

# GeoPoll Technical Report: Farm Radio International Uganda – Listenership of Bushenyi FM Radio in Bushenyi and Kasese

## Introduction

Farm Radio International (FRI) commissioned Mobile Accord Inc. (MAI)/GeoPoll to conduct a SMS survey to evaluate the impact of interactive rural radio (IRR) programming in the Bushenyi and Kasese districts of Uganda, specifically targeting banana farmers. The report below analyses the data gathered by the SMS survey. Data collection occurred between June 28<sup>th</sup> and July 4<sup>th</sup> with respondents that live in the districts of Bushenyi and Kasese.

The aim of this survey is to measure the impact of FRI radio programming on banana production, which was aired on Bushenyi FM Radio in Bushenyi and Kasese districts starting in early 2016. The data collected by the SMS survey allowed GeoPoll to measure the current practices of both listeners and non-listeners of the specific radio station and program in order to understand the differences between these two groups.

MAI offers a unique global mobile messaging and surveying platform called GeoPoll, which collects mobile data and sends information via short-messaging service (SMS), interactive voice response (IVR), computer assisted telephone interviewing (CATI), mobile web, and a mobile application. Through established partnerships with mobile network operators in developing countries, MAI has a database of more than 320 million mobile network subscribers and is active across 32 countries in Africa, Asia, and the Middle East. The GeoPoll platform provides real-time data for decision making, analytics, and dashboard visualizations that can be used for activity design, implementation, adaptive program management, as well as monitoring and evaluation.

## Methodology

GeoPoll utilized a targeted sampling technique in order to collect the 300 completes across the two districts specified for this study. GeoPoll defines a ‘complete’ as a respondent who answers all the necessary questions within the survey instrument received. Survey invitations are normally sent to the mobile phones of respondents who then voluntarily accept the invitation and proceed to take the survey instrument. During data collection, GeoPoll sent the survey to 12,951 unique mobile phone numbers in the districts of Bushenyi and Kasese. The survey was conducted in both English, and Ruganda languages for respondents over the age of 18. Throughout the data collection period, GeoPoll monitored and validated the data as it came in daily. The statistical significance for the entire study has a confidence interval of +/- 5.59% at a 95% confidence level.

The data below is primarily reflected by comparing listeners versus non-listeners of Bushenyi FM Radio since the start of 2016. Depicting the data this way differs from a standard aggregate by

question and views listener and non-listeners as a separate subset. By displaying the data in this fashion, the differences and similarities between listeners and non-listeners becomes more evident with each variable measured in the study.

## Limitations

Like all modes of survey research, SMS surveys have several limitations. Firstly, mobile user samples consist of individuals that own mobile phones and thus individuals that do not own a mobile phone due to socioeconomic reasons cannot be targeted. Similarly, respondents must be literate to be able to participate in SMS surveys, so illiterate respondents cannot be targeted. Additionally, SMS surveys are limited to 160 characters for each message, which directly impacts the type and scope of questions that can be asked in a survey. There is no mechanism for respondents to ask for clarification on questions in SMS surveys thus questions have to be worded in a simple and basic manner to avoid misunderstandings. Lastly, SMS surveys tend to provide samples that are slightly skewed toward young males. All of these limitations are evident in the data reflected below. Additionally, GeoPoll encountered difficulties reaching an equal representation of listeners and non-listeners. Bushenyi FM Radio is the most popular radio station in the two targeted districts and it appears that the majority of respondents that listen to this station heard FMI programming at least once since the start of 2016.

## Results and Observations Listeners vs. Non-listeners

### Background

The key questions for the survey determined if banana farmers had listened to Bushenyi FM Radio and the specific banana production programming since the start of 2016. The first question asked respondents if they had listened to Bushenyi FM Radio and the second question asked if they had listened to the program entitled “Eiraka ryomuhingi no muriisa” on banana production. Respondents that replied “yes”, they had listened to the program on banana production are deemed as listeners; respondents that replied “no” to both questions were classified as non-listeners in the survey results below.

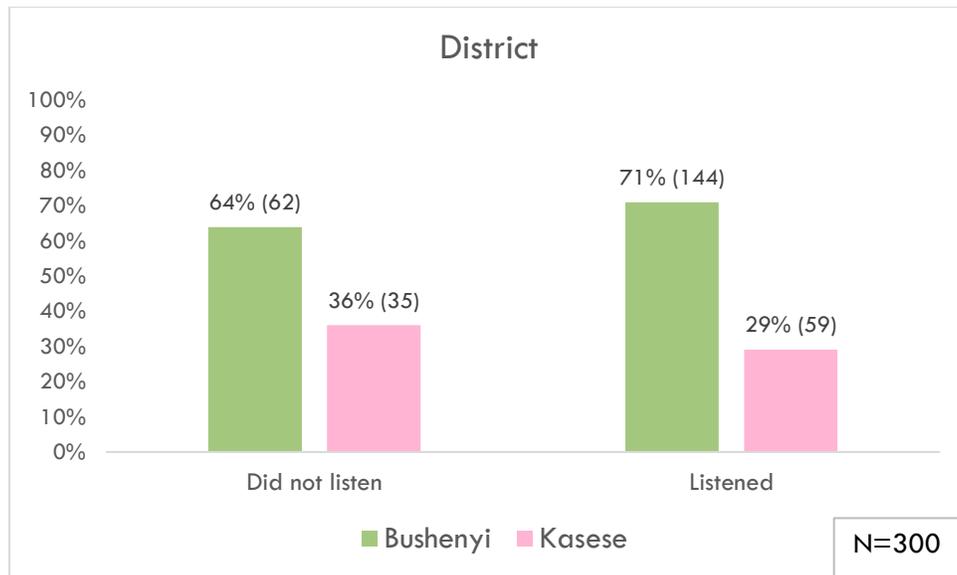
### Demographics

Approximately 69% (206) of those surveyed are from Bushenyi district while 31% are from Kasese. Additionally, 67% (202) of those surveyed were male respondents, while 33% (98) were female. Out of the 300 surveys gathered, 50% (149) of the respondents are in the age group 18-24, while 35% (105) are ages 25-35 and 15% (46) are above the age of 35. Approximately 267 of the 300 respondents surveyed listened to Bushenyi FM Radio since the beginning of 2016 and live in the Bushenyi or Kasese districts of Uganda. The following data aggregates each variable by listener and non-listener.

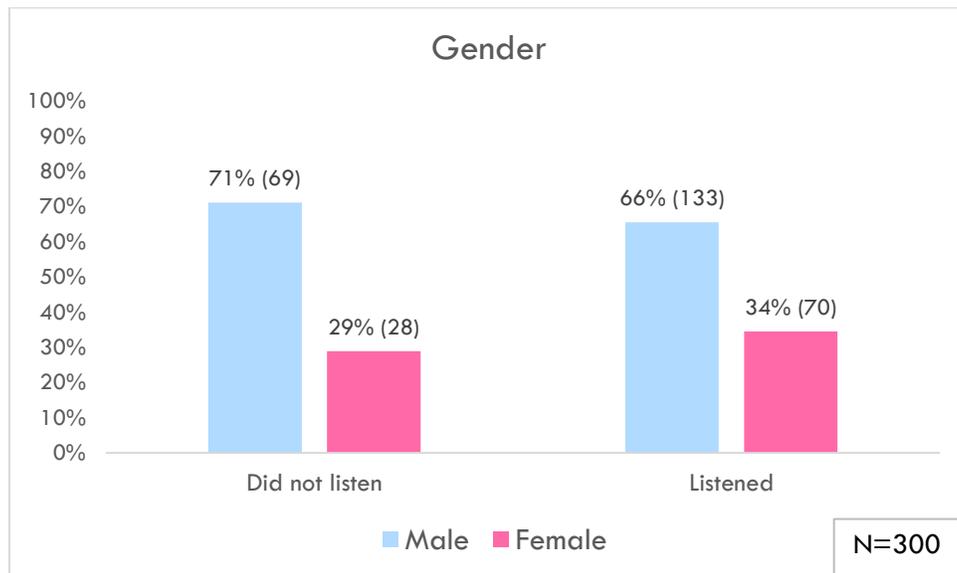
### Detailed Results

In Bushenyi district, 64% (62) are classified as non-listeners and 71% (144) as listeners. In Kasese district, 36% (35) are non-listeners, while 29% (59) are listeners. The chart below displays the data by district and by the number of respondents classified as listeners and non-listeners. The data

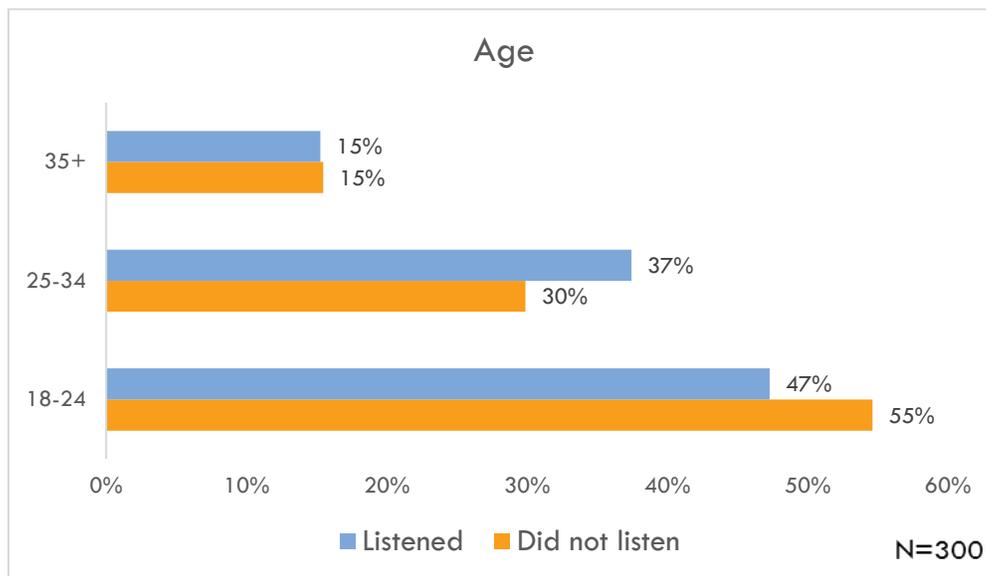
collected in this survey yielded 203 listeners and 97 non-listeners. Non-Listeners were determined by 33 respondents that did not listen to Bushenyi FM Radio since the start of 2016 as well as 64 that did listen to this radio station, but did not listen to the programming on banana production.



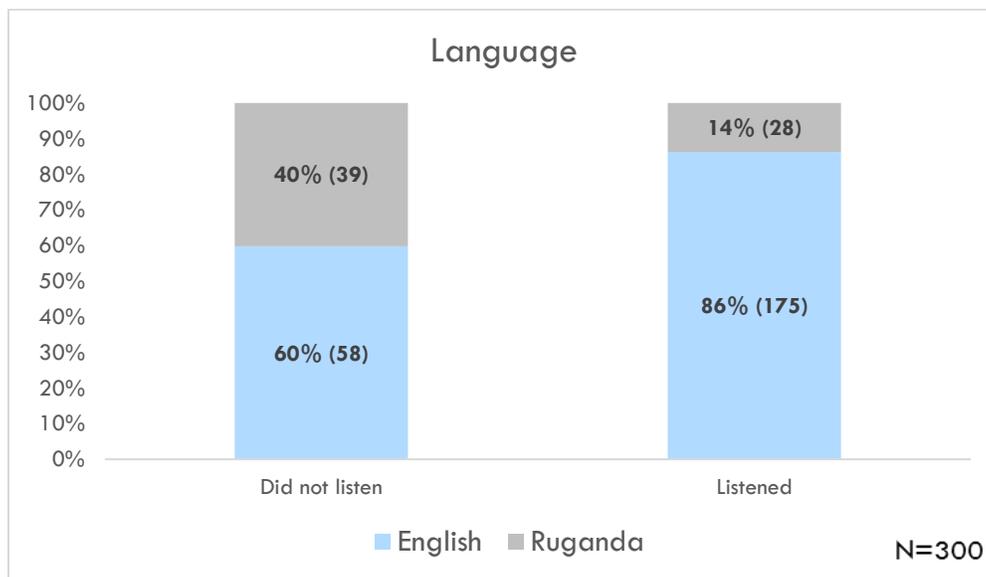
There is a slight difference between genders for listeners and non-listeners. Respondents that did not listen are 71% (69) male and 29% (28) female. Respondents classified as listeners are 66% (133) male and 34% (70) female. The chart below displays the precise gender breakdown for listeners and non-listeners.



For non-listeners, 55% (53) are ages 18-24, 30% (29) are ages 25-34, while 15% (15) are over the age of 35. For listeners, 47% (96) are ages 18-24, 37% (76) are ages 25-34, and lastly 15% (31) are over the age of 35.



Respondents were given an option to take the survey in either English or Ruganda. For listeners, 86% (175) selected to take the survey in the English language, while 14% (28) selected to take the survey in the Ruganda language. For non-listeners, 40% (39) selected to take the survey in the Ruganda language while 60% (58) took the survey in the English language.

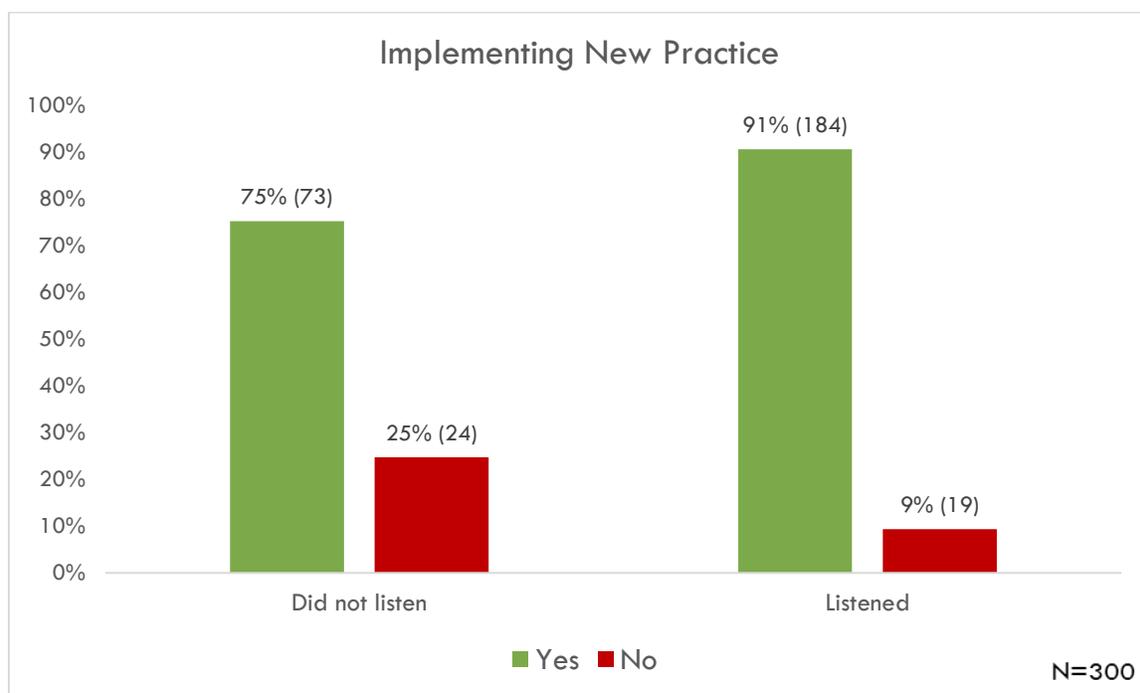


## Overview

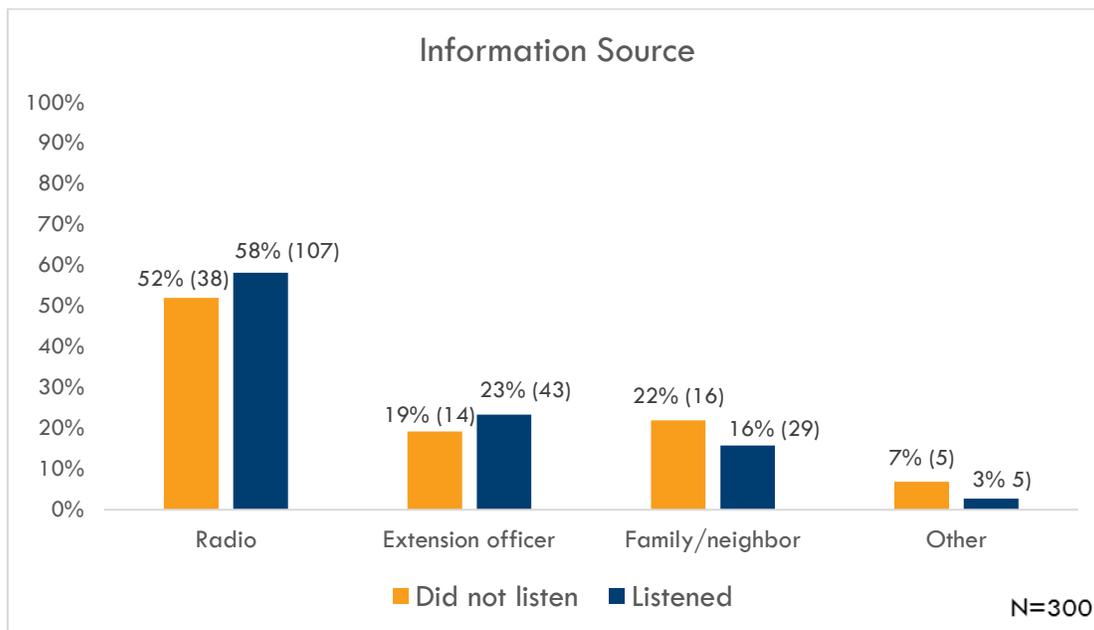
The results below reflect the 17 non-demographic questions that respondents were given in the survey. All of the data reflected below is disaggregated by listeners and non-listeners when applicable.

## Detailed findings

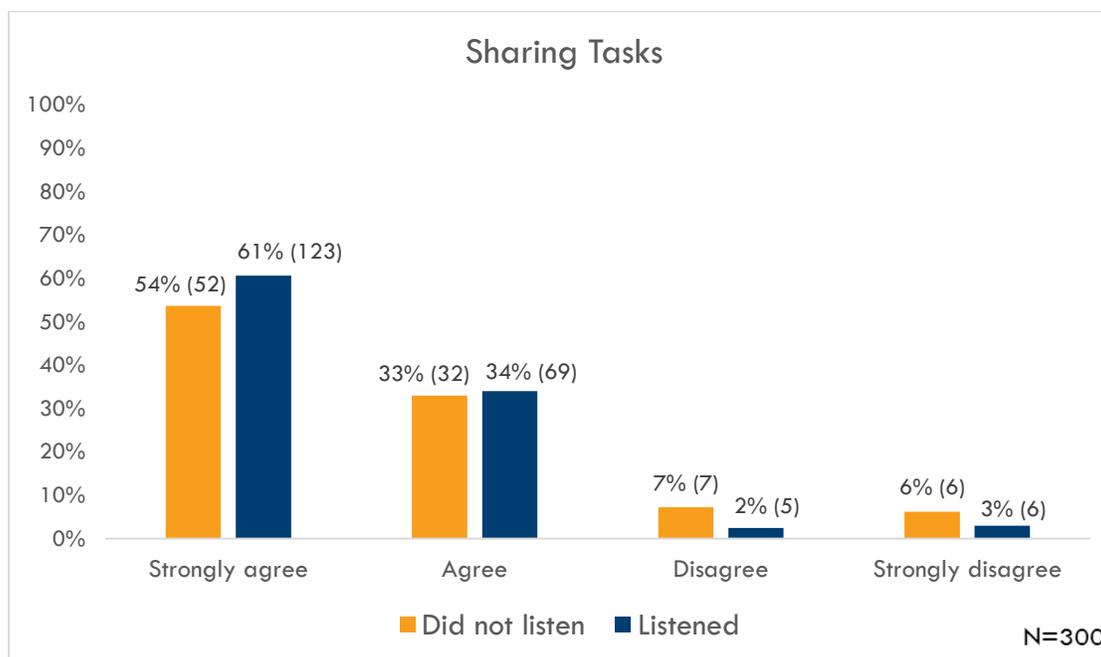
As a screening question, all respondents were asked if they grew bananas on their farm. If they did not grow bananas, they were deemed ineligible for the survey and did not proceed with answering any other questions. When asked if the respondent had implemented new practices to improve banana productivity/ control pests and diseases since the start of 2016, 75% (73) of non-listeners responded yes, while 25% (24) replied no. For listeners, 91% (184) indicated they implemented new practices, while 9% (19) said they did not. The chart below displays the precise breakdown by listeners and non-listeners.



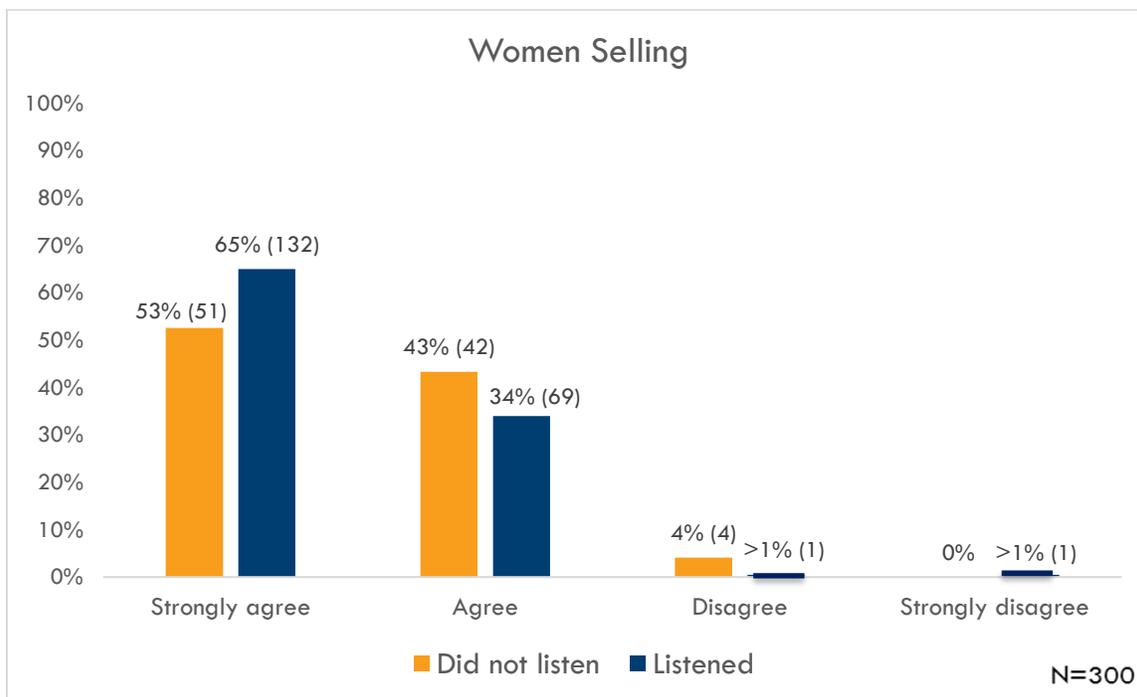
When asked what is the main source of information that a respondent receives improved practices from, 56% (145) of the total sample indicated radio, 22% (57) replied extension officer, 18% (45) family/neighbor, and 4% (10) other. The table below displays the precise breakdown for listeners and non-listeners.



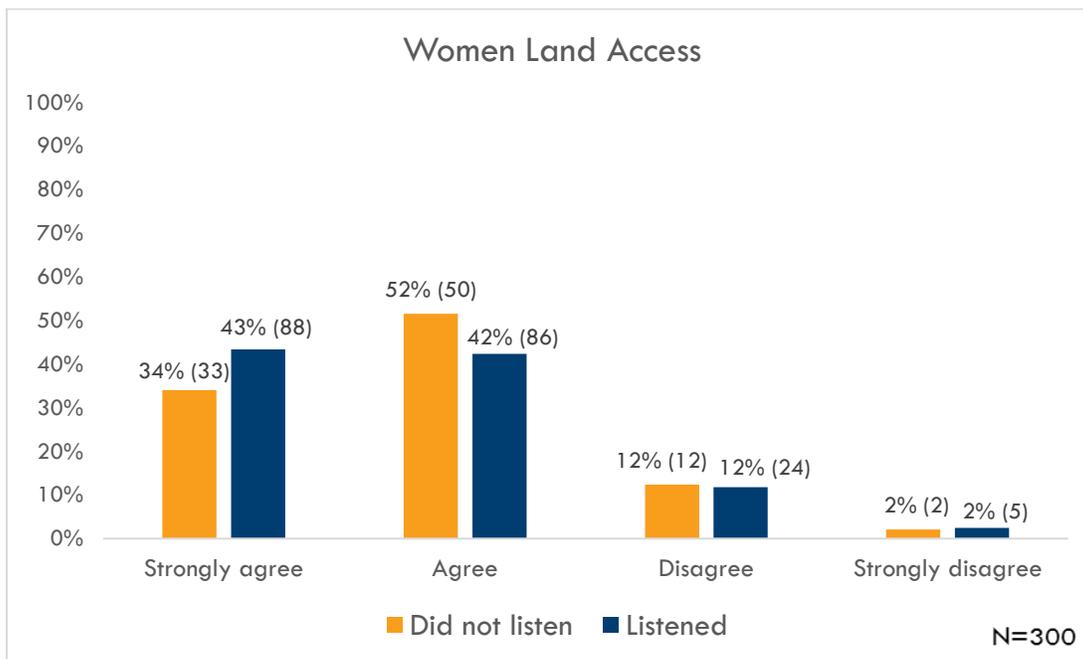
Respondents were asked to react to a series of statements on improving banana production in their community. The first statement stated “Men and women should share productive and domestic tasks more equally”. Listeners were more likely to strongly agree at 61% (123) compared to non-listeners at 54% (52). However, listeners and non-listeners were proportionately similar for agreeing with the statement at 34% (64) for listeners compared to non-listeners at 33% (32). Both listeners and non-listeners had overwhelming agreement with this statement.



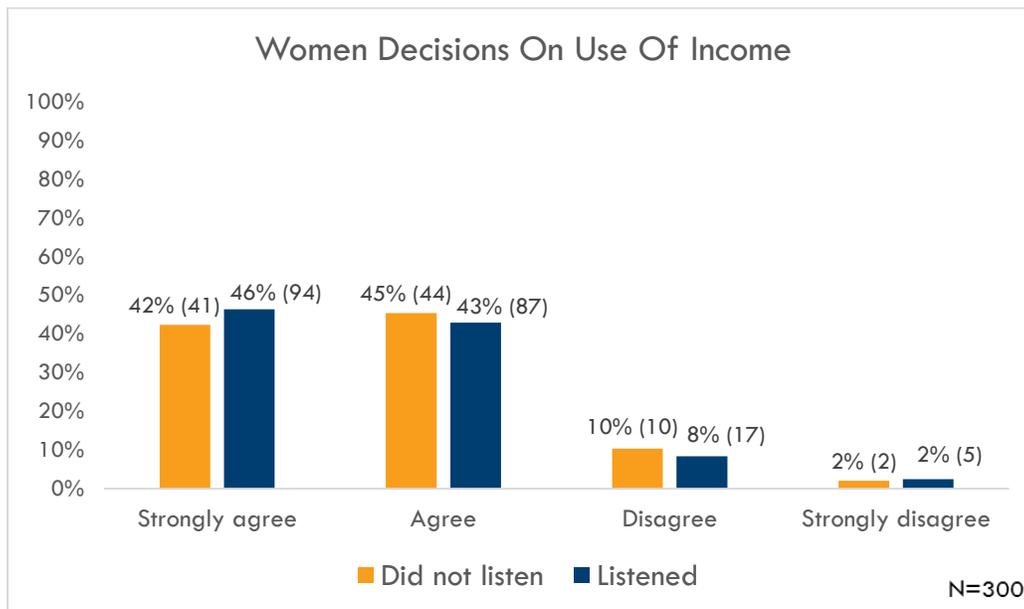
The second statement stated “Both man and woman should agree on when to sell bananas”. Approximately 99% (201) of listeners indicated they strongly agree or agree with the statement while 96% (93) of non-listeners responded they strongly agree or agree with the statement. As the chart below reflects, both listeners and non-listeners overwhelmingly agree with this statement.



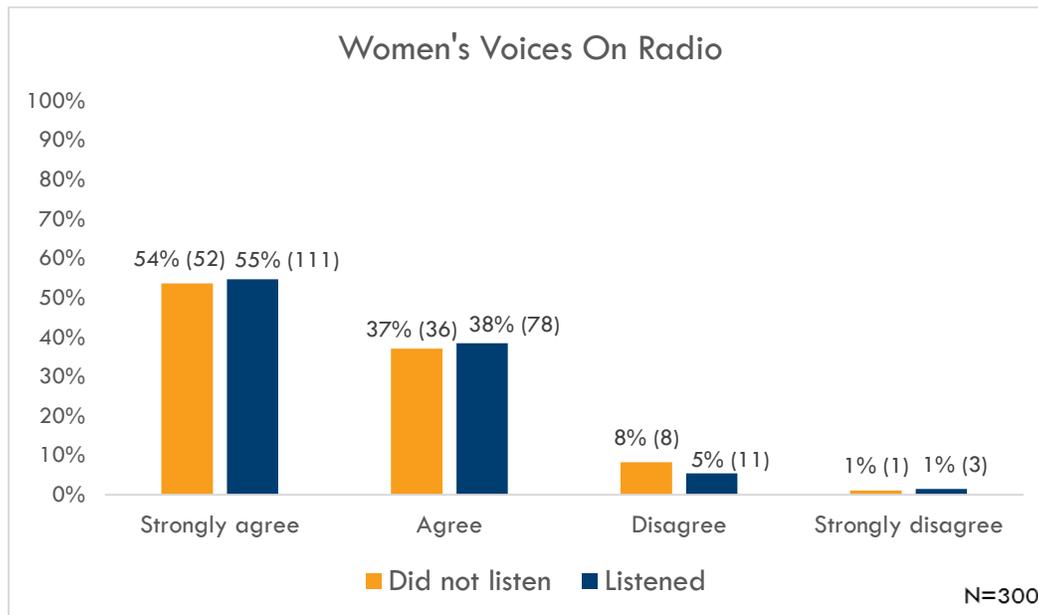
The third statement stated “Women who have access and control over land are better banana farmers”. Approximately 86% (174) of listeners indicated they strongly agree or agree with the statement while similarly 86% (83) of non-listeners responded they strongly agree or agree with the statement. As the chart below displays, both listeners and non-listeners are largely in agreement with this statement.



The next statement posed “Women should contribute more to decisions about farming and use of income”. Approximately 89% (181) of listeners indicated they strongly agree or agree with the statement while 88% (85) of non-listeners responded they strongly agree or agree with the statement. As the chart below exhibits, both listeners and non-listeners are in agreement with this statement.



The last statement posed “There should be more women's voices on the radio and other media”. Approximately 93% (189) of listeners indicated they strongly agree or agree with the statement while 91% (88) of non-listeners responded they strongly agree or agree with the statement. As the chart below exhibits, both listeners and non-listeners are in agreement with this statement.



### Underlying Trends

The majority of both listeners and non-listeners responded positively to the role of women in agriculture. A likely explanation for these results and a lack of deviation between listeners and non-listeners are twofold. Firstly, the survey reached 70% of men which could naturally skew the opinions of respondents. Secondly, GeoPoll struggled to reach non-listeners and exceeded the target for reaching listeners. Thus, the results might be slightly skewed towards these factors, albeit significant enough to make statically valid inferences from.

### Detailed findings For Listeners

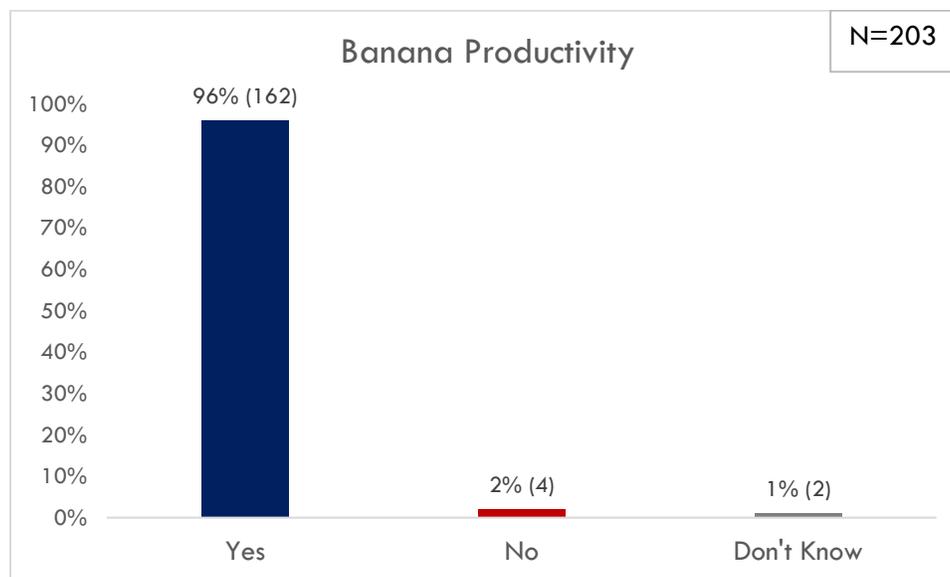
The 203 respondents that reported listening to the programming on banana production aired on Bushenyi FM Radio were asked a series of specific questions. One of the first questions inquired, “There were 30 episodes of the program. How many did you listen to?” since the start of 2016. As the table below displays, 30% (60) replied all or almost all, 25% (50) more than half, and 27 (55) replied about half. Only 195 (38) indicated they listened to less than half or one/two episodes.

	<b>Listened</b>
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How Many Episodes Listened To Since 2016	Percentage	Count
All or almost all	30%	60
More than half	25%	50
About half	27%	55
Less than half	9%	18
One or two	10%	20
<b>Total</b>	<b>100%</b>	<b>203</b>

As a follow-up question, listeners were asked if they had started to implement some of the practices promoted on the radio program. Approximately 83% (168) replied that they had started to implement the practices, 16% (33) replied they had not implemented the practices yet, but plan to do so in the near future, while only 1% (2) replied that they did not plan to implement the practices they heard during the programming on banana production.

Additionally, when asked if the use of these improved practices lead to an improvement in banana productivity, 96% (162) replied yes, 2% (4) replied no and 1% (2) replied don't know. The chart below displays the results gathered among listeners.



The final two questions posed to listeners reflected on the programming regularly featuring women farmers as speaker and specifically asked listeners to react to a statement regarding these occurrences. For the question on whether listeners remember hearing women farmers being featured as speakers during the programming, 81% (165) replied yes, 8% (17) replied no, and 10% indicated they did not know or did not remember. As a follow-up, listeners were asked to react to

this statement, “The program was effective at giving women a voice/addressing their concerns”. Approximately 93% (190) of listeners indicated they strongly agree or agree with the statement. Only 6% (13) strongly disagreed or disagreed with the statement. The two tables below reflect the precise results gathered for the two aforementioned questions.

Featured Women Farmers As Speakers	Listened	
	Percentage	Count
Yes	81%	165
No	8%	17
Don't know/Don't remember	10%	21
<b>Total</b>	<b>100%</b>	<b>203</b>

Giving Women A Voice/Addressing	Listened	
	Percentage	Count
Strongly agree	44%	90
Agree	49%	100
Disagree	5%	11
Strongly disagree	1%	2
<b>Total</b>	<b>100%</b>	<b>203</b>

## Conclusion

Approximately 69% of respondents came from Bushenyi and 31% came from Kasese districts of Uganda. Approximately 89% of respondents indicated they had listened to Bushenyi FM (BFM) since the start of 2016. Out of this subset, 76% reported having listened to the program, “Eiraka ryomuhingi no muriisa” on banana production.

Respondents were asked if since the start of 2016, they had implemented new practices to improve banana productivity/pest control and 86% said yes while 14% said no. Furthermore, 91% of listeners indicated they implemented new practices, while only 75% of non-listeners indicated they had implemented new practices. The main source of information on improved banana growing practices for respondents was the radio at 56%.

When asked to react to the following statement, "Men and women should share productive and domestic tasks more equally", 92% of all respondents agreed with it (58% strongly agree, 34% Agree) and only 8% disagreed (4% disagree, 4% strongly disagree). Listeners were more likely to strongly agree at 61% (123) compared to non-listeners at 54% (52).

Of the respondents who listened the radio program, 83% have started implementing the farming practices promoted in the program and 16% say they intend to try them in future. Only 1% indicated they did not expect to implement the practices in the future. When asked if implementing the improved farming practices led to an improvement in banana productivity, 96% replied ‘Yes’, 2% replied ‘No’ and 1% replied 'Don't know'. Furthermore, 93% of those that listened to the programming on Bushenyi FM Radio agreed or strongly agreed that the program gave women farmers a voice and addressed their concerns.

In closing, it appears FRI programming in the two target districts yielded positive results among banana farmers in terms of implementing improved practices as well as their general perception of women farmers. An overarching trend the data reflects is the reach of FRI programming, as



GeoPoll struggled to reach individuals that had not listened to both Bushenyi FM Radio and the specific radio programming on banana production.