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#### Community Radio and Frontline SMS: Solving Rural Farmers' Challenges

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#### ABSTRACT

Nakaseke community radio has for a long time served as a knowledge portal for the rural poor farmers in the impoverished rural district of which over 95% of the community members are purely subsistence farmers.

These farmers have for a long time been left out because of lack of vital information on practicing better agricultural methods which has always affected better production.

We have achieved this through the use of a community radio station and a web based sms platform (the frontlinesms) to disseminate both audio and text tips on a number of farming issues which in the end have impacted the rural farming community in regaining their potential and much more production has been realized.

**Keywords:** Community Radio, Frontlinesms, Agriculture, Farming, Extension staff, disseminate, Uganda.

#### 1. INTRODUCTION

Agriculture is the most important sector of the county's economy, and it accounts for about 51% of GDP and for the bulk of exports. The sector employs around 80% of the country's labour force, and at least 2.5 million smallholders are working on less than 2 hectares of land produce the bulk of the output and food crops have replaced traditional export crops as the principal cash earners for rural families.

Unfortunately, the rural smallholders who produce the bulk of the output still lag behind in as far as information is concerned.

Nakaseke Telecentre and Community Radio has for a long time served as a knowledge portal for the rural poor farming communities in the impoverished rural district of Nakaseke, of which over 95% of the community members are purely subsistence farmers. These farmers have for a long time been left out because of lack of vital information on practicing better agricultural methods which has always affected better production.

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Such vital information includes;

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- timely updates on weather changes,
- prices for their produces
- information on available markets
- information on new technologies and
- discoveries in agriculture, like improved seeds, fertilizers and pesticides

The Lack of such information has contributed to poor yields, and low production, sometimes leaving a number of families with no alternative, only to buy food stuffs from retail shops at higher prices so that they can feed their families, and failure to take their children to schools as a result of lack of funds to meet school dues.

Radio is one of the cheapest and commonest media used allover the world in delivering and accessing timely information. Uganda has over 120 radio stations and among these, about 10% are community owned stations. The commercial stations that constitute almost 90% in most cases only consider broadcasting sponsored programs and adverts. Unfortunately, agricultural broadcasts are not among those programs that have attracted lots of sponsorship, thus having little opportunity to be heard. This now becomes the strength of the Nakaseke Community radio.

#### **1.1 Material and Methods**

#### a) Community Radio broadcasting:

Community radio is a radio service offering a third model of radio broadcasting in addition to commercial and public broadcasting. Community stations serve geographic communities and communities of interest and they broadcast content that is popular and relevant to a local, specific audience but is often overlooked by commercial or massmedia broadcasters. Community radio stations are operated, owned, and influenced by the communities they serve. They are generally nonprofit and provide a mechanism for enabling individuals, groups, and communities to tell their own stories and to share experiences.

We are using the platform to empower rural poor farming communities through a number of ways.

We have dedicated radio shows on agriculture that constitute over 70% of the station's broadcast menu. Here, we have identified a good number of successful farmers from different localities and some few among this community who we always host in live studio sessions to share experiences and successes.

Further more, we have special outreach visits to individual practitioners to capture their untold stories on how they find the practice. The recordings are later edited and played back for the audience.

With these shows, local farmers have always felt recognized in the community, and this has created the love and the feeling of ownership for the local station.

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We have also integrated the sms platform into the radio shows where technical personnel in the field answer farmers' challenging issues live.



Figure 1. Ssenabulya James having an interview with Haji Siraje Muwanga, a prominent coffee farmer in Kiziba, Nakaseke.



Figure 2. A fruit farmer hosted in a live radio show.

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#### b) FrontlineSMS:

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This is a web based sms platform used to share and interact with one another. The solution is being used in over 135 countries to enable interaction between farmers and experts.

The solution uses a GSM modem, a web-based SMS platform; the FrontlineSMS (a free open source software for managing SMS messages), with a database of farmers' contact numbers that we have compiled and friendly enough, it requires no internet connection.

The project of the Nakaseke Community Telecentre in Uganda, helps farmers in rural areas to connect with better markets. It encourages two-way feedback with farmers, buyers and agro-processors, and other service providers. The project is designed to help farmers access agricultural market price information, weather information, disease/pest outbreaks, new developments in agriculture through their mobile phones.

We are using FrontlineSMS to manage, send and receive SMS. The key advantage of FrontlineSMS is that it can be customised to suit any organisation's needs. You can adapt it for all sorts of services, and communicate with your community about anything: agricultural market price information, weather, natural calamities, or an alert system.

The technology has helped us to send information concerning developments in the sector, disease outbreak, solutions to challenges like pesticides for pest attack, weather changes and many other relevant information. We have been able to do this through partnering with local, national and international organizations involved in agriculture that include Local CBOs, National Agricultural Advisory Services (NAADS), National Agriculture Research Organisation (NARO), Agriculture Research Information Service (ARIS), Voluntary Efforts for Development Concern (Vedco), e-Agriculture, CAB International, Farm Radio, New Agriculturalist, Agfax and many others.

We resource for useful information from these partners, repackage with close support from extension staff at local governments and then disseminate to our listeners direct to their phone in-boxes. They can also reply and exchange, with questions, which we also forward to technical persons like the extension staff and some other experts for answers, which are again sent back to the individual farmers' mobile phones and sometime answered live over the community broadcaster.

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Figure 3. A screen capture of the fronlinesms platform we are using.

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Figure 4. A farmer checks an agricultural information sms on her mobile receiver.

You can watch a short video on how farmers are using the service at <u>http://youtu.be/gjA4b2BnX5s</u>

#### **1.2 Results and Conclusions**

With this initiative, local farmers have the opportunity to access all the necessary information and we hope that by providing a solution that works on simple technology and does not require too much money to afford for any household, many farmers will continue to benefit from their endeavors and this will continue bringing about development and social empowerment among the rural farming community.

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