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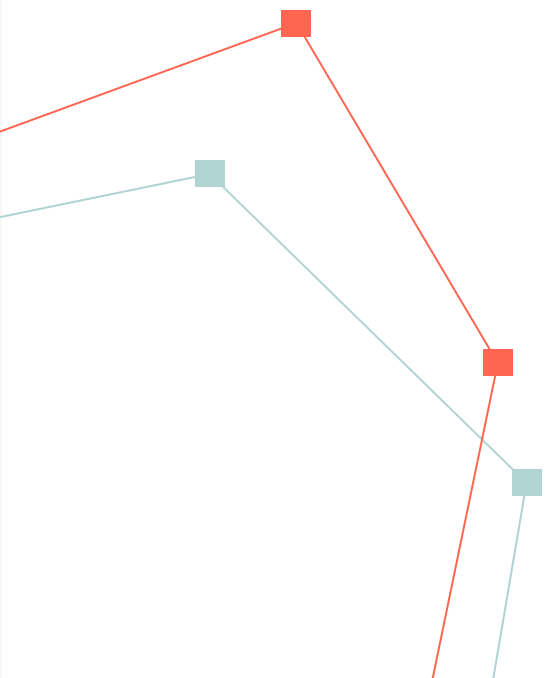
IGNITE Lean Data Insights: Dairy Farmers' Experience with IVR Messages

Digital Green

Ethiopia

July 2022

Thank You For Working With Us!



About IGNITE

The Impacting Gender & Nutrition through Innovative Technical Exchange in Agriculture (IGNITE) mechanism is a five-year invested funded by the Bill & Melinda Gates Foundation and implemented by Tanager, Laterite, and 60 Decibels (60dB) to improve household nutrition and women's empowerment by strengthening African institutions' ability to integrate gender and nutrition into their way of doing business and their agricultural interventions.

IGNITE works with African institutions to design, implement, and evaluate nutrition-sensitive and gender-integrated agriculture interventions

About 60 Decibels

60 Decibels (60dB) makes it easy to listen to the people who matter most. 60 Decibels is an impact measurement company that helps organizations around the world better understand their customers, suppliers, and beneficiaries. Its proprietary approach, Lean Data, brings customer-centricity, speed and responsiveness to impact measurement.

60 Decibels has a network of 750+ trained Lean Data researchers in 50+ countries who speak directly to customers to understand their lived experience. By combining voice, SMS, and other technologies to collect data remotely with proprietary survey tools, 60 Decibels helps clients listen more effectively and benchmark their social performance against their peers.

60 Decibels has offices in London, Nairobi, New York, and Bengaluru. To learn more, visit 60decibels.com.

We are proud to be a Climate Positive company.



Acknowledgements

Thank you to Benson Mutuku, Charles Karari, Samwel Oando, Winnie Osulah and Maureen Munjua from Tanager, and Tetyana Zelenska, Samrawit Hagos, and Andrew Hicks and the rest of the Digital Green team for their support throughout the project.

This work was funded by IGNITE.

Overview

About DAAS' Farmer Interventions

Digital Agricultural Advisory Services (DAAS) is a five-year partnership between Digital Green (DG), Precision Agriculture for Development (PxD), and the Government of Ethiopia aimed at strengthening digital extension channels in Ethiopia. DAAS uses digital channels to help the Ethiopian Ministry of Agriculture train its cadre of extension agents – Development Agents (DAs) – to provide advisory support to farmers, and to directly provide advisory support to Ethiopian farmers through various digital means.

Under DAAS, Precision Agriculture for Development is partnering with Ethiopia's [Agriculture Transformation Agency's \(ATA's\) 8028 services](#) to develop and deliver targeted content for Ethiopian dairy farmers through IVR messages.

About This Study

This study was designed to support Digital Green and its partners understand the uptake, effectiveness, and impact of advisory messages on dairy farming, sent via 8028 IVR calls.

60 Decibels' Lean Data researchers conducted phone interviews with 1,057 farmers, categorized as:

- Male primary listeners: listeners who solely listened to the IVR call
- Female primary listeners: listeners who solely listened to the IVR call
- Female secondary listeners: listener who heard the call on speaker phone
- Female partial listeners: listeners who dropped off and did not complete calls

About This Report

This report contains insights and findings from phone interviews conducted by 60 Decibels, a tech-enabled social impact measurement company that specializes in phone-based surveys.

It provides a baseline understanding of Ethiopian farmers who listened to the call, including information on farmer profiles, the IVR calls' effectiveness, listeners' experience, and the impact of calls on primary and secondary listeners.*

Throughout this report, we segmented the analysis by listener type, and how impact and experience metrics affect these. For more info on listener types, please see next page.

For details about our methodology, please [page 5](#).

* We asked all listeners for demographic information, about IVR call effectiveness, household dynamics, and satisfaction. Impact related questions were only asked to primary and secondary listeners.

Listener Overview

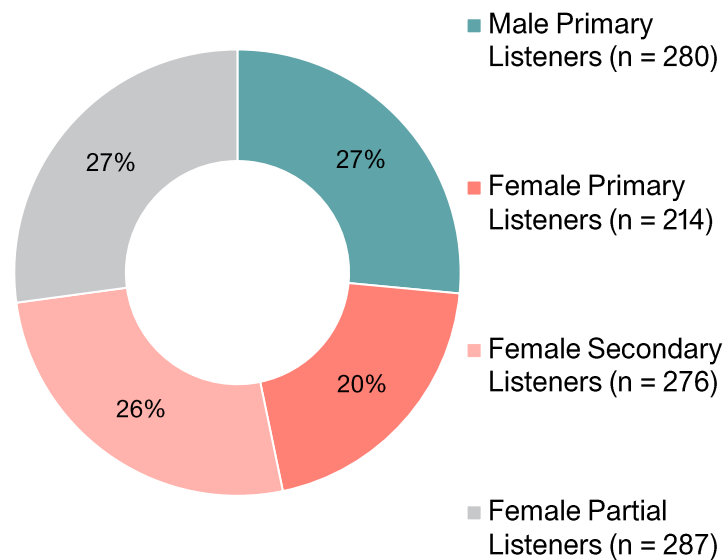
We spoke to **1,057** Ethiopian dairy farmers who received advisory messages on their phones via 8028 IVR calls. The average farmer we spoke with was 39 years old and 59% live in Amhara.

We segmented our sample between Primary, Secondary, and Partial Listeners - based on their listening rate. Primary Listeners listened to all 5 advisory messages, Partial Listeners did not listen to the messages in full, and Secondary Listeners listened to the messages on speaker phone.





We spoke to 4 different types of listeners – male primary listeners, female primary listeners, female secondary listeners, and female partial listeners.

Listener Types

Data relating to farmer characteristics



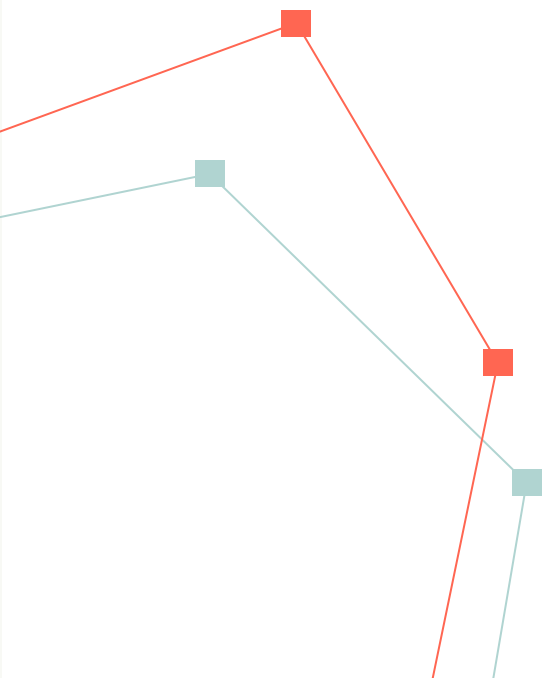
Key Terms

-  **Male Primary Listeners:** Male farmers who picked up the call and directly received and heard the IVR messages.
-  **Female Primary Listeners:** Female farmers who picked up the call and directly received and heard the IVR messages.
-  **Female Secondary Listeners:** Female farmers who heard the content of the IVR call because the registered household member heard it on the speaker phone.
-  **Female Partial Listeners:** Female farmers who did not pick up the phone or only heard the message partially. These farmers heard at least one message in full.

Over the course of this report, we have used the above icons to represent listener groups.

Summary Of Data Collected

Our confidence level and margin of error for results are calculated based on the total number of phone numbers we had access to, not the total population that Digital Green works with.



1,057 phone interviews completed in March - June 2022.

Methodology

Survey mode	Phone
Country	Ethiopia
Language	Amharic, Oromiffa
Dates	March - June 2022
Sampling	Random sample of 8,414 farmers in Ethiopia that was shared with us.
Response rate*	74%
Average time p/interview	Primary Listener (30 minutes), Secondary Listener (20 minutes)

Sampling

	% sample
% female	64
% Amhara	64
% SNNP	20
% Oromia	16

Accuracy

Confidence Level	95%
Margin of error	3%

Responses Collected

Dairy Farmers	1,057
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*Calculated as follows: Completed # of interviews / (Total numbers dialed – wrong numbers – ineligible numbers)

Welcome To The Results

We enjoyed hearing from 1,057 of farmers who listened to Digital Green's content through an 8028 IVR call - they had a lot to say!

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Performance Snapshot: All Primary Listeners

Digital Green is providing a hassle-free service to farmers. There is scope to reach underserved farmers and deepen impact.

<p>Profile</p> <p>0.78</p> <p>Inclusivity Ratio</p>	<p>Impact</p> <p>41%</p> <p>report quality of life as 'very much improved'</p> 	<p>What Impact</p> <ul style="list-style-type: none"> • 44% mention increased impact • 28% say their dairy production increased • 19% talk about ability to afford household bills 	<p>Contribution</p> <p>47%</p> <p>first time accessing service provided</p> 	<p>Listener Voice</p> <p>"The message was very helpful and simple to understand. It also taught me a lot on how to take care of my pregnant cow and her newborn calves. Based on the information that I've received, I've already suggested Artificial Insemination to other members of my family and they are waiting for their cow to give birth." – Male, 43, Primary</p> <p>Data Summary**</p> <p>Company Performance: 1,057 farmer interviews in May 2022 in Ethiopia. Quintile Assessment compares Company Performance with 60dB Agriculture – Training benchmark comprised of 17 companies, 9 countries, and 4,026 farmers. Full details can be found in Appendix.</p>
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<p>Net Promoter Score®</p> <p>53</p> <p>on a -100 to 100 scale</p> 	<p>Challenges</p> <p>7%</p> <p>report challenges</p> 	<p>Application of Information</p> <p>35%</p> <p>applied all of the information</p>	<p>Way of Farming</p> <p>53%</p> <p>Way of farming 'very much improved'</p> 	<p>Performance vs. 60dB Benchmark</p> <ul style="list-style-type: none"> ● ● ● ● ● - TOP 20% ● ● ● ● ● - TOP 40% ● ● ● ● ● - MIDDLE ● ● ● ● ● - BOTTOM 40% ● ● ● ● ● - BOTTOM 20%
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*We only included data for male and female primary listeners in this snapshot

** For the rest of the report, we have benchmarked at the all listeners level.

Performance Snapshot: Sex Disaggregated

Digital Green is providing a hassle-free service to male and female farmers. There is scope to reach underserved farmers and deepen impact, especially among female farmers.

Profile	Impact	What Impact	Contribution	Listener Voice
<p>Net Promoter Score®</p> <p>56</p> <p>49</p> <p>on a -100 to 100 scale</p>	<p>Challenges</p> <p>8%</p> <p>5%</p> <p>report challenges</p>	<p>Application of Information</p> <p>43%</p> <p>26%</p> <p>applied all of the information</p>	<p>Way of Farming</p> <p>64%</p> <p>37%</p> <p>Way of farming 'very much improved'</p>	<p>“The message was very helpful and simple to understand. It also taught me a lot on how to take care of my pregnant cow and her newborn calves. Based on the information that I’ve received, I’ve already suggested Artificial Insemination to other members of my family and they are waiting for their cow to give birth.” – Male, 43, Primary</p> <p>Legend</p> <p>Male Primary Listener: Metrics in Blue </p> <p>Female Primary Listener: Metrics in Pink </p>

Profile

0.81

0.78

Inclusivity Ratio

Impact

48%

29%

report quality of life as 'very much improved'

What Impact

- 56% and 29% mention increased impact
- 36% and 16% say their production increased
- 14% and 25% talk about ability to afford household bills

Contribution

54%


38%


first time accessing service provided

Listener Voice

“The message was very helpful and simple to understand. It also taught me a lot on how to take care of my pregnant cow and her newborn calves. Based on the information that I’ve received, I’ve already suggested Artificial Insemination to other members of my family and they are waiting for their cow to give birth.” – Male, 43, Primary

Legend

Male Primary Listener: Metrics in Blue 

Female Primary Listener: Metrics in Pink 

Net Promoter Score®

56

49

on a -100 to 100 scale

Challenges

8%

5%

report challenges

Application of Information

43%

26%

applied all of the information


Way of Farming


64%

37%

Way of farming 'very much improved'

Legend

Male Primary Listener: Metrics in Blue 

Female Primary Listener: Metrics in Pink 

Top Overall Findings

1

Listeners value convenience, ease of understanding and usefulness of information.

Overall, listeners give the dairy advisory information through the 8028 IVR call a good Net Promoter Score of 49, reflecting high loyalty and satisfaction. Convenient usage, easy and understandable language, and the information's usefulness are top satisfaction drivers.

Female secondary listeners report the highest NPS of 62, while partial listeners report lower levels of satisfaction with an NPS of 31.

Only 7% of listeners report a challenge highlighting the hassle-free experience. (See pages [38](#), [39](#), [41](#))

2

Digital Green's dairy farming advisory information is impactful and leads to tangible improvements.

Close to 8 in 10 listeners report some improvements in their quality of life. Almost all listeners mention improvements in their way of farming and cattle management, and 9 in 10 farmers report increases in money earned. Top changes in way of farming include improved cattle care, feed preparation, and feeding.

Female primary listeners are less likely to report depth of impact: the proportion reporting 'very much improved'.

(See pages [32](#), [34](#), [35](#), [36](#))

3

Listeners who are able to apply the IVR advisory in full experience better impact than partial applicants.

4 in 10 listeners were unable to apply all of the information they heard. Listeners who applied 'all of it' to their dairy farming (65%) were much more likely to experience greater impact on their quality of life than listeners who apply 'most' (29%) or 'some' (11%) of the information.

Listeners report lack of credit and unclear information as top barriers to apply all of it. (See page [43](#))

4

Partial listeners are from slightly better off households than other listener groups.

35% of female partial listeners live under the \$3.2 line compared to 53% of the Ethiopia population and all listeners average of 42%. The main reason they did not listen to the calls fully is because they were at work.

Top reasons they disconnected the call was because they were at work, poor network connectivity, and language barriers. Female partial listeners also report lower levels of satisfaction (NPS of 31) and a high challenge rate (11%) compared to all listeners. (See pages [12](#), [46](#))

Top Gender Findings

1

Female listeners report lower understanding, application, and uptake of AI services.

While all listeners report advisory information to be useful, fewer female listeners – particularly female primary listeners – report ease in understanding, application, and uptake of the information shared.

About 9 in 10 male farmers applied information, compared to only 7 in 10 female farmers. Similarly, close to 8 in 10 male farmers used AI services for crossbred cattle, compared to only 65% of female listeners. (See page [17](#))

2

Close to half of the female listeners are final decision makers in dairy farming-related decisions.

9 in 10 male primary listeners are the final decision maker in their household's dairy-related decisions, compared to 4 in 10 female primary listeners. Female secondary listeners are least likely to be final decision makers, with only 1 in 10 solely making decisions.

Levels of decision-making ability vary by sex and listener groups – all male listeners who are not primary decision makers provided 'a lot' of input into decision making. Female listeners were more likely to only provide 'some' input. (See pages [27](#), [28](#), [29](#))

3

Most listeners share information with family and their community. They are more likely to share with members of the same sex in a community forum.

Female listeners are more likely to share information with other females (79%) than males (46%). Male listeners shared more often with male community members (64%) than with females (47%).

Male listeners are more likely to share information through family gatherings than females, while female listeners are more likely to share information in one-to-one conversations and village level community groups compared to males. (See page [21](#), [22](#))

4

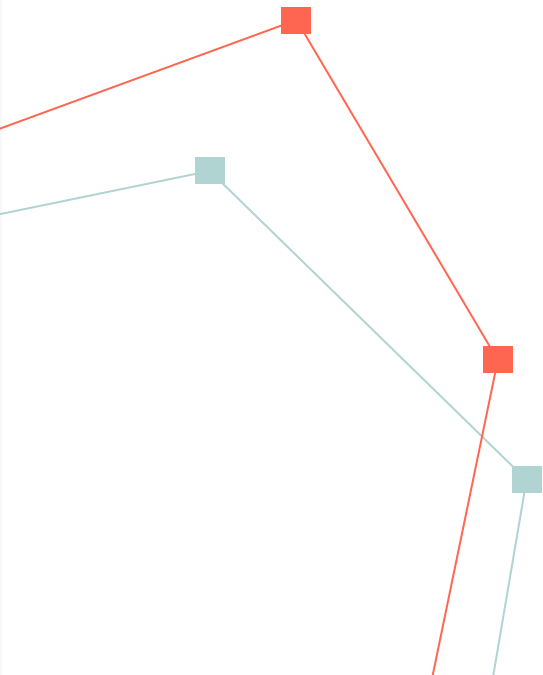
Male household members are more likely to undertake time-consuming activities, while female household members take up less time taking chores.

9 in 10 male listeners undertake dairy farming activities such as purchase of feed and 7 in 10 take up preparation of feed. These activities are known to be more time-consuming. 8 in 10 female listeners report looking after milk processing and milking of cows.

Both male and female listeners equally take up cattle health management. (See page [30](#))

Listener Voices

We love hearing listeners voices.
Here are some that stood out.



Impact Stories

83% shared how the 8028 IVR calls had improved their quality of life

“I am happy that I am able to buy more cows and change my children’s clothes. My children also drink milk every morning, which improves their health” - Male, 32, Primary

“We are able to buy the feed for our cattle and cover our household consumption cost with the money we earn from the dairy farming. Additionally, we are able to save our money at a local saving community group.” - Female, 36, Primary

“Prior to taking this advise and applying it, I was receiving donations from NGOs but now I am independent of any donations from others.” - Female, 43, Primary

“Nowadays, inflation is really high but thanks to 8028, I am passing this tough time by selling good milk. I am even able to save money in the bank thanks to 8028.” - Female, 36, Primary

“We can live a new life because now we can build a new home, cover the household expenses and keep up with the household consumptions.”- Female, 28, Secondary

“We have been able to send our kids to school and also renovate the roof of our house into corrugated iron.” - Female, 30, Secondary

Opinions On 8028 IVR Value Proposition

61% were Promoters and were highly likely to recommend the 8028 IVR call

“It is good. I like to get the information from the IVR. It is convenient and can be listened to while engaging in other duties. I can also listen with the whole family.” - Female, 28, Primary

“Most of the time women don’t have a radio or anything else to learn from. 8028 helps us improve their knowledge and it is easy to use! I think many women can benefit from this because most of the time they are staying at home. This could be a good method of reaching these women.” - Female, 45, Secondary

Challenges faced with the 8028 IVR calls

7% reported facing a challenge

“One of the challenges I've faced is lack of money to feed the cows in ways that we've been advised to. The advisory tells us to feed them according to our budget but it's still expensive.” - Male, 43, Primary

“I only understand Amharic, but I receive the advisory in Oromiffa. This prevents me from understanding the message and getting valuable information.” - Female, 48, Primary

- Profile of All Farmers We Spoke With
 - Demographics and Income Profile
 - Inclusivity and Farm Profile
 - Phone Usage, Ownership, and IVR Calls
 - Access to Dairy Related Information
- Application and Effectiveness Of Information: Primary and Secondary Listeners
 - IVR Effectiveness Overview: Ease of Understanding, Application, Uptake of Crossbred Cattle
 - Information Dissemination: Who, Medium of sharing
 - Information Retention: Quiz section
- Household Dynamics and Decision Making: Primary and Secondary Listeners
 - Decision Making on AI services, Consumption and Sale of Milk, Dairy Farming Revenue
 - Division of Labour
- Impact on Dairy Farming: Primary and Secondary Listeners
 - Quality of Life
 - Way of Farming
 - Cattle Management and Money Earned
- Satisfaction and Challenges: All Listeners
 - Net Promoter Score & drivers
 - Challenges
- Partial Listener: Deep Dive

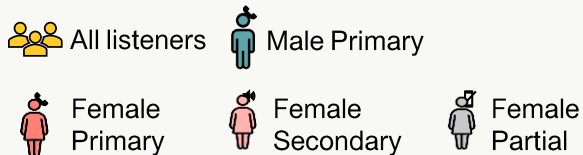
Respondent Demographics

We asked questions about farmers' homes, ages, and education levels. Close to half studied past primary school and 16% did not go to school.

12% of listeners live in female-headed households. Registered female primary and registered partial listeners are more likely to be the head of their household.

When there are significant differences, we mention trends by segments such as listener type, location, listening rate, farm size, type of phone owned.

Legend:

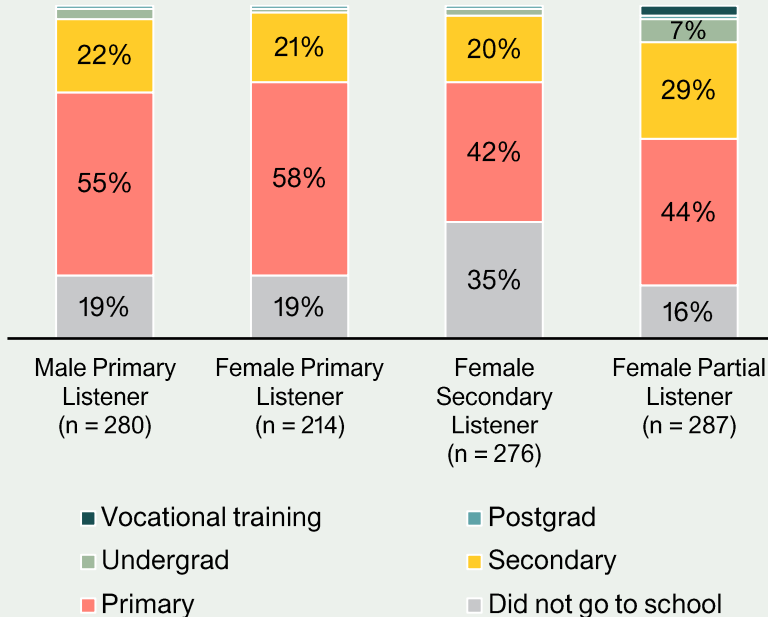


By asking primary listeners to play the IVR message on speaker phone, Digital Green is able to reach listeners who are more likely to be illiterate or less literate.

About the DG Farmers We Spoke With

Data relating to farmer characteristics (n = 1,057)

Education Level



Age (mean)	39	44	38	37	38
Household head (% female)	12	3	30	6	27
Household size (mean)	6	6	6	6	6

Region	% of respondents				
Amhara	59	65	59	67	43
Oromia	19	13	23	13	26
SNNP	22	21	18	19	30

Poverty Profile

Female partial listeners are from households that are better off than other listeners while female secondary listeners' households are the worst off within the group.

Using the Poverty Probability Index[®] we measured the poverty profile of farmers we interviewed and compared it to the Ethiopian national average as recommended by the World Bank.

We also measured the poverty profile of male and female farmers. 44% of male farmers relative to 41% of female farmers live under \$3.20 daily.

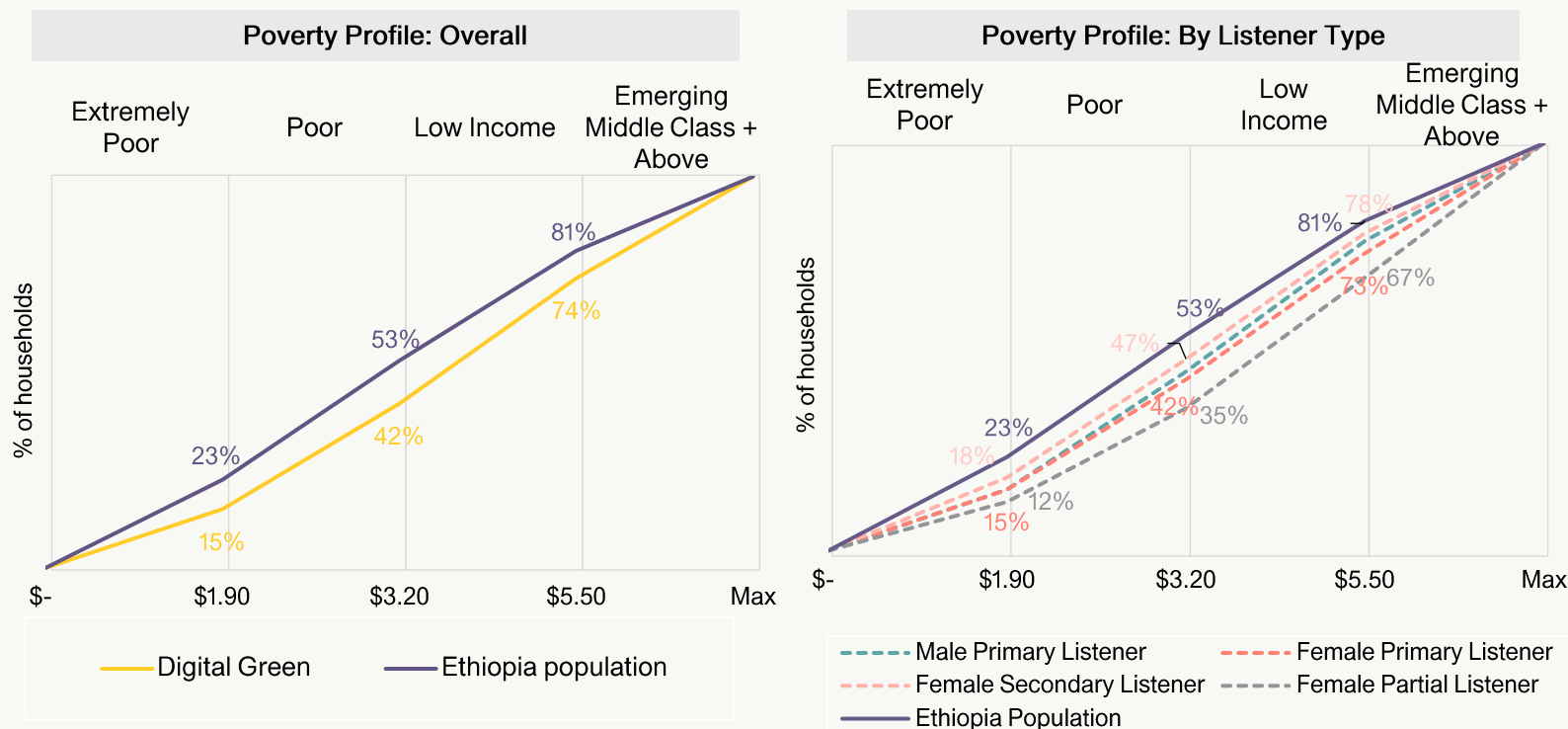
We use the Inclusivity Ratio to show the degree to which companies are over-or under penetrating low-income segments in the country of operation. The Inclusivity Ratio by listener type is as follows:

- Male primary listener: 0.81
- Female primary listener: 0.78
- Female secondary listener: 0.88
- Female partial listener: 0.67

*More on how the Inclusivity Ratio is calculated in the [appendix](#).

Income Distribution of Digital Green Farmers Relative to Country Average

% living below \$3.20 per day (2011), calculated using the Poverty Probability Index. (n = 1,057)








Profile: Farm and Mobile

Smartphone usage penetration and access to IVR calls is low overall. All male primary listeners own their phones themselves while female listeners share it with the household.

Only 6 in 10 female primary listeners owned the phone they received the IVR message on, and a similar proportion share it with another family member, suggesting the need for more concerted effort to reach women through IVR. The average female respondent attributed a higher percentage of household income to dairy than the average male.



While average cattle ownership was slightly higher for male primary listeners compared to female, females were more likely to report owning crossbred cows.

Legend:

-  All listeners
-  Male Primary
-  Female Primary
-  Female Secondary
-  Female Partial

Type of Phone Used, Owned, Usage, Preferred IVR Times & Farm Profile

(n= 1,054)

					
Type of Phone Used (% reporting smartphone)	8%	12%	3%	18%	10%
Ownership of Phone (% of listener who owned the phone themselves)	100%	62%	6%	81%	62%
Phone Sharing (% reporting No one)	79%	38%	11%	56%	46%
Suggested Time to Receive IVR Call (% reporting Post 5 PM)	70%	91%	88%	84%	83%
Access to IVR calls (% reporting 'Yes')	7%	21%	14%	12%	14%
Cattle size (mean)	4.3	4	5.5	4.4	3.5
Crossbred cows (mean)	2.1	2.3	2	2.2	1.9
% of household income from dairy	30%	42%	61%	24%	15%

Access to Dairy Related Information

Half of the listeners we spoke to report accessing similar dairy related information for the first time. Female secondary listeners are slightly more likely to report first time access.

Listeners who own their phone are more likely to have had access to similar information from other sources than those who do not own their phone (53% vs. 22%).

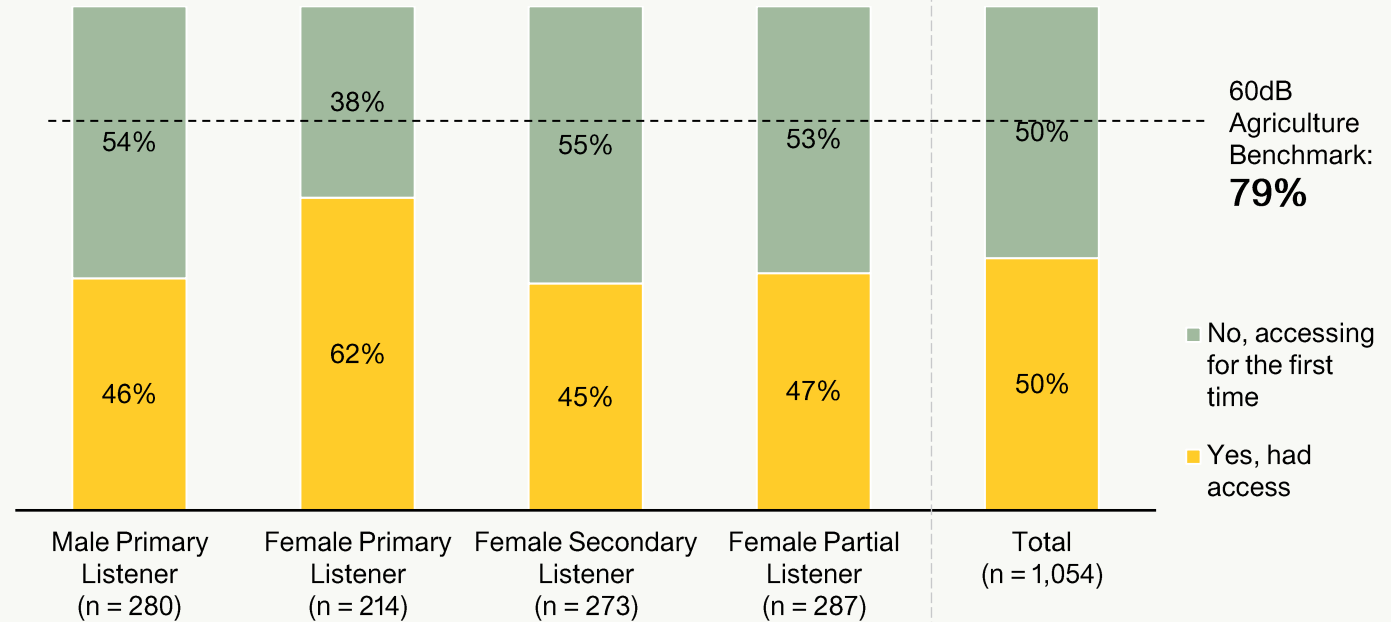
Food for Thought

Are these results surprising? Do farmers have access to dairy advisory related information from other sources?

First Access

(n = 1,054)

● ● ● ● ● - BOTTOM 20%



● Profile of All Farmers We Spoke With

- Demographics and Income Profile
- Inclusivity and Farm Profile
- Phone Usage, Ownership, and IVR Calls
- Access to Dairy Related Information

● Application and Effectiveness Of Information: Primary and Secondary Listeners

- IVR Effectiveness Overview: Ease of Understanding, Application, Uptake of Crossbred Cattle
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- Decision Making on AI services, Consumption and Sale of Milk, Dairy Farming Revenue
- Division of Labour

● Impact on Dairy Farming: Primary and Secondary Listeners

- Quality of Life
- Way of Farming
- Cattle Management and Money Earned

● Satisfaction and Challenges: All Listeners

- Net Promoter Score & drivers
- Challenges

● Partial Listener: Deep Dive

IVR Effectiveness: Overview

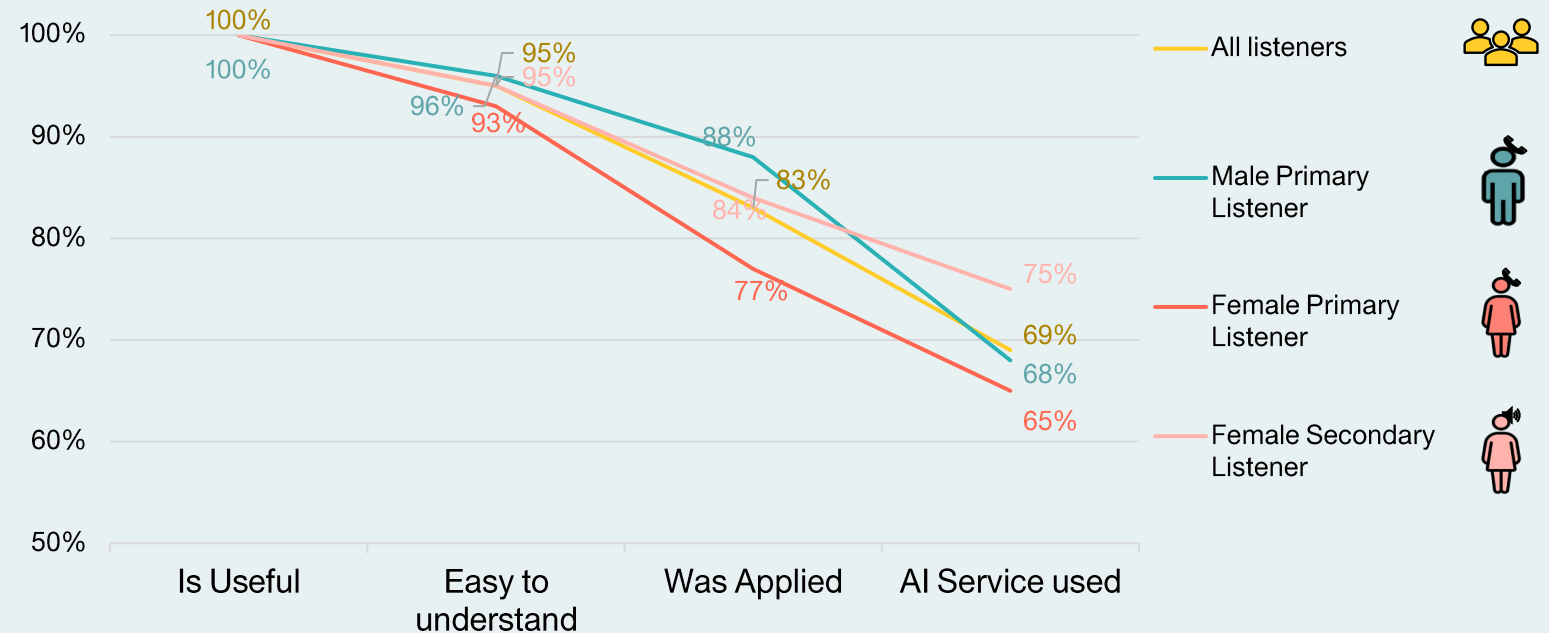
Female primary listeners report the lowest levels of ease of understanding information, application, and uptake of AI service.

We asked listeners about the extent to which they found the 8028 IVR call useful to their dairy practice and easy to understand, how much they applied the information, and about the uptake of AI service to get crossbred cattle.

All listeners found the information useful and 9 in 10 found it easy to understand. 8 in 10 applied it, and 6 in 10 used the AI service.

Effectiveness of IVR Call By Listener Type

(n = 768, 770, 766, 769)








Understanding & Important Information

Overall, listeners report the most important information was about using AI to get crossbred cattle, among which female listeners rate it slightly higher than male listeners.

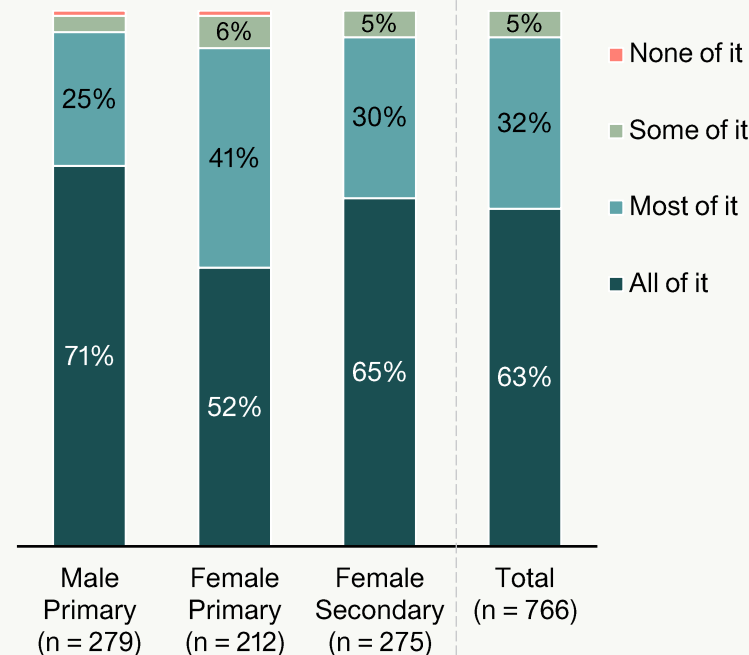
We asked listeners how much of the information shared via the 08028 call was easy to understand. 3 in 5 listeners found 'all' of the training easy to understand.

We also asked farmers about the single most important piece of information they received. Messages on the uptake of AI service to get crossbred cattle and information on caring for pregnant cows are the most valued pieces of information.

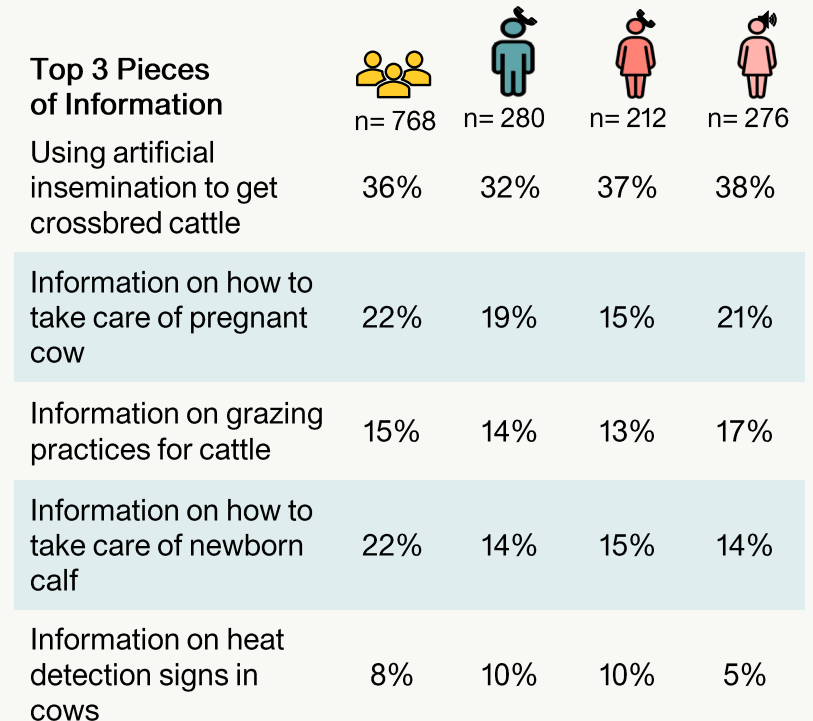
Legend:

-  All listeners
-  Male Primary
-  Female Primary
-  Female Secondary
-  Female Partial

Ease of Understanding
(n = 770)



Most Important Piece of Information
(n = 768)*



IVR Information: Application

We asked listeners the extent to which they applied dairy farming advisory information they received.

Female primary listeners are less likely to apply of all the information as compared to other listeners.

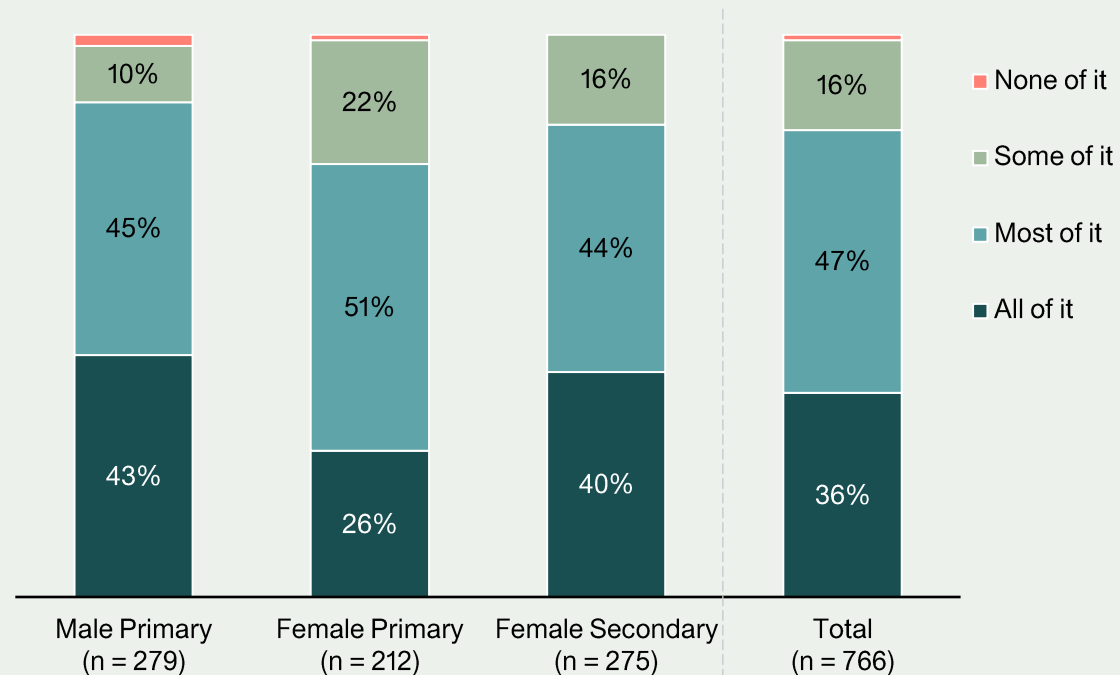
Female secondary listeners in particular, who currently rear at least 5 cattle are more likely to apply all information compared to others (60% vs. 25%). Similarly, listeners who have at least 4 crossbred cows and calvers are more likely to apply all of it (73% vs. 45%).

Action to Consider

How can Digital Green act on barriers that listeners mention? Can you consider providing relevant offerings?

8 in 10 farmers applied all or most of the dairy farming advisory information. Those who did not apply all information, primarily cite lack of credit as a constraint.

Application of Dairy Farming Advisory Information
(n = 766)



IVR Information: Application





We asked listeners who did not apply all of the information reasons as to why they did not apply.

We found little or no different between listener types.

Top reason for not applying the dairy advisory information is lack of credit or money.

Reasons for Not Applying the Dairy Farming Advisory Information

(n = 482)

Reasons for not applying	Male Primary Listener 	Female Primary Listener 	Female Secondary Listener 	All Listeners 
No credit or money	74%	90%	85%	81%
Information not clear	3%	5%	3%	3%
Do not trust the information	2%	2%	1%	3%
Shortage of feed	9%	4%	8%	7%
No access to inputs	6%	3%	3%	4%
Lack of time	6%	1%	3%	3%
Less space/land	2%	2%	2%	2%
Not rearing crossbred cattle	2%	0%	1%	1%






Uptake of Artificial Insemination

7 of out 10 male and female respondents started using AI services after listening to IVR calls. Primary reason for non-adoption among men is that they already own crossbred cows. For women, it is the lack of capital.

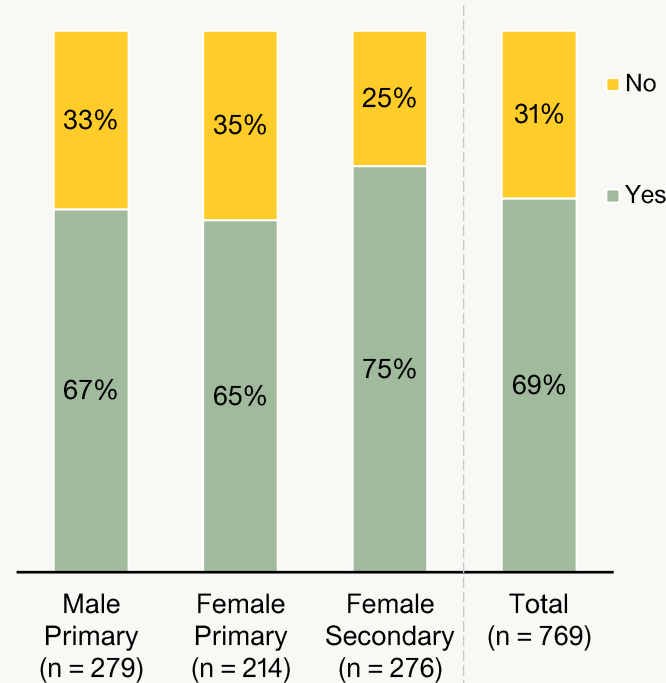
We asked listeners if they used Artificial Insemination (AI) service to get crossbred cattle after listening to the IVR call. Female secondary listeners are more likely to use the AI service compared to primary listeners – potentially indicative of IVR’s effectiveness.

Listeners who report at least half of their household’s total income from dairy farming are more likely to use AI service to get crossbred cattle (85% vs. 56%).

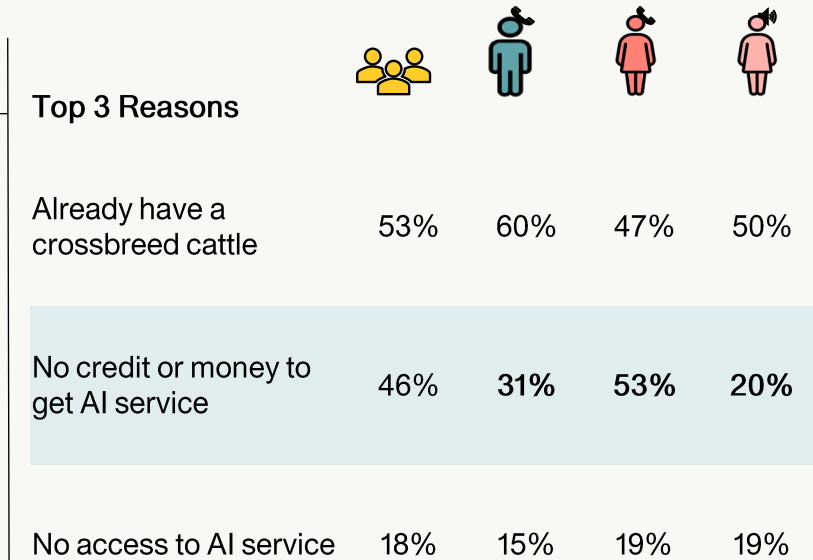
Legend:

-  All listeners
-  Male Primary
-  Female Primary
-  Female Secondary
-  Female Partial

Uptake of Crossbred Cattle
(n = 769)



Reasons for Not Using AI Service
(n = 239)



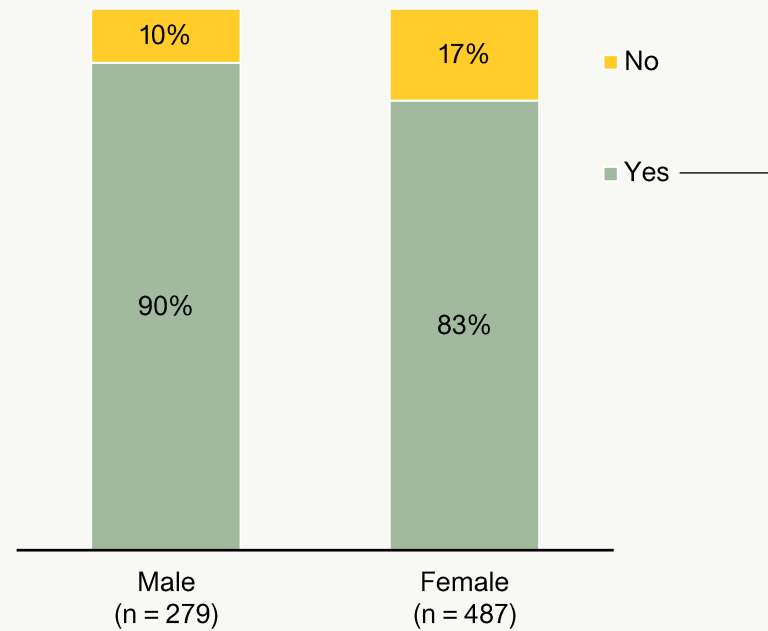
Information Dissemination: Who

Close to 9 in 10 listeners have shared information from the IVR call with family and community members. Listeners are more likely to share information with members of the same sex – particularly in a community setting.

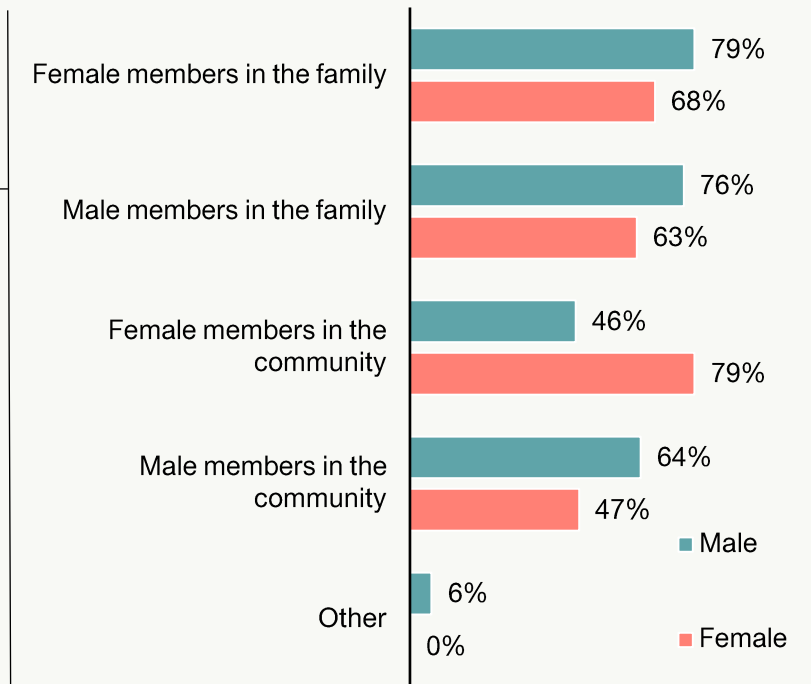
Overall, 14% of listeners did not share the IVR call information with anyone. This is primarily due to lack of time (30%) and existing access to information for family and community members (20%).

Male and female listeners seem to be well connected. This suggests that DG can have greater impact on farmers not just by interacting with them directly, but also through their family members.

Sharing of IVR Information
(n = 766)



Information Disseminated to Who
(n = 655)



Information Dissemination: Medium

Female listeners are more likely to share information in one-to-one conversations and village level community groups compared to male listeners.

We asked listeners who share information through village level community groups, to list the specific village level community groups.

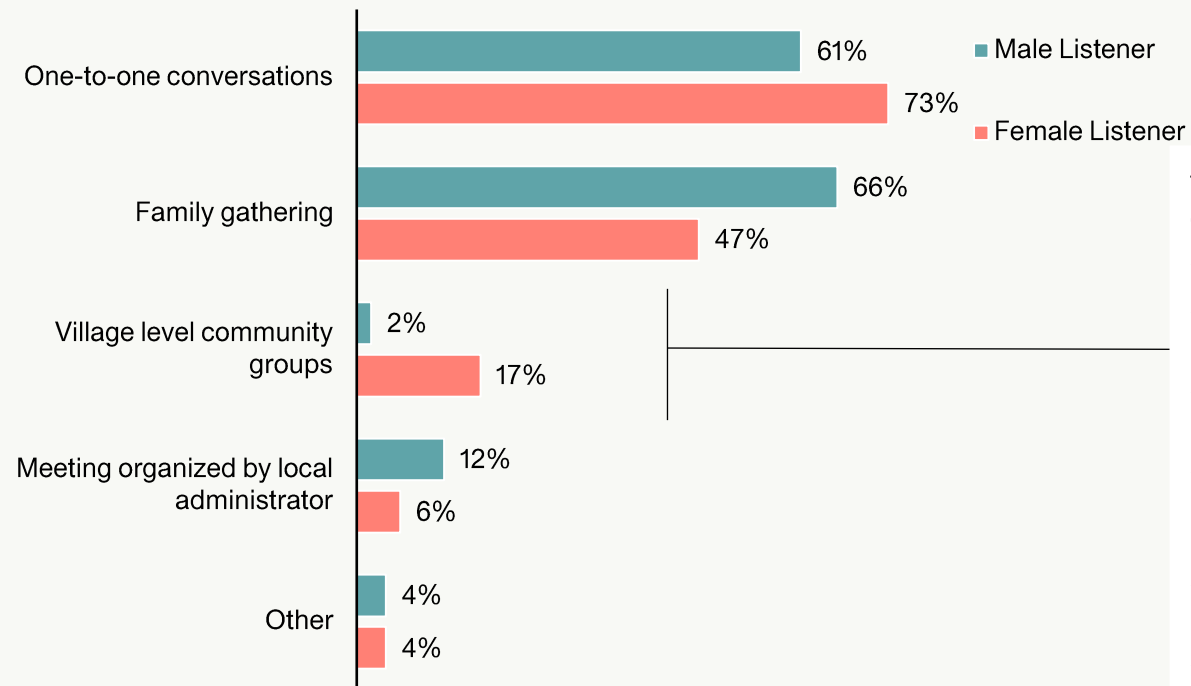
Their top forums are development groups, dairy groups and cooperatives, and village-level sharing groups. There are no differences by listener type.

Question for Discussion

Are female listeners more likely to be part of village level community groups in Ethiopia?

Medium of Sharing Information

(Total n = 770, Male Primary Listener n = 280, Female Primary Listener n = 214, Female Secondary Listener n = 276)



Top village level community groups:

- Development groups (64%)
- Dairy groups and cooperative (44%)
- Village level savings group (30%)
- Union and primary multipurpose cooperatives (29%)
- Saving and credit cooperative (22%)
- Poultry groups (12%)

Information Retention: Summary

We quizzed primary and secondary listeners on the messages they received including:





- identifying signs of heat
- insemination practices
- prevention of unwanted pregnancies
- concentrated feed
- benefits of colostrum

For further details on responses to each of the quiz questions, view the next page.

Overall, over half of the listeners provide the correct answer for three questions. Female primary listeners are slightly more likely to answer three questions correctly.

Information Retention Summary

(Total n = 770, Male Primary Listeners n = 280, Female Primary Listener n = 214, Female Secondary Listener n = 276)

Summary	Male Primary Listener 	Female Primary Listener 	Female Secondary Listener 	All Listeners 
% who got only 1 questions correct	1%	1%	0%	1%
% who got 2 questions correct	8%	8%	12%	9%
% who got 3 questions correct	53%	57%	49%	53%
% who got 4 questions correct	34%	30%	36%	34%
% who got all 5 questions correct	4%	3%	3%	3%

Information Retention (1/2)

Listeners demonstrate high retention of messages about identifying signs that show a cow is in heat. However, a lower proportion of secondary female listeners mention 'mounting on another cow' as a sign of heat.

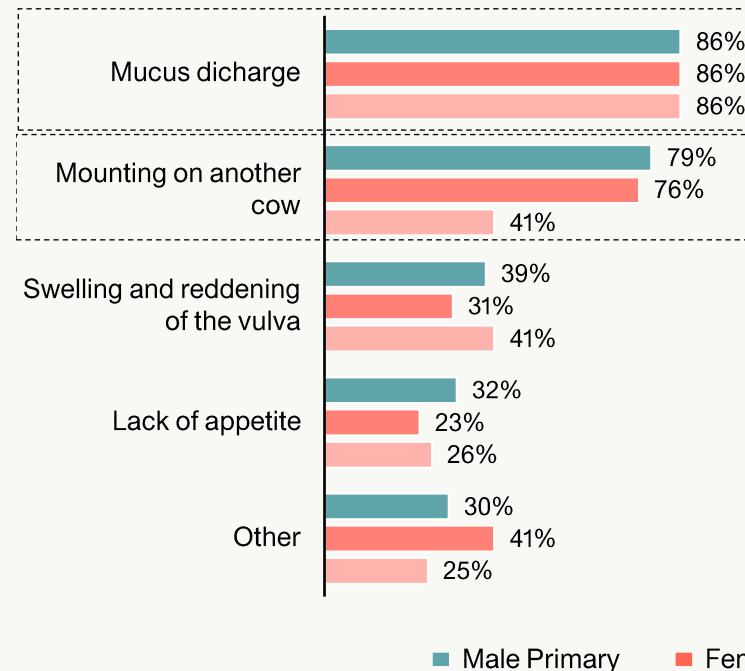
7 in 10 farmers believe a cow should be inseminated within 7 hours of detecting signs of heat. A much smaller proportion were likely to get them inseminated with the correct, most fertile window of 8 hours (4 in 10).

Primary and secondary female listeners are more likely to mention inseminating cows 'within 24 hours of detecting the sign'.

8 in 10 listeners mention mounting on another cow and mucus discharge as signs that indicate a cow is in heat. Only 4 in 10 report the 8 hour window for insemination of the cow.

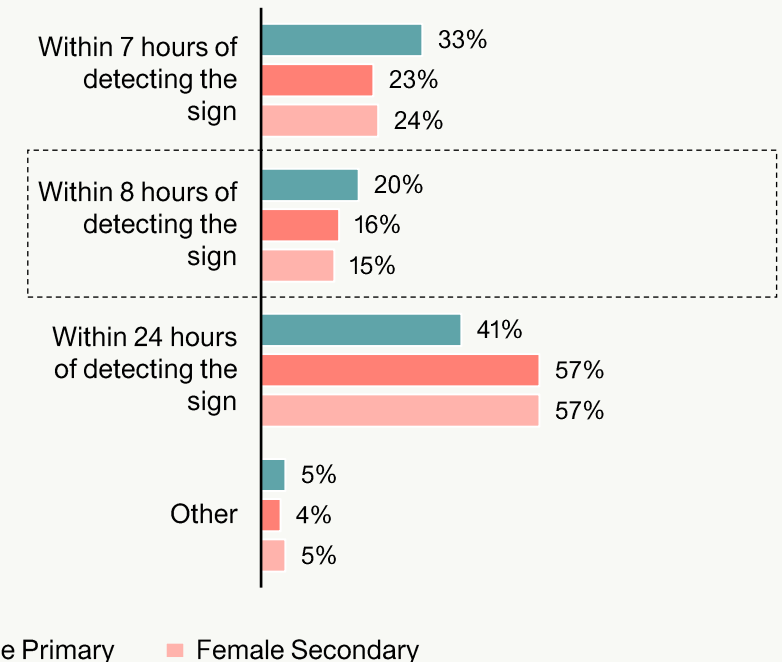
Signs Indicating Cow in Heat

(Male Primary Listener n = 278, Female Primary Listener n = 214, Female Secondary Listener n = 276)



Cow Inseminating Practices

(Male Primary Listener n = 276, Female Primary Listener n = 213, Female Secondary Listener n = 274)

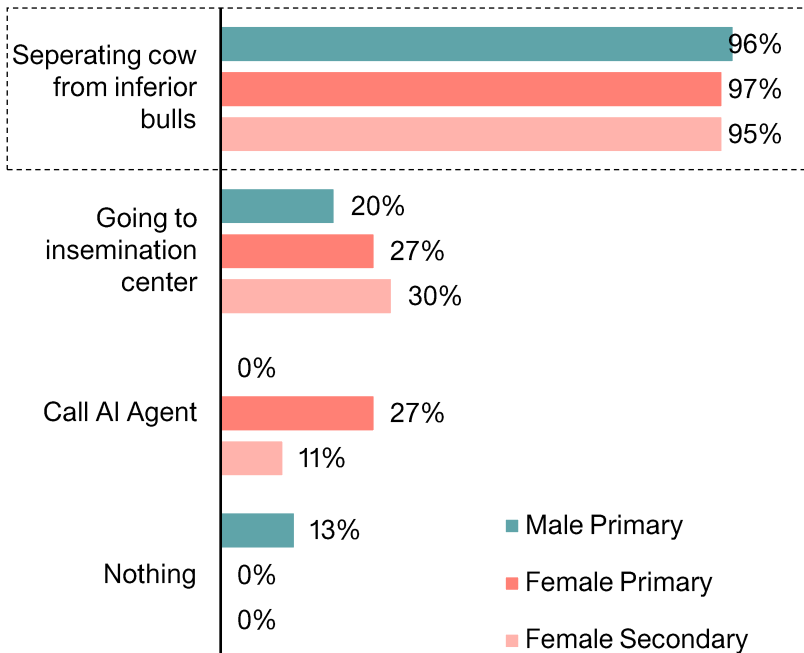


Information Retention (2/2)

Almost all listeners accurately recall measures to prevent unwanted pregnancy. 1 out of 5 listeners recommend 2.2kg of concentrated feed to cow per liter and about 8 out of 10 report that colostrum helps calves' development.

Measures to Prevent Unwanted Pregnancy

(Male Primary Listener n = 272, Female Primary Listener n = 210, Female Secondary Listener n = 263)



Concentrated Feed By Litre of Milk

(Male Primary Listener n = 272, Female Primary Listener n = 210, Female Secondary Listener n = 263)

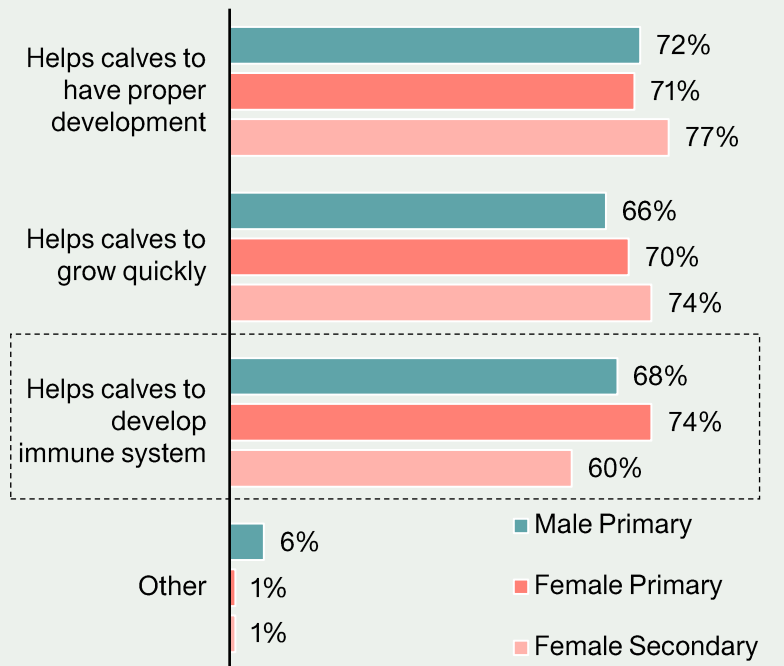
26% of **male primary listeners** believe they should give 2.2 kilograms of concentrated feed to a lactating cow for each litre of milk.

22% of **female primary listeners** believe they should give 2.2 kilograms of concentrated feed to a lactating cow for each litre of milk.

27% of **female secondary listeners** believe they should give 2.2 kilograms of concentrated feed to a lactating cow for each litre of milk.

Benefits of Feeding Colostrum

(Male Primary Listener n = 272, Female Primary Listener n = 210, Female Secondary Listener n = 263)



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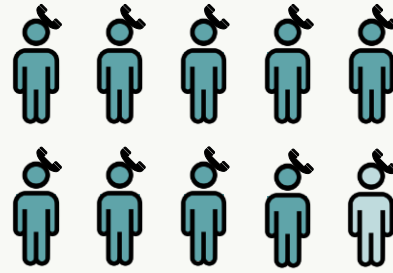
Household Dynamics: Decision on Using AI service

We asked listeners about dairy related decision-making in the household.

Male listeners are much more likely to be the sole decision maker in the household regarding the uptake of AI service compared to female primary and secondary listeners. (95% vs. 42% vs. 12%).

Encouragingly, close to half of female primary listeners report providing ‘a lot’ or input in making decisions when they are not final decision makers.

Male Primary Listener

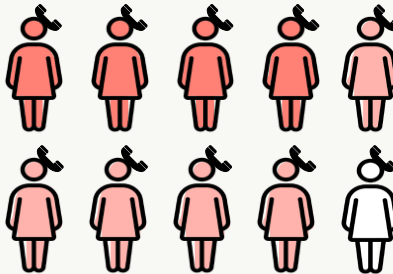


95% mention that they solely made the decision to use AI service to get crossbred cattle

4% of male primary listeners report providing ‘a lot’ input but did not make the final decision

1% provided ‘some’ input into the decision but did not make the final decision

Female Primary Listener

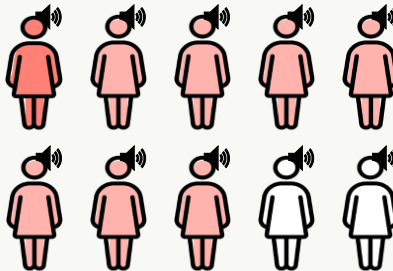


42% mention that they solely made the decision to use AI service to get crossbred cattle

46% of female primary listeners report providing ‘a lot’ input but did not make the final decision

13% provided ‘some’ input into the decision but did not make the final decision

Female Secondary Listener



12% mention that they solely made the decision to use AI service to get crossbred cattle

73% of female secondary listeners report providing ‘a lot’ input but did not make the final decision

15% provided ‘some’ input into the decision but did not make the final decision

Solely made the decision

Provided ‘a lot’ input

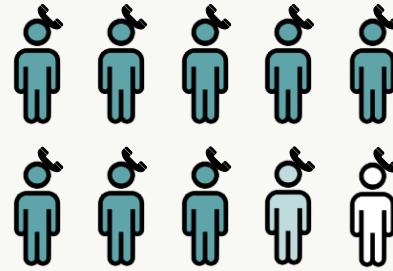
Provided ‘some’ input

Household Dynamics: Consumption and Sale of Milk

Similarly, we wanted to understand household dynamics related to decision-making on consumption and sale of milk.

Female secondary listeners are least likely to solely make the decision on consumption and sale of milk. 1% of secondary listeners report providing no input in any of the decisions.

Male Primary Listener

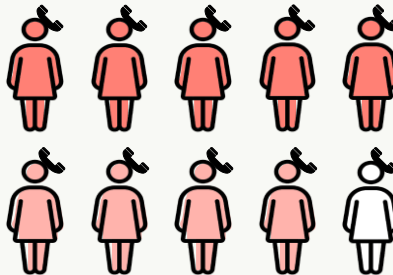


85% male primary listeners solely made the decision on consumption and sale of milk

8% report providing 'a lot' of input but did not make the final decision

6% provided 'some' input into the decision but did not make the final decision

Female Primary Listener

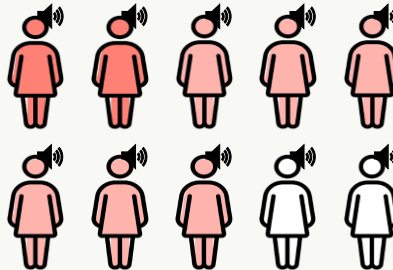


47% female primary listeners solely made the decision on consumption and sale of milk

44% report providing 'a lot' of input but did not make the final decision

9% provided 'some' input into the decision but did not make the final decision


Female Secondary Listener





22% female secondary listeners solely made the decision on consumption and sale of milk

61% report providing 'a lot' of input but did not make the final decision

16% provided 'some' input into the decision but did not make the final decision

 Solely made the decision

 Provided 'a lot' input

 Provided 'some' input

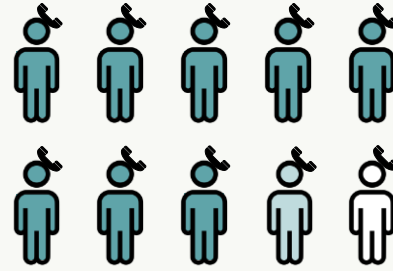
Household Dynamics: Dairy Farm Revenue

We asked listeners who makes the day-to-day decisions related to what should be done with the money earned from dairy farming in their household.

Half of the female primary listeners report that their spouse makes the decisions regarding dairy revenue. The female primary listeners who did not have any input into the decision mentioned that they are not willing to voice out their option if given the chance.

Female secondary listeners who are in female-headed households are much more likely to report being the main decision maker (63% vs. 7%).

Male Primary Listener

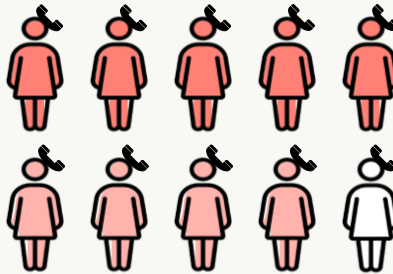


81% male primary listeners solely made the decision related to dairy farming money earned

10% report providing 'a lot' of input but did not make the final decision

9% provided 'some' input into the decision but did not make the final decision

Female Primary Listener

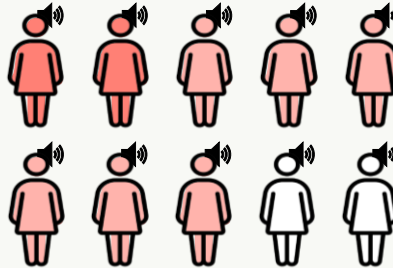


49% female primary listeners solely made the decision related to dairy farming money earned

41% report providing 'a lot' of input but did not make the final decision

9% provided 'some' input into the decision but did not make the final decision

Female Secondary Listener



20% female secondary listeners solely made the decision related to dairy farming money earned

62% report providing 'a lot' of input but did not make the final decision

17% provided 'some' input into the decision but did not make the final decision

Solely made the decision

Provided 'a lot' input

Provided 'some' input

Household Dynamics: Division of Labour

Male members primarily undertake purchase and feed preparation while female members primarily look after milking the cattle and milk processing.

We asked listeners questions to understand the role they play in dairy farming including the division of farming activities between male and female members of a household.

Both men and women equally take up cattle health management.

Male household members are more likely to undertake time-consuming activities (feed preparation, and feeding, watering and herding), while female household members take up less time taking chores (barn cleaning and milking a cow).*







Legend:

 Male Primary  Female Primary  Female Secondary

*Information on time-consuming activities were referred from the [DAAS Gender Analysis Report](#).

Household Division of Dairy Farming Activities

(n = 752,759)

Farming Activities	Undertaken by male household member			Undertaken by female household member		
						
Purchase of feed	94%	84%	92%	4%	11%	2%
Preparation of feed	77%	61%	72%	28%	44%	30%
Feeding, watering and herding – when the cattle stay in the field	64%	62%	60%	23%	36%	30%
Feeding, watering and herding – when the cattle stay nearby	45%	29%	42%	39%	61%	52%
Cattle health management	49%	25%	34%	27%	48%	34%
Cattle breeding	49%	39%	41%	18%	29%	14%
Barn cleaning	12%	18%	12%	72%	72%	78%
Dung collection and processing	6%	3%	2%	70%	77%	68%
Milk processing	6%	9%	13%	75%	79%	68%
Milking a cow	14%	12%	17%	80%	85%	72%
Selling of dairy products in nearby by markets	10%	18%	21%	64%	57%	42%
Caring for calves	35%	19%	23%	52%	68%	62%

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Impact Performance: Quality of Life

Overall, 4 in 5 listeners report improved quality of life. However, there are differences in the proportion reporting 'very much improved' (29% female primary listeners compared to 48% male primary listeners).

Listeners who applied all the information received (65%) are much more likely to report 'very much improved' quality of life than those who applied 'most of it' (29%) or 'some of it' (11%).

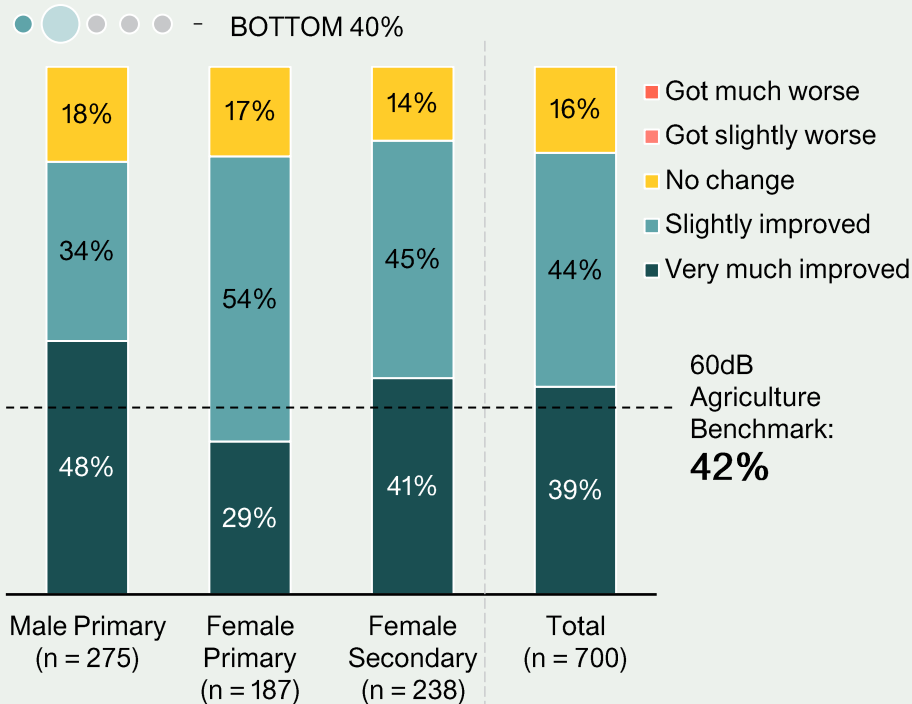
Food for Thought

Female primary listeners are less likely to apply all of the information and to report 'very much improved' quality of life. How can Digital Green encourage female primary listeners to apply all the information received?

Close to 2 in 5 listeners report their quality of life has 'very much improved'.

Perceived Quality of Life Change

(n = 700)



Very much improved:

“My milk production has improved and my children are able to drink milk regularly. I know it will improve their health.” - Male, 60, Primary listener

Slightly improved:

“We were able to build a cement floor house with the money we earned from dairy farming.” - Female, 28, Secondary

No change:

“The price of feed is so expensive that all our money is spent on that.”- Female, 34, Primary

Quality of Life: Top Outcomes

Listeners were asked to describe – in their own words – the changes they are experiencing because of the 8028 IVR calls.





The top outcomes are shown on the right. The gradient highlight indicates the top 3 outcomes within each listener type with the darkest being #1 and lightest being #3.

16% of listeners who reported ‘no change’ all mention that they are yet to implement the dairy advisory information.

Overall, listeners report top outcomes as increased income, increased production, and improved ability to afford household bills.

Most Common Self-Reported Outcomes for 83% of Listeners Who Say Quality of Life Improved

(n = 700). Open-ended, coded by 60 Decibels.

Quality of life outcomes	Male Primary Listener 	Female Primary Listener 	Female Secondary Listener 	All listeners 
Increased income	56%	29%	33%	39%
Increased production	36%	16%	24%	25%
Improved ability to afford household bills	14%	25%	32%	24%
Improved food consumption	20%	16%	27%	21%
Improved savings	5%	24%	12%	14%
Improved ability to afford education	7%	15%	18%	8%
Improved ability to buy farm inputs	5%	9%	8%	13%
Improved ability to afford home improvements	5%	14%	11%	10%
Started a new venture	6%	8%	5%	6%
Improved ability to afford assets	4%	1%	6%	4%

Changes in Way of Farming

Listeners who listened to all 5 messages are more likely to report a 'very much improved' way of farming as compared to those who dropped off after 3 messages.

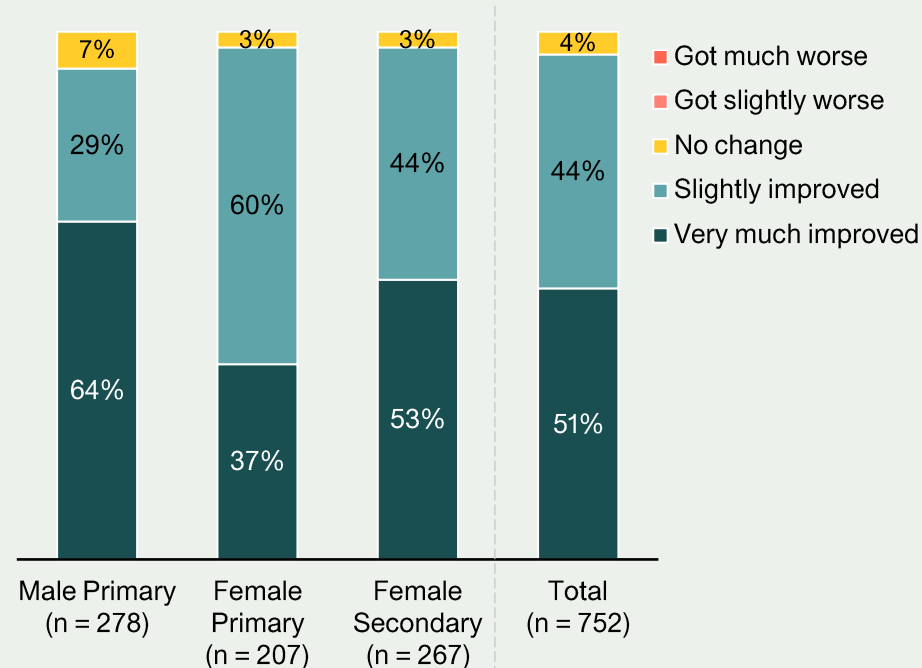
Listeners who applied all of the information are more likely to mention 'very much improved' way of farming (84% vs 33%) compared to listeners who applied 'most', 'some', or 'none' of the information.

Listeners who had prior access to information are more likely to report 'very much improved' way of dairy farming (44% vs. 59%). This suggests that listeners who are new to information require more time and interactions to experience impact.

Almost all listeners report improvements in their way of farming because of the dairy farming advisory information. Similar to changes in quality of life, female primary listeners are less likely to report 'very much improved' way of farming.

Change in Way of Farming

(n = 752)



Very much improved:

"We now take care of the hygiene of our cows and their barn very seriously. We make sure to wash our cows at least twice a week. Previously, we used to feed the cows dried Injera but now we provide a healthier feed."
- Male, 35, Primary listener

Slightly improved:

"We feed the cows up to three times daily. We also provide clean drinking water and keep the bran very clean. When we have questions regarding our cows, we contact professionals."
- Female, 35, Secondary

Way of Farming: Top Changes





Listeners who report 'no change' in their way of farming mention the following (percentages are written out in the following order: Male primary listener, Female primary listener, and Female Secondary listener):

- Lack of trust in new methods (28%, 14%, 29%)
- Inability to afford inputs (17%, 29%, 29%)
- Yet to apply information (6%, 14%, 29%).

Farmers' top ways of farming changes are improved cattle care, feed preparation, and feeding.

Most Common Self-Reported Changes for Listeners Who Say Way of Farming Improved

(n = 720). Open-ended, coded by 60 Decibels.

Way of Farming Changes	Male Primary Listener 	Female Primary Listener 	Female Secondary Listener 	Digital Green Average 
Improved cattle care	41%	27%	37%	38%
Improved feed preparation	27%	29%	35%	32%
Improved feeding	28%	28%	28%	30%
Improved farm sanitation	23%	24%	25%	26%
Insemination of cattle	13%	15%	14%	15%
Improved pregnant cattle care	9%	9%	11%	10%
Build better barn for cattle	7%	8%	7%	8%
Better detection of cow in heat	7%	9%	7%	7%
Balanced diet to cattle	4%	8%	4%	7%
Improved frequency of feeding	4%	5%	7%	6%

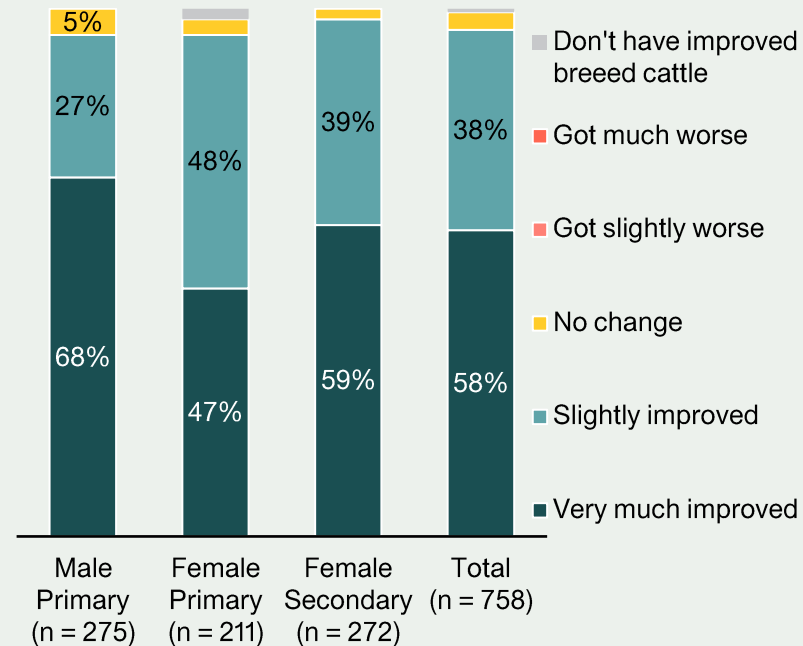
Change in Cattle Management and Revenue

Almost all respondents report improvement in how they manage improved breeds and 9 in 10 report an increase in dairy revenue because of the advisory information.

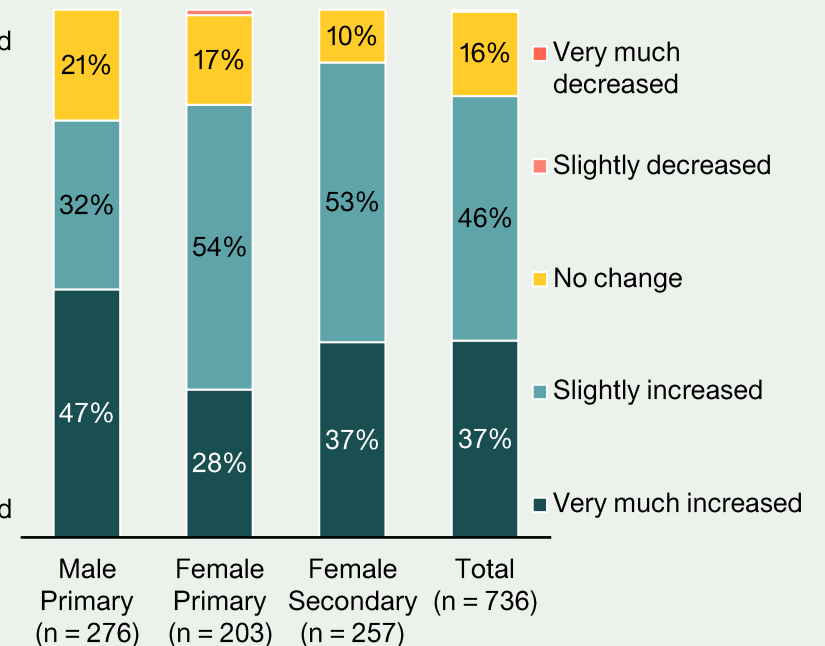
Female primary listeners are slightly less likely to report 'very much' improved cattle management and 'very much' increase in money earned.

Listeners who applied all the information are much more likely to report 'very much improved' cattle management (84% vs. 43%) and 'very much increased' money earned (63% vs. 21%) than those who applied 'most', 'some' or 'none' of the information. This suggests that applying the information has a strong positive effect on cattle management and money earned.

Change in Cattle Management
(n = 758)



Change in Money Earned from Dairy Farming
(n = 736)



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Customer Satisfaction: Net Promoter Score

IVR calls as a medium has a Net Promoter Score of 49, which is good. It varied slightly by listener type with Female Secondary listeners reporting the highest NPS.

The Net Promoter Score® (NPS) is a gauge of satisfaction and loyalty. Anything above 50 is considered excellent. A negative score is considered poor. More on this metric [here](#).

Asking respondents to explain their rating provides insight into what they value and what creates dissatisfaction. These details are on the next page.

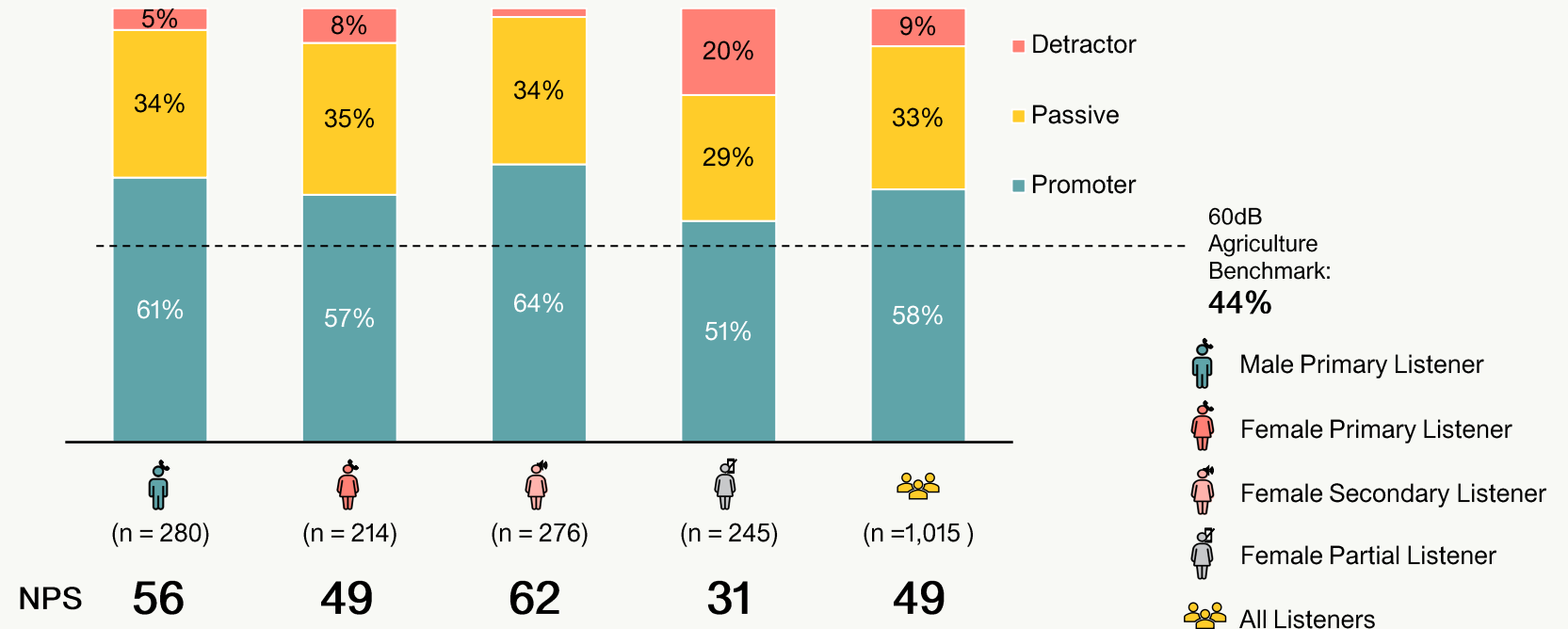
We also saw trends in NPS by the following metrics:

1. **First time access:** Listeners who are accessing information for the first time had a higher NPS than those who had prior access (56 vs. 42)
2. **Application of information:** Listeners who applied 'all of it' had a higher NPS than those who applied 'most', 'some', or 'none' of it (72% vs. 28%)

Net Promoter Score® (NPS)

(n = 1,015)

● ● ● ● ● - BOTTOM 40%



Top Value Drivers

We asked listeners what they liked about the IVR calls. These are shown on the right.

We also asked Detractors how IVR could improve. They mention that the following could be improved:






- Lack of exposure or familiarity (32%)
- Cannot afford inputs (15%)
- Language barrier (12%)

34% of listeners are Passives. They spoke about convenience (70%) and time savings (26%), and complained about difficulty in understanding the message (1%) and lack of exposure or familiarity to the information (1%).

Promoters value the convenience of IVR, its ease of understanding, and usefulness. For female listeners, access and affordability of information also stood out as value drivers.

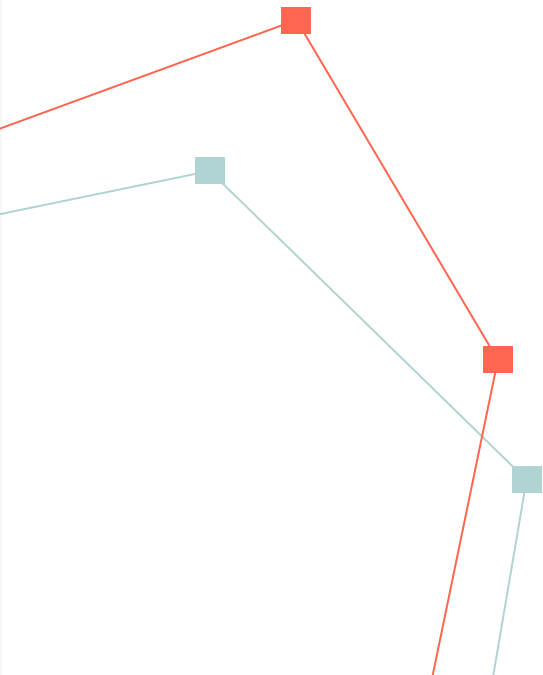
Top Value Drivers Reported by Promoters

(n = 434).

Promoters Drivers	Male Primary Listener 	Female Primary Listener 	Female Secondary Listener 	Female Partial Listeners 	Digital Green Average 
Convenient to use	35%	41%	36%	11%	31%
Language was easy to understand	21%	7%	19%	9%	14%
Usefulness of the message	17%	6%	15%	16%	14%
Low or zero cost in accessing the message	8%	11%	13%	11%	11%
Improved access to information	8%	13%	5%	23%	12%
Saves time	4%	8%	9%	4%	6%
Ability to repeat the messages	4%	3%	7%	1%	4%
Easy to use	5%	8%	2%	14%	7%

Net Promoter Score: Listener Voices

Doubling down on these value drivers can increase the share of Promoters, which in turn creates positive word of mouth, a highly cost-effective acquisition channel.



Here are some quotations from the 58% of listeners who are Promoters.

Primary Listener

“Most of the times, in rural areas, we get training maybe once a year about dairy activities. This is not enough. But when we get 8028 calls, we are so relieved that we can get information all the time, whenever we want.” - Female, 41

“It enables us to access dairy information anytime of the day, even if there is no electricity. If the message was delivered using radio or TV, we would have to depend on the availability of electric power. But this has enabled us to access the information anytime of the day.” - Female, 35

“We can listen to the call even while doing other tasks outside. It has helped us a lot in our work.”- Male, 62

Secondary Listener

“Since we can access the information using our mobile phones easily, we can save our time and energy by not travelling to some other place to get the information.” - Female, 34

Partial Listener

“Getting similar information from the local government’s agriculture office expert is very difficult. Now, we can easy access to it from our phone, at the convenience of our home. It is very useful!” - Female, 40

Listener Challenges

Only 7% of listeners, overall, report having a challenge with the IVR calls.

Asking about listener challenges enables Digital Green to identify problem areas and tackle them proactively.

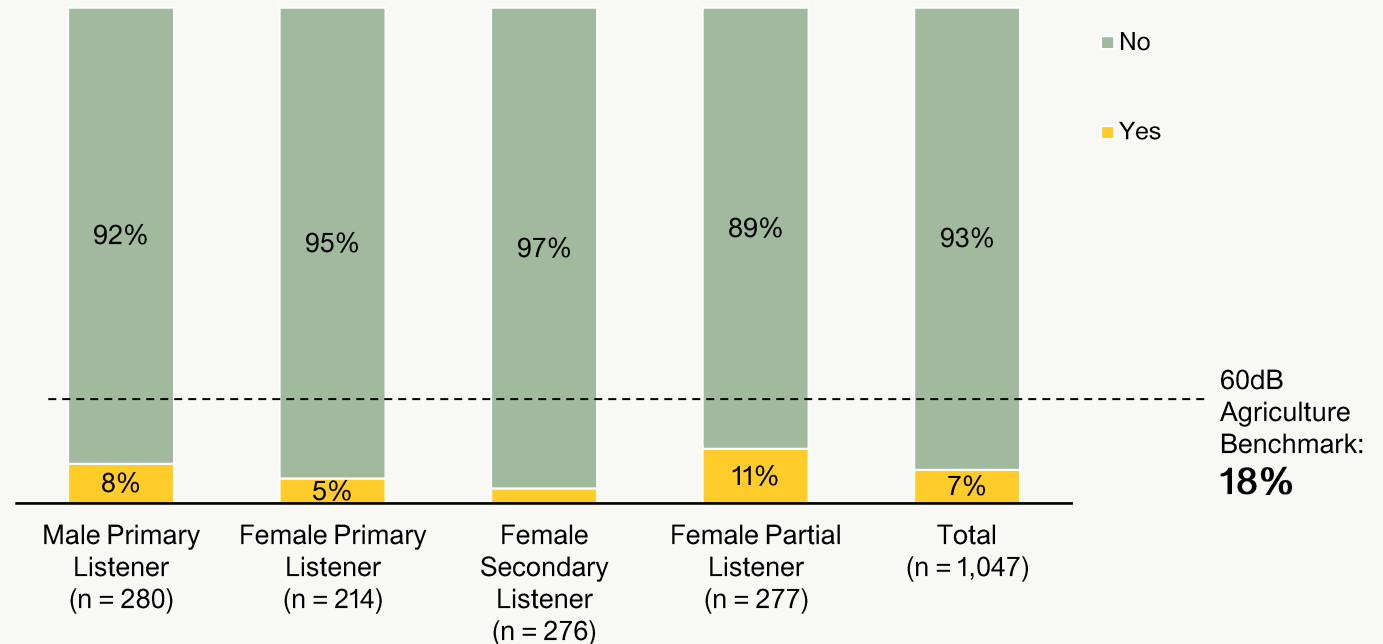
Unresolved challenges can encourage negative word-of-mouth and detract from positive impact. The next page shows listeners' most common issues.

Listeners who were easily able to understand all of the advisory message are less likely to report a challenge as compared to those who did not (4% vs 96%).

Proportion of Listeners Reporting Challenges

(n = 1,047)

● ● ● ● ● - TOP 20%








Listener Challenges: Top Issues

Women were more likely to highlight issues related to the IVR message – poor network, and language barrier – while men spoke of market challenges, limited access to feed and AI breeds.

Most Common Issues for 7% of Listeners Who Say They've Experienced a Challenge

(n = 41). Open-ended, coded by 60 Decibels

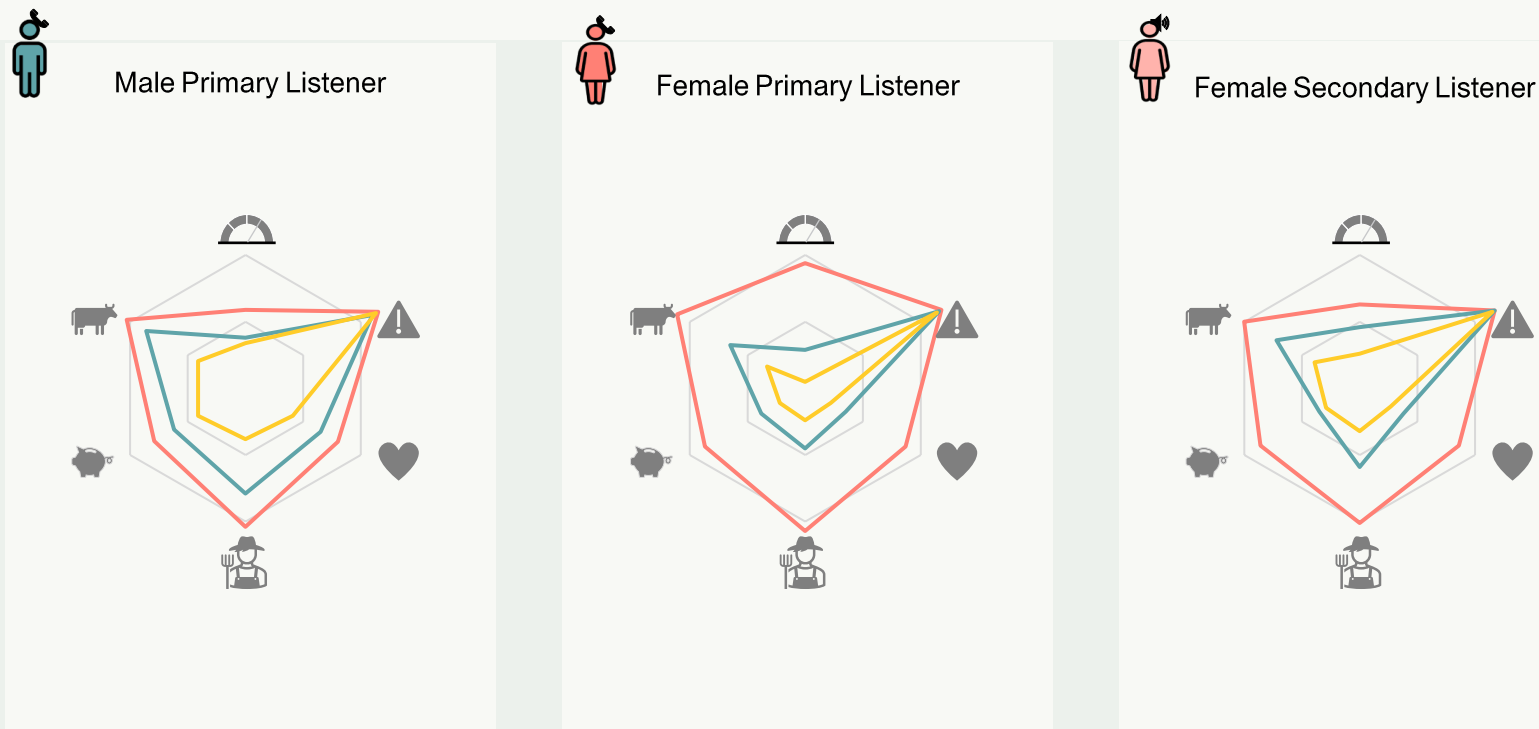
Common Issues	Male Primary Listener 	Female Primary Listener 	Female Secondary Listener 	Female Partial Listeners 	Digital Green Average 
Shortage of feed (barriers to apply information)	33%	-	22%	-	28%
Poor network connectivity	10%	27%	33%	7%	19%
AI breed unavailable	29%	9%	-	-	19%
Language barrier	5%	36%	-	37%	26%
Inadequate AI agents in the area	5%	9%	22%	-	12%
Corrupt AI agents	5%	9%	-	-	7%
Message unclear	5%	-	11%	3%	6%

Summary: Experience & Impact by Information Application

We observe statistically significant differences across all metrics – farmers who applied all of the training appear to be more satisfied and experience higher improvements in quality of life, way of managing cattle, and money earned from dairy farming, compared to farmers who applied ‘most’ or ‘some’ of the training.










Female primary listeners who applied all of the training are more likely to report higher impact and satisfaction than male primary listeners and female secondary listeners.

Listeners who applied all of the dairy advisory information experience greater impact and satisfaction those who apply most or some of the dairy advisory information.



Food for Thought

How can Digital Green encourage more listeners to apply their information? Some suggests are providing credit options. See [page 19](#) for more details.

 All of it	 Net Promoter Score Proxy for farmer satisfaction/loyalty	 Quality of Life % “very much improved”	 Money Earned from Dairy Farming % “very much increased”
 Most of it	 No Challenges % experienced “no” challenges	 Way of Farming % “very much improved”	 Cattle Management % “very much improved”
 Some of it			

- Profile of All Farmers We Spoke With
 - Demographics and Income Profile
 - Inclusivity and Farm Profile
 - Phone Usage, Ownership, and IVR Calls
 - Access to Dairy Related Information
- Application and Effectiveness Of Information: Primary and Secondary Listeners
 - IVR Effectiveness Overview: Ease of Understanding, Application, Uptake of Crossbred Cattle
 - Information Dissemination: Who, Medium of sharing
 - Information Retention: Quiz section
- Household Dynamics and Decision Making: Primary and Secondary Listeners
 - Decision Making on AI services, Consumption and Sale of Milk, Dairy Farming Revenue
 - Division of Labour
- Impact on Dairy Farming: Primary and Secondary Listeners
 - Quality of Life
 - Way of Farming
 - Cattle Management and Money Earned
- Satisfaction and Challenges: All Listeners
 - Net Promoter Score & drivers
 - Challenges
- Partial Listener: Deep Dive

Deep-dive: Partial Listeners (1/4)

Listeners at work, poor connectivity, and poor timing of the call were top reasons for cutting the call midway.

We asked partial listeners why they they did not listen to the complete call.

According to PxD’s information on partial listener’s listening rates:

- 41% heard 4 messages
- 25% heard 3 messages
- 17% heard 2 messages
- 13% heard 1 message
- 4% heard none of the calls

The average female partial listeners we spoke with heard message 1 and message 3 in full, but only heard 60% of the other 3 IVR calls.

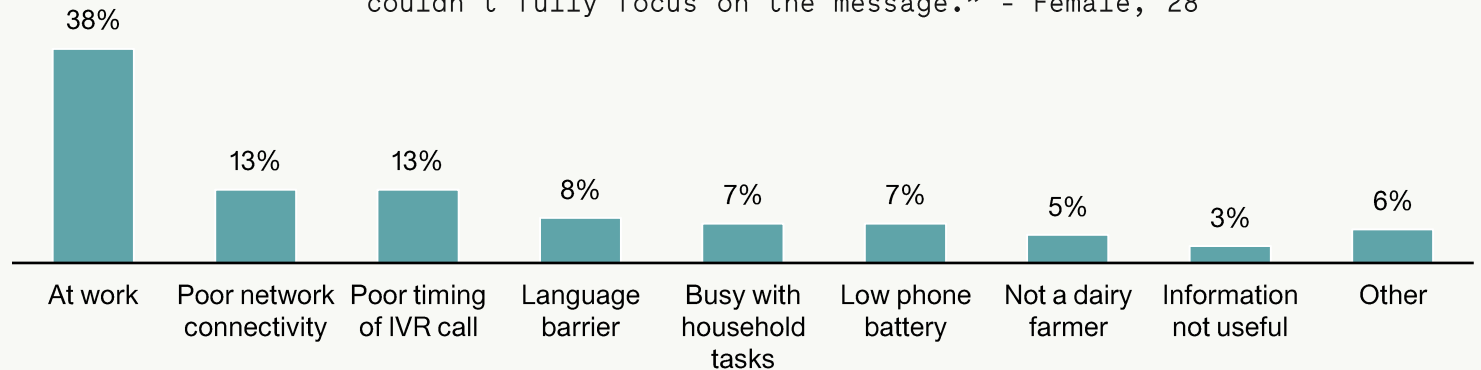
We asked partial listeners who else was in the room when they answered the IVR call. 42% mention a male or female household member, 39% mention their spouse, and 32% say no one else was there.

Reason for Drop-off

(n = 287)

“Yes, I remember that I received a message call from 8028 but as a farmer I was on my farmland working with my family that is why I don’t hear the message till the end.” - Female

“It was mainly due to connection issues. Besides that, I received the call while I was preparing meals for my family, and I couldn't fully focus on the message.” - Female, 28



Deep-dive: Partial Listeners (2/4)

Listeners were more likely to disconnect the call as they were doing another task.

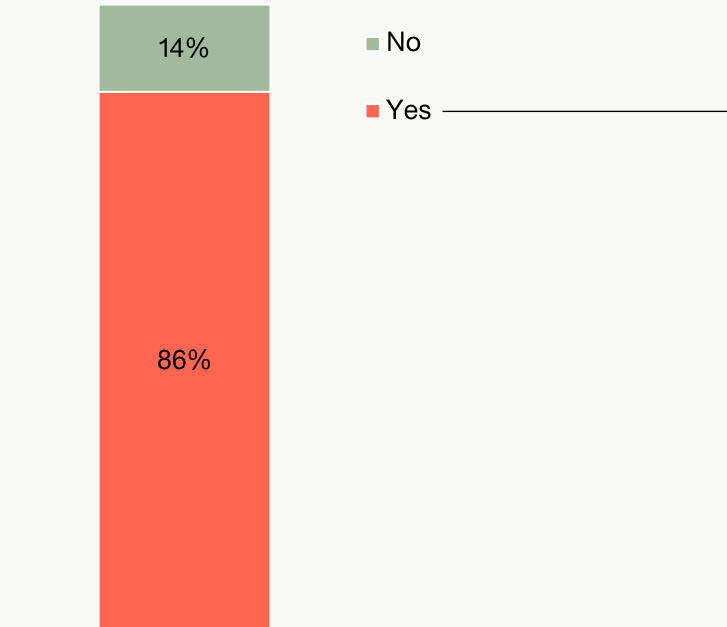
We asked partial listeners if they were doing another task at the time of the IVR call. Close to 9 in 10 partial listeners were doing another task while listening to the IVR call. We then asked if this affected their decision to disconnect the call mid-way. 4 in 10 mention it as their sole reason.

84% of female partial listeners would like to receive the call post 5 PM (see [page 14](#) for more on this metric).

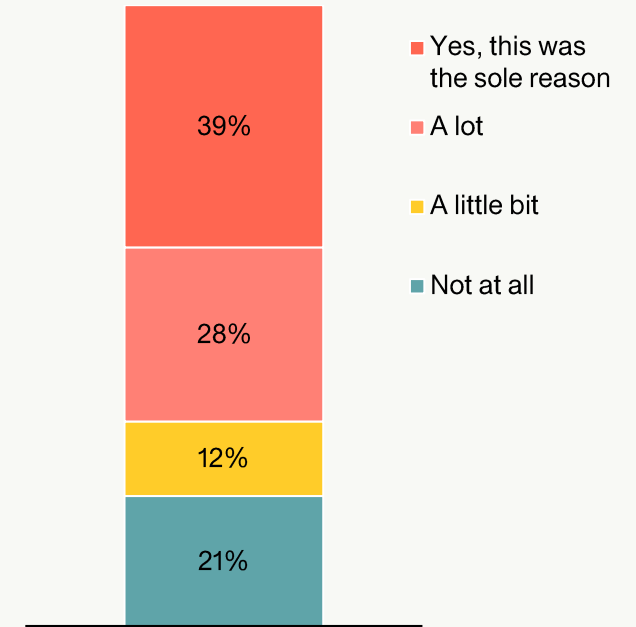
Discussion Point

Currently, when do listeners receive the call? Can the IVR push-call be scheduled in a way that farmers receive it post 5PM?x

Doing Another Task at the Time of IVR Call (n = 283)



Contributions to Disconnect IVR Call Midway (n = 244)



Deep-dive: Partial Listeners (3/4)

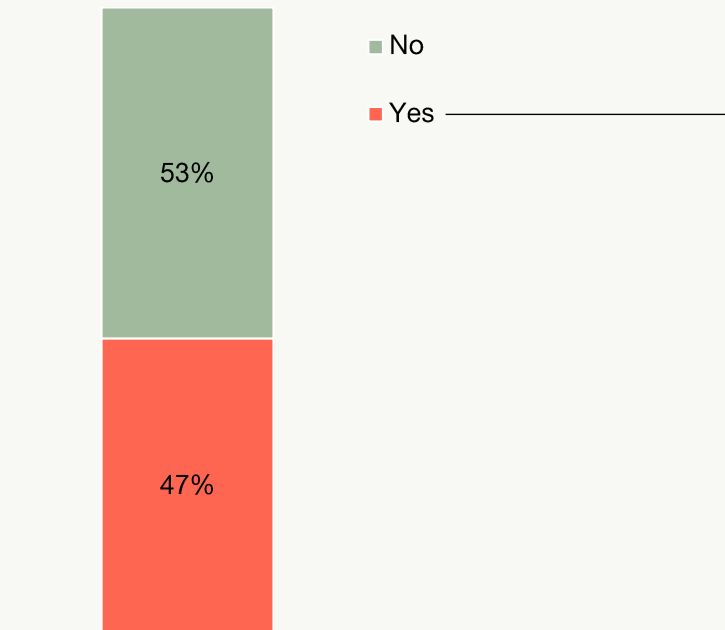
Similarly, we asked listeners if they had access to dairy farming advisory information from any other sources before receiving information from the 8028 IVR push-call.

Close to half of female partial listeners report having access to such information. Encouragingly, almost all listeners report that having prior access had no influence in their decision to disconnect the call.

Prior access to information did not influence partial listeners' decision to disconnect the call midway.

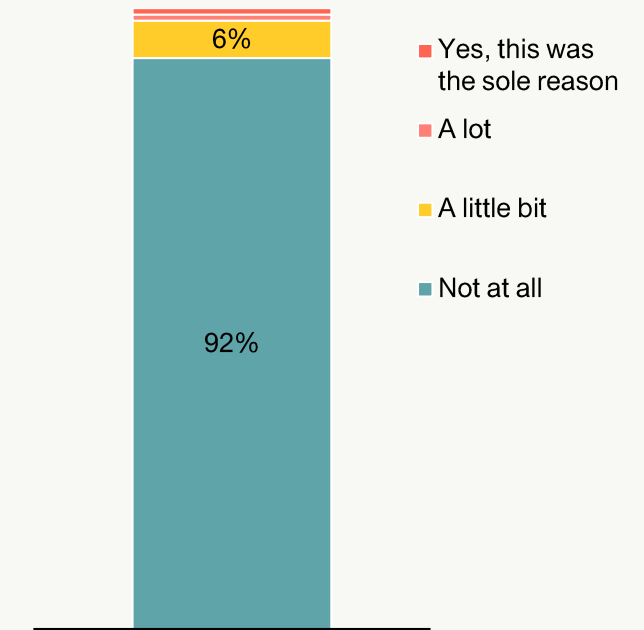
Prior Access to Similar Information

(n = 287)



Contributions to Disconnect IVR Call Midway

(n= 130)



Deep-dive: Partial Listeners (4/4)

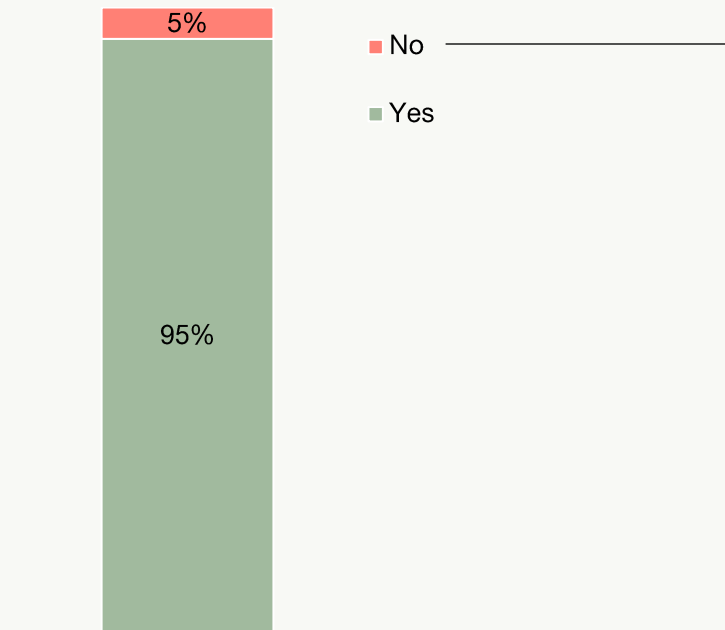
Only 5% of partial listeners did not find the information useful. The lack of usefulness influenced close to 70% to disconnect the IVR call.

Almost all listeners found the dairy farming advisory information useful for their practice. Those who did not find it useful mention that they:

- are not a cattle or dairy farmer
- lack of capital
- language barrier

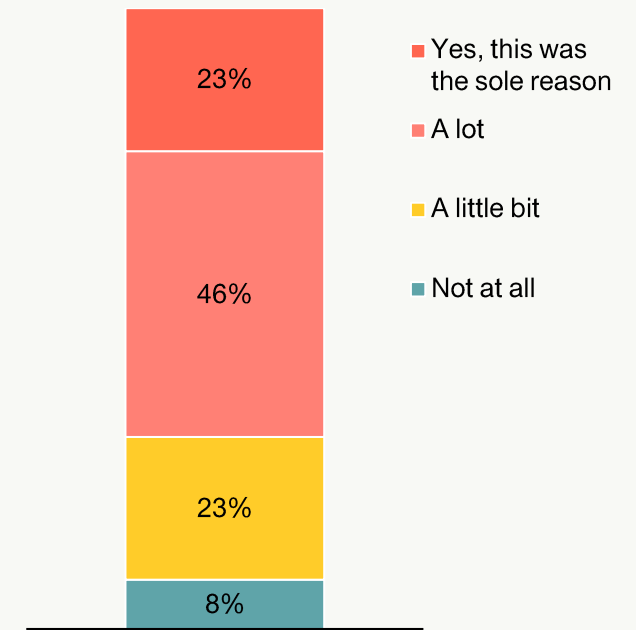
Usefulness of Information

(n=264)



Contributions to Disconnect IVR Call Midway

(n= 22)



Recommendations

There is opportunity for Digital Green to increase the reach of women farmers, and curate messages to improve female involvement.

Recommendation

Explanation



Continue trying innovative ways of reaching women with messaging, digitally.

Women's Access is Limited: Women are 14% less likely to have access to a mobile phone in Africa. Our research shows that only 6 in 10 women who have access to mobile phone report owning it and 4 in 10 have to share it with other household members.

Encourage speaker phone use and more: 46% of male primary listeners we spoke with said they heard the IVR message on a speaker phone and a female in the household listened to it as well. This is encouraging and makes a case for trialling similar approaches such as ensuring women are sent messages after 5 PM, since 9 in 10 of them requested this.



Try another way of reaching partial listeners.

Female partial listeners are more educated and from households that are better off than female listeners who heard the message in full. They were also more likely to use smartphones.

While they found the IVR information useful, they could not listen to the full message because they were busy with another task when they received the call. Making call-backs at a more appropriate time that picks up from where the listener left off could increase retention and application from this group.



Create messaging around equitable distribution of burden and benefits of dairy farming.

Male primary listeners are much more likely to be the final decision makers in household's dairy-related decisions (95%) compared to female primary (45%) and secondary listeners (12%). Additionally, male members primarily undertake purchase and feed preparation while female members primarily look after milking the cattle and milk processing.

Digital Green and partners could consider providing messaging around joint decision making to increase female levels of decision-making ability in the household. IVR message should reinforce the need for more equitable distribution of dairy activities within households.

Recommendations

There is opportunity for Digital Green to provide additional assistance to deepen impact.

Recommendation

Explanation



Incentivize women to share messages with other women in their household, and community.

Women share with women, and in a one-to-one setting. 7 in 10 female listeners share messages with women in their household and 8 in 10 share it with female community members. Additionally, female listeners were much more likely to share messages at village level groups compared to male members.

Encouraging and incentivizing women to share messages with household and community members can increase Digital Green's impact on farmers not just by interacting with them directly, but also through their family members.



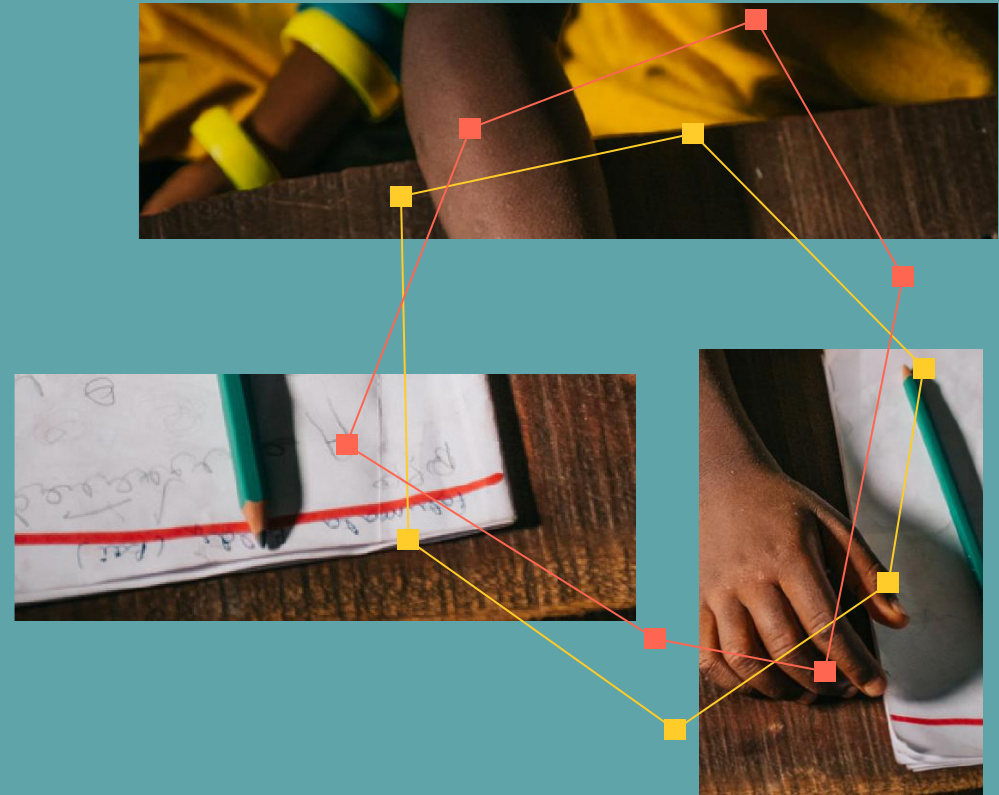
Consider women-focused financial products to encourage adoption of AI.

While comparable proportions (3 in 10) men and women are not using AI to get crossbred cow, their reasons are different. Women are more likely than men to report lack of access to credit as the main reason they did not use AI (53% vs. 31%).

Improving women farmers' access to financial products could increase the adoption of Artificial Intelligence to get crossbred cattle – and in turn, potentially increasing IVR's effectiveness.

What Next?

...& Appendix



How to Make the Most of These Insights

Example tweets or Facebook posts to share publicly

- 83% of our listeners say the quality of their lives has improved since they started listening to the 8028 IVR calls. “My milk production has improved. My children they able to drink milk regularly. Now I know it will improve their health.”
#ListenBetter with @60_decibels
- 58% of listeners would recommend us to a friend or family member – what are you waiting for?
- 28% of all challenges faced by our customers are shortage of feed related – what improvements would you like to see? We #ListenBetter with @60_decibels

Here are ideas for ways to engage your team and use these results to fuel discussion and inform decisions.

What You Could Do Next. An Idea Checklist From Us To You :-)

Engage Your Team	<input type="checkbox"/> Share staff quiz – it’s a fun way to fuel engagement & discussion <input type="checkbox"/> Send deck to team & invite feedback, questions and ideas. Sometimes the best ideas come from unexpected places! <input type="checkbox"/> Set up team meeting & discuss what’s most important, celebrate the positives & identify next steps
Spread The Word	<input type="checkbox"/> Reach a wider audience on social media & show you’re invested in your customers – we’ve added some example posts on the left
Close The Loop	<input type="checkbox"/> Let us know if you’d like us to send an SMS to interviewed customers with a short message letting them know feedback is valued and as a result, you’ll be working on XYZ <input type="checkbox"/> If you can, call back the customers with challenges and/or complaints to find out more and show you care. <input type="checkbox"/> After reading this deck, don’t forget to let us know what you thought here!
Take Action!	<input type="checkbox"/> Collate ideas from team into action plan including responsibilities <input type="checkbox"/> Keep us updated, we’d love to know what changes you make based on these insights

Detailed Benchmarking Comparison

Digital Green performs particularly well on farmers reporting challenges.

Comparison to benchmarks can be useful to identify where you are under- or over-performing versus peers, and help you set targets. We have aligned your results to the [Impact Management Project](#) framework – see next page.

Information on the benchmarks is found below:

Company Data
farmers 1,057

60dB Global Benchmark:
companies 581
customers 239,950

60dB Agriculture Benchmark
companies 17
customers 4,026

60dB Agro- Africa Benchmark
companies 12
customers 3,076

Comparison of Company Performance to Selected 60dB Benchmarks

Dimension	Indicator	Digital Green	60dB Global Benchmark	60dB Agriculture Benchmark	60dB Agro-Africa Benchmark
Who ○	% live in poverty (below \$3.20 line)	42	42	-	-
How Much ≡	% reporting quality of life very much improved	39	41	42	43
	% reporting quality of life slightly improved	44	42	39	36
What Impact □	% reporting increased income	44	-	-	-
	% reporting increased production	28	-	-	-
	% reporting improved ability to afford household bills	19	-	-	-
Contribution +	% first time accessing service	50	66	79	83
Risk △	% experiencing challenges	7	28	22	18
Experience	Net Promoter Score	49	43	44	46

Impact Management Project

We take pride in making the data we collect easy to interpret, beautiful to look at, and simple to understand and act upon.

We also align our data with emerging standards of best practice in our space, such as the [Impact Management Project \(IMP\)](#).

The IMP introduces five dimensions of impact: Who, What, How Much, Contribution, and Risk.

These dimensions help you check that you haven't missed any ways of thinking about, and ultimately measuring, the positive and negative changes that are occurring as a result of an intervention.

**IMPACT
MANAGEMENT
PROJECT**

We aligned your results to the Impact Management Project. We're big fans of the IMP – it's a simple, intuitive and complete way of conceptualizing impact.

Dimension	Explanation
Who ○	The Who of impact looks at the stakeholders who experience social and environmental outcomes. All things equal, the impact created is greater if a particularly marginalised or underserved group of people is served, or an especially vulnerable part of the planet protected. For the who of impact, we tend to work with our clients to understand poverty levels, gender and disability inclusivity.
What Impact □	What investigates the outcomes the enterprise is contributing to and how material those outcomes are to stakeholders. We collect most of this what data using qualitative questions designed to let customers tell us in their own words the outcomes they experience and which are most important to them.
How Much ≡	How Much looks at the degree of change of any particular outcome.
Contribution +	Contribution seeks to understand whether an enterprise's and/ or investor's efforts resulted in outcomes that were better than what would have occurred otherwise. In formal evaluation this is often studied using experimental research such as randomised control trials. Given the time and cost of gathering these data, this is not our typical practice. We instead typically ask customers to self-identify the degree to which the changes they experience result from the company in question. We ask customers whether this was the first time they accessed a product of technology like the one from the company, and we ask how easily they could find a good alternative. If a customer is, for the first time, accessing a product they could not easily find elsewhere, we consider that the product or service in question has made a greater contribution to the outcomes we observe.
Risk △	Impact Risk tells us the likelihood that impact will be different than expected. We are admittedly still in the early days of figuring out how best to measure impact risk – it's an especially complex area. That said, where customers experience challenges using their product or service, we do think that this correlates with a higher risk that impact does not happen (i.e. if a product or service is not in use then there's no impact). Hence, we look at challenge rates (the percent of customers who have experienced challenges using a product or service), and resolution rates (the percent of customers who experienced challenges and did not have them resolved) as customer based proxies for impact risk.

Calculations & Definitions

For those who like to geek out, here's a summary of some of the calculations we used in this deck.

Metric	Calculation
Net Promoter Score®	The Net Promoter Score is a common gauge of customer loyalty. It is measured through asking customers to rate their likelihood to recommend your service to a friend on a scale of 0 to 10, where 0 is least likely and 10 is most likely. The NPS is the % of customers rating 9 or 10 out of 10 ('Promoters') minus the % of customers rating 0 to 6 out of 10 ('Detractors'). Those rating 7 or 8 are considered 'Passives'.
Inclusivity Ratio	The Inclusivity Ratio is a metric developed by 60 Decibels to estimate the degree to which an enterprise is reaching less well-off customers. It is calculated by taking the average of Company % / National %, at the \$1.90, \$3.20 & \$5.50 lines for low-middle income countries, or at the \$3.20, \$5.50 and \$11 lines for middle income countries. The formula is: $\sum_{x=1}^3 \frac{([Company] Poverty Line \$x)}{(Country Poverty Line \$x)} / 3$

We can now access information from home.
It is easy to understand.
I can access it from my phone.

My dairy farming is

- >profitable
- >generating more income
- >has healthier cattle

now.

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