Voice Radio can therefore be a powerful tool for increasing our understanding of how rural communities are experiencing climate change, as well as for enhancing knowledge about effective resilience strategies – especially when combined with face-to-face interventions as in the BRAVE and NIMFRU projects. It can provide national agencies and NGOs with a feasible model of improved information distribution at scale while at the same time gathering feedback on how that information is being received by its target audience, thus supporting iterative programme design. It can help to ground-truth policymaking in real life experience. But any organisation considering using this approach must understand that radio alone is not the solution – it must also embrace the principles of participation and empowerment.

Guidance for implementing Farmers' Voice Radio is available to download for free from the [Farmers' Voice Radio website](#), and a field manual for running listener groups and FAMVACs as seen in the NIMFRU project is available from the [Walker Institute website](#).



### Acknowledgements

The authors are grateful to all partners involved in the BRAVE and NIMFRU projects who took their time to contribute to this study. The Briefing Note was funded by the Walker Institute.

### To cite this report

Insert reference using this style:

Davis, H. and Clark, H. (2020) 'Using Participatory Radio to Support Climate Change Resilience', Briefing Note WBN1020/01, Walker Institute, University of Reading, July 2020

### To contact the authors

Hannah Davis – [hdavis@lyf.org.uk](mailto:hdavis@lyf.org.uk)

Hannah Clark – [hclark@lyf.org.uk](mailto:hclark@lyf.org.uk)

Farmers' Voice Radio is an initiative of the Lorna Young Foundation [www.lyf.org.uk](http://www.lyf.org.uk).

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USA

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Walker Institute  
University of Reading  
Earley Gate  
Reading  
RG6 6AR UK

Email: [info@walker.ac.uk](mailto:info@walker.ac.uk)  
Tel: +44 (0)118 378 4651  
Fax: +44 (0)118 378 8316  
Web: [www.walker.ac.uk](http://www.walker.ac.uk)  
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