



# **Impact of an SMS- Augmented Participatory Radio Campaign (PRC) in Atanga Sub-County of Northern Uganda**

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The BoldSteps Foundation team<sup>25</sup> conducted a 12-month research project in Northern Ghana to tackle a number of key questions relating to the convergence of radio and mobile telephony and its potential impact on rural access, trends and development. Key thoughts and questions guiding the research included:

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The Canada-Africa Partnership on AIDS Uganda (CAP-AIDS Uganda) partnered with the radio station Mega FM-Gulu to pioneer an approach to behaviour change communication in the field of public health. The partnership took place in Atanga county of Gulu. Through a participatory communication model developed by Farm Radio International in the field of agricultural extension, CAP-AIDS conducted a research program to see whether or not the Participatory Radio Campaign (PRC) could improve the willingness of people in HIV-stricken communities to come forward for voluntary counseling and testing (VCT), despite powerful stigmas and cultural taboos.

The PRC is an approach to behaviour change communication that uses radio along with modern information and communication technologies (ICTs), and involves the beneficiaries of the campaigns in the planning and evaluation of the radio campaign. Farm Radio International has demonstrated significant increases in the uptake of various agricultural techniques through behaviour change communication. The research explored whether these successes could be matched in the fight to stop the spread of HIV/AIDS in Northern Uganda and also whether the additional use of SMS alerts could augment the impact of the campaign. The aim was to establish the extent to which the use of ICTs impacted the participatory radio strategies to encourage VCT-Health-Seeking-Behaviour within the highly vulnerable Acholi sub-region of Northern Uganda.

## **Background**

Information dissemination is essential for addressing public health crises. In the ongoing battle against HIV/AIDS, mass communication campaigns have proven to be significant in altering perceptions of the disease and improving health-seeking behaviours. Further, involving people in meaningful and participatory communication based on dialogue, listening, and responding to expressed information needs, has greater success than standard one-way flows of

information. Interaction from listeners and meaningful participation of different stakeholders is at the heart of the participatory radio campaign, or PRC. The study team worked from the assumption that the PRC, when combined with new two-way ICTs like mobile phone platforms and SMS, would have greater reach and encourage participation and improve knowledge uptake of the messages. This approach was used to encourage voluntary counselling and testing in the HIV/AIDS-stricken region of Northern Uganda, where strong stigmas related to VCT prevent many people from receiving HIV positive diagnosis and starting treatment. It was concluded that adding the use of SMS to the radio campaign led to an increased number of clients going to local health facilities for VCT service. Indeed, the messages may have been so successful that the lack, or sometimes the complete unavailability, of the testing kits sometimes led to disruption and discouragement of the targeted audience.

Farm Radio developed its PRC-model by informing and engaging smallholder farmers for the uptake of knowledge in the agriculture sector by using new and innovative technologies. This case study provides empirical evidence that PRC and SMS can also have a positive developmental impact in the realm of HIV/AIDS prevention.

### **HIV/AIDS Problem in the Case Study Area**

HIV and AIDS remain one of the biggest challenges facing post-conflict communities across Uganda and, in particular, Northern Uganda. The Acholi region, which is in a post-conflict situation and has many camps for internally displaced persons (IDPs), is characterized by a predominance of the commercial sex trade and limited access to HIV prevention services, despite the high risk of exposure. CAP-AIDS acknowledges the importance of disseminating information using mass communication methods, and it is opportune that Uganda has radio stations in both urban and rural areas. Mobile phone penetration is also high. It is estimated that by 2013 Uganda

will have over 75 percent mobile phone penetration. The PRC research undertaken by CAP-AIDS in Uganda sought to investigate the impact of the convergence of radio with SMS on VCT- seeking behaviour to stem the HIV and AIDS pandemic. The research further sought to promote ultimate health benefits to communities through communication.

### **PRC-Research Objectives**

The main objective of this study was to explore how and to what extent ICT-enhanced participatory radio strategies could contribute to the success of HIV/AIDS prevention initiatives, specifically VCT, within the highly vulnerable Acholi sub region of Northern Uganda. The specific objectives were:

1. To design and implement an action research plan to determine the potential of participatory radio campaigns in promoting VCT in the Acholi sub region of Uganda; and
2. To assess the role of SMS messaging to enhance the reach, interactivity, and effectiveness of participatory radio strategies.

### **PRC Approach**

Through the African Farm Radio Research Initiative (AFRRI), Farm Radio International pioneered a development communication approach that focused on helping smallholder farmers in Africa to learn about, discuss, evaluate, and adopt a range of agricultural practices to improve their lives and their livelihoods. The research findings indicate that farmers who reside in communities reached by the PRC are five times more likely to adopt improved agricultural practices compared to those farmers who reside in communities not yet reached by the PRC. These PRC initiatives go far beyond the traditional management of the packaged information routinely disseminated by government agencies, international organizations or NGOs.

PRC initiatives reach the wider public, and encourage feedback and participation of the beneficiaries in the planning and design of the radio campaign.

PRC has the following six characteristics:

1. Ensures the participation of farmers and broadcasters in all stages of the campaign.
2. Features the voices of farmers.
3. Gathers continuous feedback from listeners.
4. Engages and entertains listeners using a variety of effective radio formats.
5. Uses a “core story” to provide a common thread by the campaign, keeping it focused and engaging.
6. Builds a dramatic “arc” through the program.

The Participatory Radio Campaign model was found effective for informing and engaging smallholder farmers towards improving the level of uptake of agricultural practices and innovations.

### **PRC-Design for HIV/AIDS VCT Uptake**

A group of stakeholders were consulted during the formative stage of designing the HIV/AIDS campaign to ensure the programs broadcast on Mega FM in Gulu were accurate and culturally appropriate. Baseline surveys were conducted to understand the attitudes and beliefs of the community in Atanga towards HIV/AIDS. Consultative meetings were also held with Atanga Health Centre Facility staff to agree on: (a) how the preliminary surveys could be integrated into the actual health centre activities; and (b) the specific responsibilities to be borne by the different stakeholders. Accordingly, a memorandum of understanding (MoU) was drafted clarifying the agreements made between stakeholders and identifying the roles each would play.

## **Data Interpretation and Analysis of VCT Messaging Uptake**

The quantitative data analysis is mainly based on the actual VCT attendance trends and patterns within the study site selected for this particular assessment. Data was collected from the VCT laboratory registers. The final analysis compared VCT attendance at three time periods: prior to the PRC, during the radio campaign alone, and when SMS features used to remind listeners of the program time and themes were added to the PRC. The trends and patterns of the VCT uptake were analysed to establish the influence of radio and new ICTs on VCT uptake. The rates of VCT attendance were compared with those in a control community. The control community did not receive either SMS-texting or the PRC radio broadcasts, but was involved in other VCT uptake activities. This arrangement helped the study team to make a comparison on the VCT-uptake, specifically focusing on the impact of the radio campaign and the radio campaign when combined with SMS.

The research team was aware of the challenges of availability of staff and testing kits at the health facility in Atanga. Prior arrangements by the research team ensured that testing kits would be in steady supply in order to avoid disruption of the campaign outcomes. A meeting with key HIV and AIDS service providers ensured that commitments were secured for the supply of HIV testing kits.

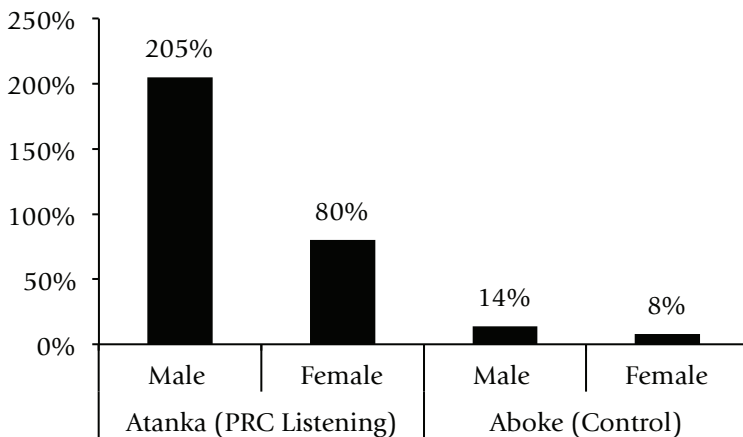
### **PRC Project Outcomes**

The pilot study found that the PRC model, which uses radio broadcasts and SMS messaging, can have a strong influence on VCT seeking behaviour. Notwithstanding the degree of success, Short Messaging Services (SMS) may not be appropriate for those who are illiterate as it can negatively affect the intended outcomes of the SMS alerts. However, the problem of non-literate audiences being unable

to decipher the content sent inside the SMS text could be mitigated by radio broadcasters through skilful relaying of the messages in the vernacular.

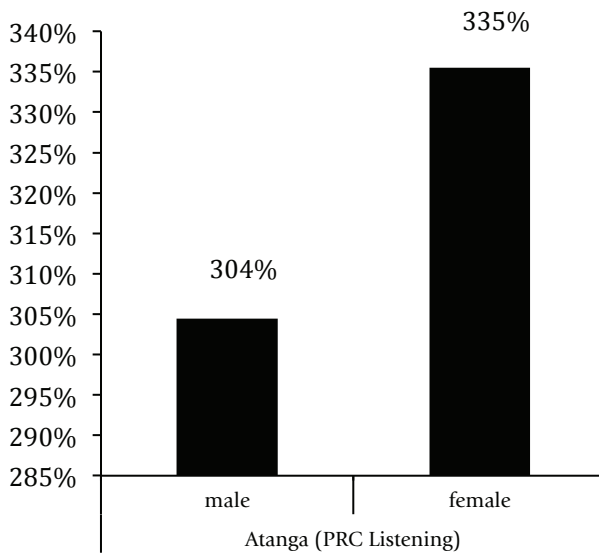
As shown in Figure 1 below, there were marked increases in VCT uptake among men and women after the PRC. Before the introduction of the PRC in Atanga-sub-county, 153 males went for VCT over a four-month period from February through May 2010. After the PRC, during a four months period from December 2010 through March 2011, 466 went for VCT. This is a 205 percent increase in testing levels among men. On the other hand, 454 women went for testing from February through May 2010 (before the PRC). The number of women who went for testing increased to 819 for the period December 2010 through March 2011. This represents an 80 percent increase in the incidence of testing. In comparison, the increase in the “control” sub-county –Aboke – was much less, though significant in scale: a 14 percent increase among males and an 8 percent increase among females. This suggests that the PRC was not the only factor that accounts for the increase.

**Figure 1: Percent Difference in VCT Uptake Between Feb-May 2010 and December-March 2011 after PRC Began**



Comparing VCT uptake after the SMS was introduced (Figure 2) provides further insights. For the three-month period from April to June 2011, two hundred seventy-five (275) males came for testing compared to a mere 68 males who came for testing during the same time frame in April through June of 2010. This is an increase of 304 percent, significantly more than the increase attributed to the messages in the “PRC only” period. Among females, a remarkable 614 came for testing in April through June of 2011 compared to only 141 females from April through June of 2010. This suggests that adding SMS to augment the radio campaign could also have a bigger impact on females.

**Figure 2: Percent Difference in VCT Uptake between April-June 2010 and April-June 2011 with Radio Plus SMS**





Among the control group in Aboke, a total of 1,536 clients (449 male and 1,087 female) accessed VCT services over a period of eight months. When the control group figures are compared with results in Atanga, it is clear that the radio campaign significantly contributed to the uptake of VCT services.

The results of this preliminary study show that the PRC, by using radio as its medium, has had significant impact on the general public. It specifically influenced behavioural change towards VCT in Atanga Sub-County in Pader District. In Aboke Sub-County (the control community), where people do not receive the Mega FM radio broadcasts, the level of attendance by clients turning up for VCT remained steady. Perhaps this can be attributed to the relatively high population in Aboke as compared to Atanga.

The findings are clear that radios, combined with SMS through mobile phones, are powerful tools for encouraging VCT seeking behaviour. Involvement of all stakeholders is an essential component for harnessing synergies in the campaign. The PRC design ensured that all stakeholders understand PRC and its role in influencing VCT seeking behaviour, which resulted in securing their full support for the campaign.

The PRC process has helped strengthen the capacity of Mega FM stations in the production, exchange and dissemination of quality HIV and AIDS radio programs to better inform rural communities about the benefit of VCT. Mega FM has given voice to those living with HIV by incorporating testimonies and interactive talk shows to encourage listenership of the HIV/AIDS programs. Different stakeholders in HIV and AIDS also contributed to the talk shows, increasing the reliability of the information, and enhancing the level of trust listeners felt in the programs. Some of the AIDS service actors who participated in the episodes broadcast by Mega FM include: Lacor Hospital HIV and AIDS Focal Person; Gulu Youth Centre HIV and AIDS officer; Walokokwo AIDS support Centre; TASO Gulu and people living with AIDS (PLWAs).

However, sustainability challenges remain. These include a limited supply of testing kits, which are supplied by the district level Ministry of Health. Personnel at the health centres have expressed concern about stock shortages of Septrin used in the prophylaxis treatment of the clients. Based on the experiences and lessons documented by Farm Radio, PRC can stimulate demand and testing supplies need to be well stocked to meet this demand.

### **Conclusion**

When ICTs are properly utilized, a critical mass of people could be reached. However, it is important to ensure the messaging is targeted and accurate, and takes into account local customs, attitudes and stigmas. Ensuring that all beneficiaries have confidence in the information being disseminated is key to influencing HIV and AIDS related behaviours. This preliminary study has demonstrated that trustworthiness among the beneficiary communities can be achieved through proper PRC design and SMS-messaging and by including subject matter specialists in the PRC design.

While information is essential for addressing public health crises, it cannot work in isolation. Involving people in meaningful participatory communication approaches based on dialogue, listening, responding to expressed information and other needs is essential. Interaction and meaningful participation of the different stakeholders in the design of the radio campaign helped to dispel fears and encourage the target audience to seek VCT services.

The experience of Farm Radio with the Participatory Radio Campaign (PRC) model has proven to be an effective way to inform and engage smallholder farmers for the uptake of new and innovative technologies that lead to improvement of their livelihoods. In this research, the PRC model has also proven that radio and SMS can have strong influence on VCT seeking behaviour, especially with a rural audience. Notwithstanding the degree of success, Short Messag-

ing Services may not be appropriate especially with those who are illiterate. This can affect the intended outcomes of the SMS alerts. Further, this preliminary study shows positive outcomes as evidenced through PRCs that create a significant impact on the demand for VCT services. The additional use of SMS significantly amplifies this impact as well. However, this was one study conducted with one station. Knowing that ICTs have proliferated in both urban and rural settings, further research and replication of the PRC model for VCT health seeking behaviour needs to be conducted on a wider scale to confirm the positive impact.

The study has provided evidence on the contribution of health communication strategies to effective HIV prevention strategy. This factor should underpin strengthening of targeted strategies for health communication. Effective HIV/AIDS response is affected by a number of factors and requires a multi-sector approach for attaining the desired results and after for stemming the pandemic. Individual testimonies and amplifying voices over the air are beneficial to prevention and care interventions. Stimulating public and policy debate through innovative communication approaches will further influence the collective and individual participation, ownership, and accountability of community members. In this regard, the research findings contribute to evidence-based decision-making processes pertinent to determining communication approaches, budgets and strategies in the health sector, specifically for addressing the HIV/AIDS pandemic.