




60 \_ decibels

# DigiFarm Mshauri Wa Shamba User Experience Report



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## About This Report

Access to reliable, easy-to-use digital information is essential for smallholder farmers to make better decisions and improve their livelihoods. AI-powered solutions can support this by providing timely, relevant, and personalized advice. However, these benefits are only realized when the solutions truly meet the needs of their end-users: the farmers themselves.

SafariComm and Opportunity International's collaboration DigiFarm has created a WhatsApp based chatbot 'Mshauri Wa Shamba' as part of the Agricultural Information Exchange Program (AIEP). The aim of this solution is to develop an AI-driven, gender-sensitive platform to improve farmers' access to essential information.

The AIEP initiative leverages advanced digital tools, responsible AI, and language technology to enhance access to essential information and facilitate large-scale, two-way communication with smallholder farmers in Kenya and Bihar. It overcomes challenges like low literacy and limited digital skills by providing personalized, interactive content. AIEP also creates open Digital Public Goods, enabling anyone to build and share similar platforms to support farmers globally.

In partnership with the FAIR Forward team at Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, CLEAR Global, and funded by the Gates Foundation, 60 Decibels conducted research to evaluate how effectively these AI solutions serve farmers in their early stages.

This report is based on the voices of 103 farmers in Kenya. The report covers insights on farmers' profile, user experience and effectiveness of solutions, and early impact. Respondents were selected randomly for phone interviews from a database of farmers provided by DigiFarm. The surveys were conducted by 60 Decibels trained researchers. Farmers had a lot to share!

To learn more about our methodology, head to the [Appendix](#). We encourage you to use these results to set targets and identify ways you can further improve farmers' wellbeing with time.

**103 farmers interviewed**  
**20% are female.**

## Study Dimensions

### Dimensions

### Indicators



#### User Engagement

- Information received
- Value chain where applied
- Facilitated by extension agent or accessed directly



#### User Experience with Overall Service

- Convenience
- Net Promoter Score (NPS)
- Challenges



#### User Experience with Asking Questions

- Comfort asking questions
- Perceived relevance
- Perceived completeness
- Perceived responsiveness
- Ease of understanding



#### Early Impact & Scalability

- Practical implementation
- Confidence in decision-making

# 60dB Perspective

## Top Insights

### 1 Digital engagement is high among farmers.

The average farmer we spoke to was a 34-year-old male, farming on an average of 3.2 acres of land.

Smartphone ownership is high among farmers (95% owning smartphones vs 8% sharing) and so is internet usage (91% of farmers). Almost all farmers (97%) use DigiFarm's Mshauri chatbot independently and were motivated to use the app primarily to access new information.

See pages: [7](#), [8](#)

### 3 While some farmers have access to other sources of information, most prefer Mshauri.

35% of farmers report having access to alternatives such as fellow farmers, agrodealers, and the internet.

However, 76% of farmers believe Mshauri is 'much better' than these alternatives, showing a strong preference for DigiFarm's Mshauri in a competitive market.

See page: [10](#), [12](#)

### 5 DigiFarm's Mshauri enable farmers to feel more confident with the practical and timely advice they receive.

Farmers find the information provided by Mshauri helpful with 47% indicating they applied all the advice to their farming. Those who were unable to apply, cite reasons related to input and financial constraints.

73% of farmers report always finding timely information. Similarly, 67% of farmers report feeling 'very confident' about their farming decisions. This indicates that the information is not only valued but also reaching farmers when they need it most.

See pages: [16](#), [18](#), [19](#)

### 2 Farmer satisfaction is high, but there is room to improve satisfaction.

Mshauri has a Net Promoter Score® of 40, which is good but lower than the 60dB Agriculture Benchmarks. This is primarily driven by a high proportion of Passives (35%), who are content with the service but not active promoters.

Farmer satisfaction among Promoters is driven by detailed and prompt responses from Mshauri. However, 19% of farmers report challenges, mostly related to receiving more accurate and easier-to-understand information. Addressing these issues could boost satisfaction.

See pages: [12](#), [13](#).

### 4 Providing accurate and verified information is key to farmers using Mshauri.

A quarter of farmers report that they verify the information they receive from Mshauri via other sources. Farmers with access to similar alternatives were much more likely to verify the information they received (36%), compared to those with no access to alternatives (6%).

Despite this, almost 9 in 10 farmers find the information received via Mshauri to be 'complete', and only 2% report using supplemental sources for additional information.

See pages: [14](#), [15](#)

# Performance Snapshot

The performance column presents how you compare to 60 Decibels Benchmarks in the Agriculture sector globally. This is comprised of 144 companies, 25 countries, and 47,864 beneficiaries.

We also compare Mshauri’s results with our national pilot in Kenya, where we collected profile and user engagement data from users of digital farmer information services (DFS).

You can find additional insights of your results, in the context of the 60 Decibels Benchmarks, in the [Appendix](#).

Performance vs 60dB Benchmarks



Who are you reaching?	Mshauri Performance	60dB Information DFS Kenya Benchmark	60dB Global Agriculture Benchmark	Performance Relative to 60dB Agriculture Benchmark
Female	20%	51%	31%	● ○ ○ ○ ○
Average land size (acres)	3.2	2.0	-	-
% smartphone ownership	95%	37%	-	-
% using internet-enabled services	99%	59%	-	-
What impact are you having?				
% ‘very confident’ in making decisions about farming practices	67%	48%	-	-
How satisfied are your services?				
Net Promoter Score	39	26	46	● ● ○ ○ ○
% experiencing challenges	19%	17%	20%	● ● ● ○ ○
% receiving information ‘always’ when they need it	73%	26%	-	-



# 01: Profile & User Engagement

This section helps you understand farmers' profiles to help contextualize the results.

The key indicators in this section are:

- **Demographics:** Who are the farmers we spoke with?
- **Digital Profile:** Do your farmers have access to smart phones? How are they using their phones?
- **Service Usage:** Why did they decided to use Mshauri's service? What type of information did they access?

Profile

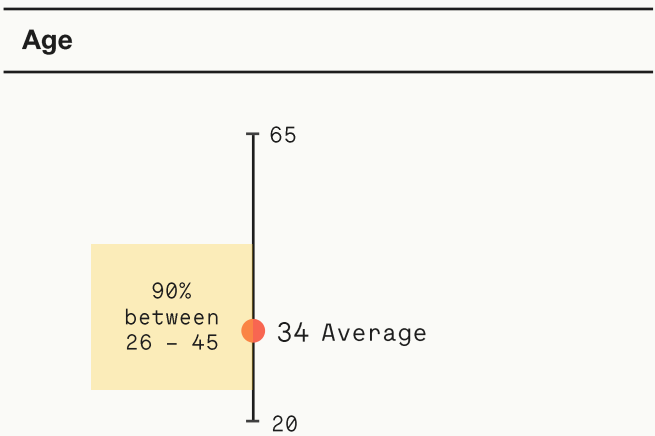
# A typical farmer we spoke to is a 34-year-old male, living in Nakuru.

## Demographics

Gender Breakdown	
Male	80%
Female	20%

●○○○○  
BOTTOM 20% - 60dB Benchmark

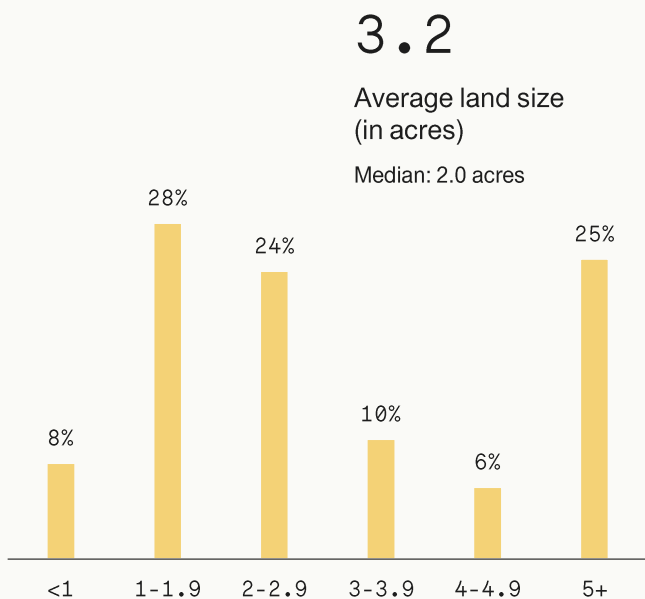
County	
Nakuru	30%
Nyandarua	25%
Narok	23%
Elgeyo Marakwet	11%
Others	9%



# On average, farmers cultivated 3.2 acres of land in the past year.

## Land Size (Acres)

Q: How much total land did you use for farming in the last 12 months? (n = 99)



### Insight

Male farmers typically have larger farms, averaging 3.5 acres, while female farmers manage relatively smaller farms, averaging 2.2 acres.\*

Compared to the 60dB national benchmark for farmers in Kenya, their average land size is bigger (3.2 vs. 2 acres).

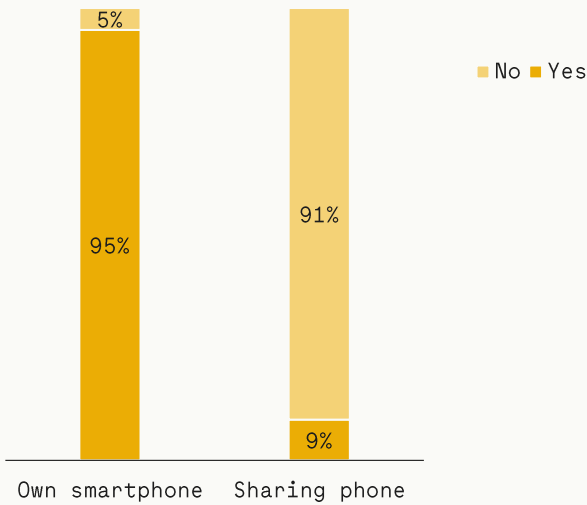
\* Please consider the difference in sample sizes between male (n = 82) and female (n = 21) farmers when interpreting results. Percentages based on smaller samples should be considered indicative or directional.

Profile

# Nearly all farmers own a smartphone and use it for internet services.

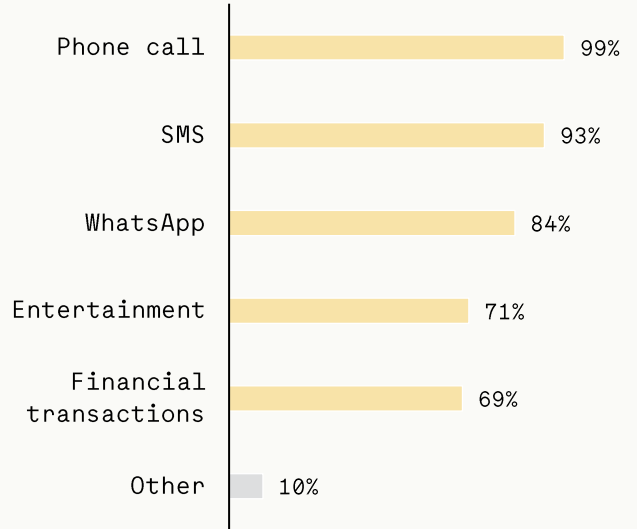
## Phone Access

Q: Do you have a smartphone? (n = 103)  
Q: Do you share your mobile phone with anyone else? (n = 103)



## Phone use

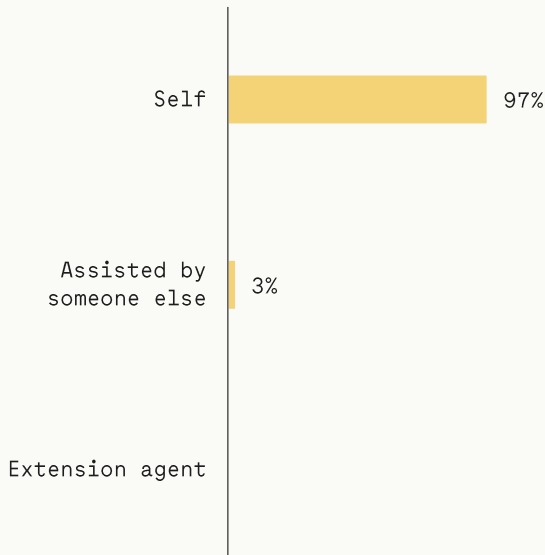
Q: Which of the following do you use your phone for? Select all that apply (n = 103)



# Nearly all farmers access Mshauri independently.

## Mode of Engagement

Q: How do you access DigiFarm's Mshauri? Select all that apply (n = 103)



### Insight

9 in 10 farmers use their phone for internet-enabled services (i.e. WhatsApp and entertainment).

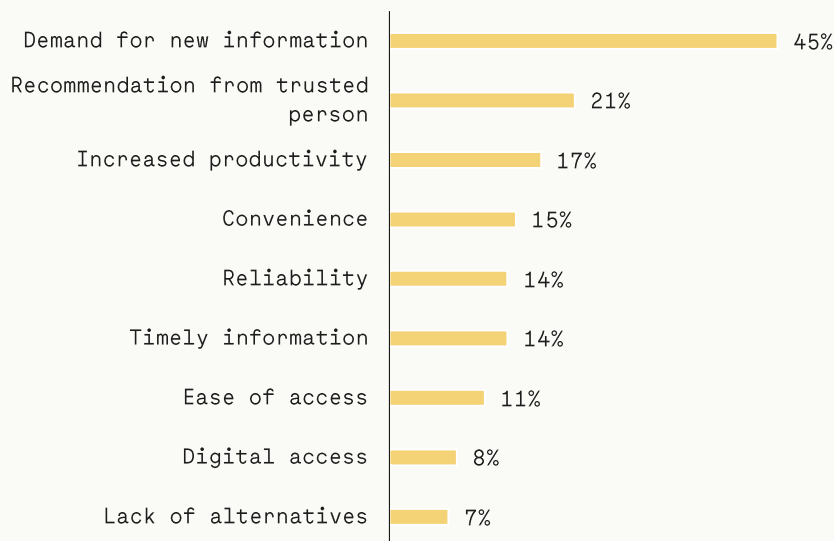
Compared to the 60dB national benchmark for farmers in Kenya, a significantly larger share of the farmers in this study own smartphones (95% vs. 55% nationally) and use internet-enabled services on their phones (91% vs. 59% nationally).

Profile

## Farmers were motivated to use Mshauri mainly to access to new farming information and based on trusted recommendations.

### Motivation for Use

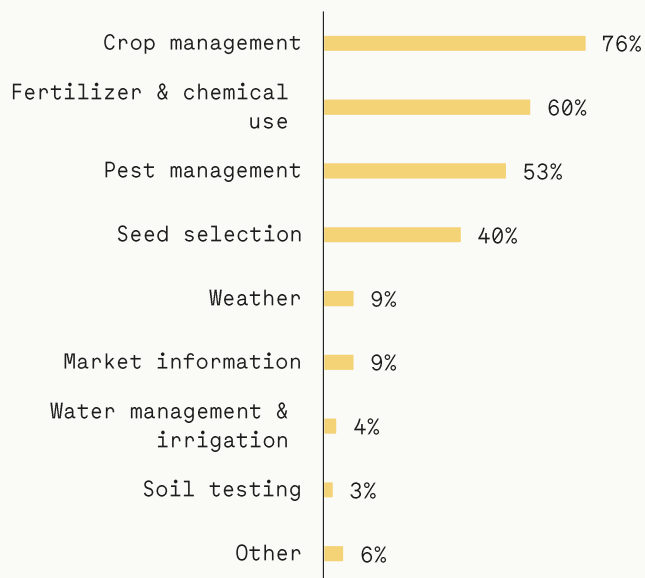
Q: Why did you decide to use Mshauri? (n = 103) Open-ended, coded by 60 Decibels.



## Most farmers access information on crop management and inputs via Mshauri. They mainly apply this information to grow potatoes.

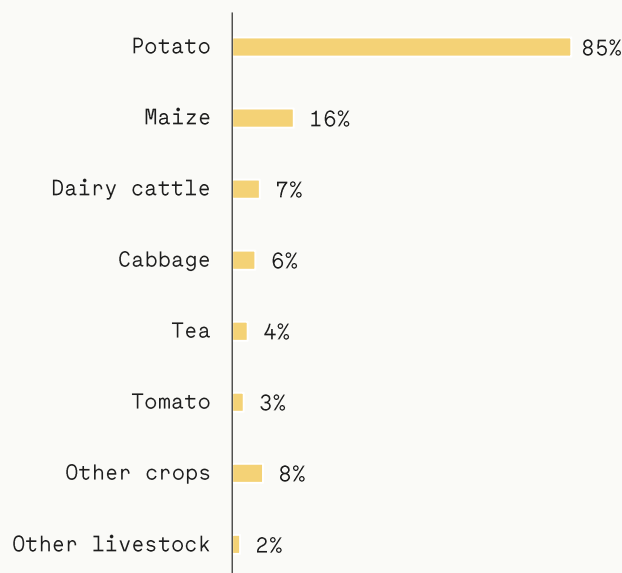
### Type of Information Accessed

Q: What type of information did you access from the DigiFarm Mshauri? (n = 103)



### Crops Information was Applied To

Q: Which crops/livestock did you apply this information to? Open-ended, coded by 60 Decibels (n = 103)

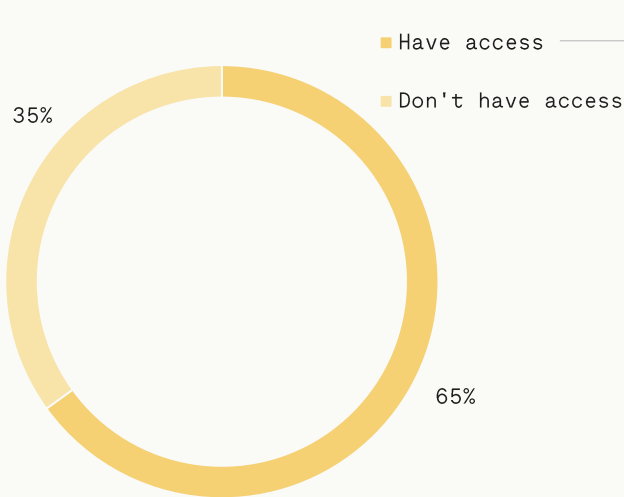


Profile

# Over a third of farmers would not have access to farm-related information if it weren't for Mshauri.

## Access to Alternatives

Q: If you did not have access to Mshauri, where would you get this information? (n = 103)



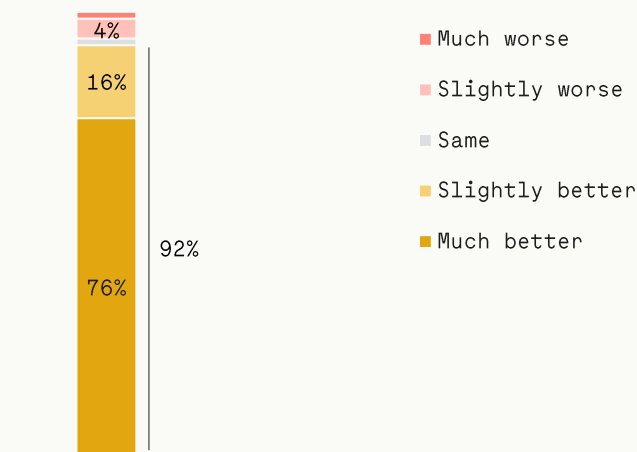
### Main alternatives are:

- Fellow farmers (19%)
- Agrodealers and Agrovets (18%)
- Internet (17%)
- Agriculture extension officers (15%)
- Other similar providers (10%)

# Nearly all farmers with alternatives consider DigiFarm's Mshauri better than the alternative.

## Comparison to Alternatives

Q: (Asked to farmers with alternatives) How does DigiFarm's Mshauri compare to this other information provider? (n = 67)



“

Some sources, like my earlier information provider, don't provide the level of detail that DigiFarm does.

- Male, 32 years



# 02: User Experience

If your farmers are unhappy, it's unlikely they will continue to choose your service or recommend to others.

This section uses the popular Net Promoter Score<sup>®</sup> to understand the level and drivers of farmer satisfaction and loyalty. Additional insights on challenges and suggestions for improvement highlight areas you can improve.

The key indicators in this section are:

- **Service KPIs:** Are farmers getting complete answers from Mshauri's service? Is the information timely and relevant?
- **Net Promoter Score:** How likely are your farmers to recommend your company to a friend?
- **% Experiencing Challenges:** What proportion of farmers experience challenges with your service?

Experience

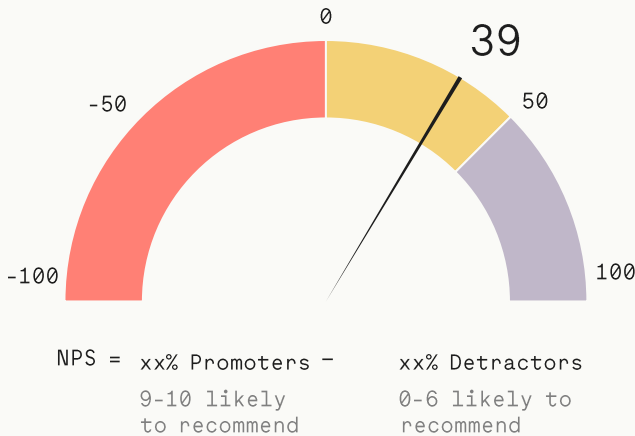
# DigiFarm Mshauri has an NPS of 39, which is favourable but slightly lower than the 60dB Benchmark (41).

## Net Promoter Score® (NPS)

Q: On a scale of 0-10, how likely are you to recommend DigiFarm Mshauri to a friend or family member, where 0 is not at all likely and 10 is extremely likely? (n = 103)

The Net Promoter Score® (NPS) is a gauge of respondent satisfaction and loyalty. The NPS is the percent of farmers rating 9 or 10 ('Promoters') minus the percent of farmers rating 0 to 6 ('Detractors'). Those rating 7 or 8 are 'Passives'.

The score can range from -100 to 100. DigiFarm Mshauri in Kenya has an NPS of 39, which is good.



Segments	NPS
Female	37
Male	43
Access to alternatives	31
No access to alternatives	49

●●○○○  
 BOTTOM 40% - 60dB Benchmark

## Promoters value advisory services and prompt response time. However, detractors want a more responsive chatbot with clearer information

Follow up from NPS question: We ask respondents to explain their rating to provide an insight into what they value and what creates dissatisfaction.

**52%** 😊  
 are Promoters

**35%** 😐  
 are Passives

**13%** ☹️  
 are Detractors

**They love:**

**They like:**

**They want to see:**

1. Detailed advisory (31% of Passives/ 10% of all respondents)
2. Prompt responses (31% of Promoters / 16% of all respondents)
3. Accessibility (28% of Promoters/ 14% of all respondents)

1. Detailed advisory (31% of Passives/ 10% of all respondents)
2. Prompt responses (19% of Passives/ 7% of all respondents)

**They complain about:**

1. Being dependent on smartphones (13% of Passives/ 6% of all respondents)

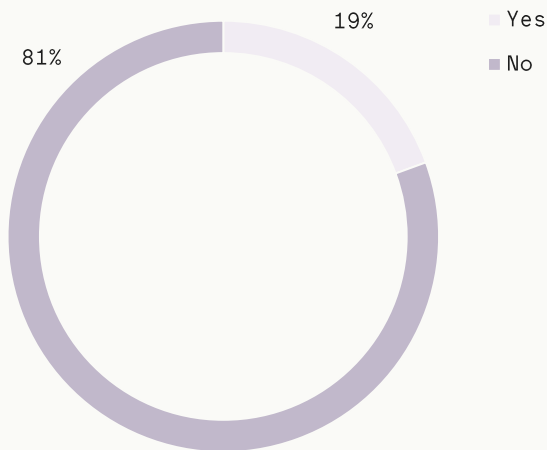
1. More responsive chatbot (5 respondents)
2. More information on extension service (3 respondents)

Experience

# 1 in 5 farmers report experiencing a challenge with DigiFarm’s Mshauri.

## Proportion of Farmers Reporting Challenges

Q: Have you experienced any challenges with DigiFarm Mshauri?  
(n = 103)



MIDDLE 60dB - Benchmark

## The most common challenges are inaccurate information and difficulty understanding technical language.

### Most Common Challenges

Q: Please explain these challenges. (n = 19)  
Open-ended, coded by 60 Decibels.

32%

mention inaccurate information  
(6 farmers)

26%

talk about difficulty understanding technical language  
(5 farmers)

21%

mention network issues  
(4 farmers)

“

Mshauri did not provide well explained answers when I inquired about potato market info.

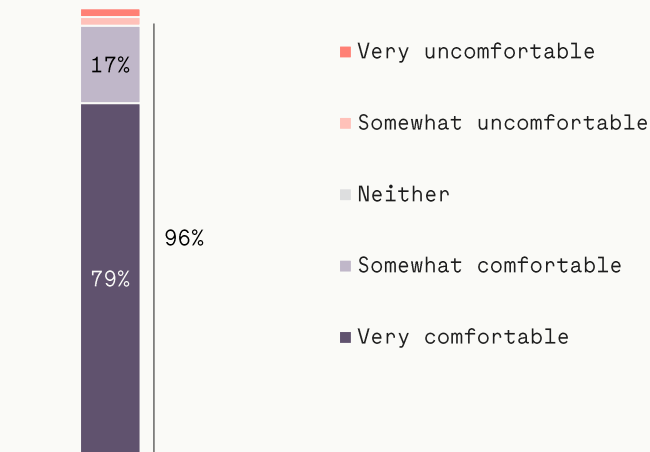
– Male, 35 years

Experience

# 4 in 5 farmers we spoke to are ‘very comfortable’ asking questions to Digifarm’s Mshauri.

## Comfort with Asking Questions

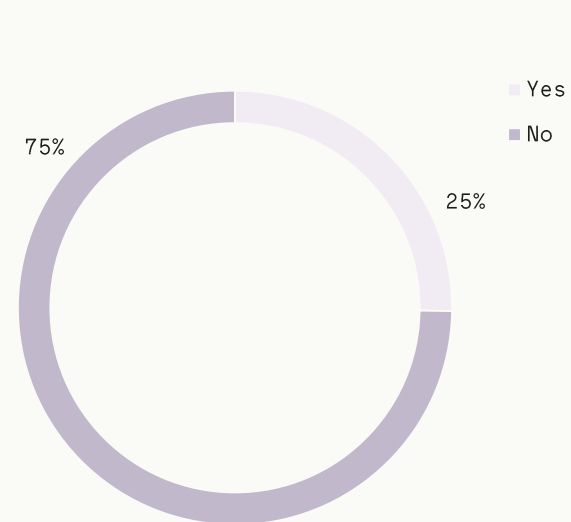
Q: To what extent do you feel comfortable asking questions to DigiFarm Mshauri? (n = 103)



# 1 in 4 farmers verify the information they receive from DigiFarm Mshauri with another source.

## Information Verification

Q: Did you have to verify the information from DigiFarm Mshauri with another source? (n = 103)



### Insight

Farmers with access to alternatives to Mshauri were much more likely to verify the information they received (36%), compared to those with no access to alternatives (6%).

Sources of verification include:

- Fellow farmers (9 farmers)
- Local agricultural sources (5 farmers)
- Agrovet (4 farmers)
- Google (4 farmers)
- Freshcrop (2 farmers)
- Others including Apollo agents, ChatGPT, KALRO, Tupande, and guidebooks.

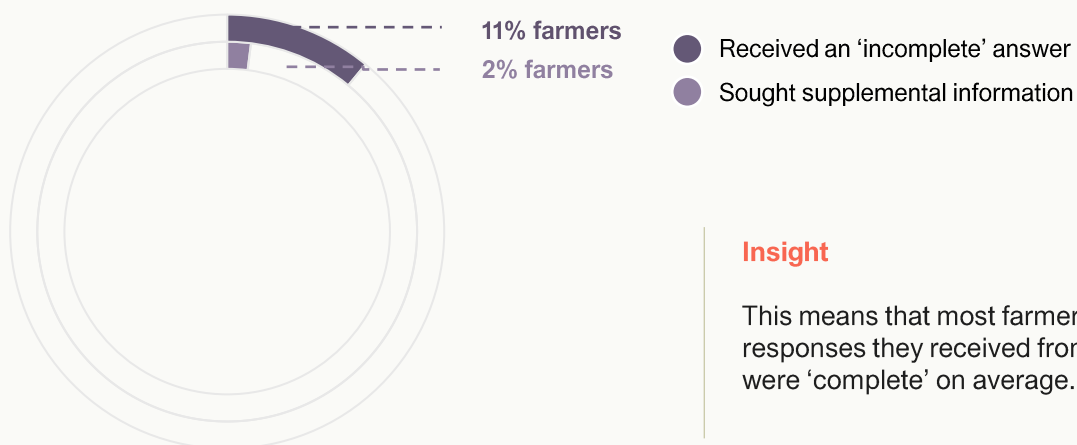
📶 Experience

# 11% farmers say the responses they received were ‘incomplete’ on average. Only 2% sought additional information from other sources.

## Completeness of Responses

Q: Think about the question(s) you asked Mshauri, did it provide a complete answer to your question(s)? (n = 103)

Q: Did you have to get additional information or advice from another source? (n = 103)



### Insight

This means that most farmers feel the responses they received from Mshauri were ‘complete’ on average.

# Most farmers who received incomplete responses, talk about missing information or lack of precision.

## Why Response is Incomplete

Q: Why were the answer(s) not complete? Select all that apply. (n = 11)

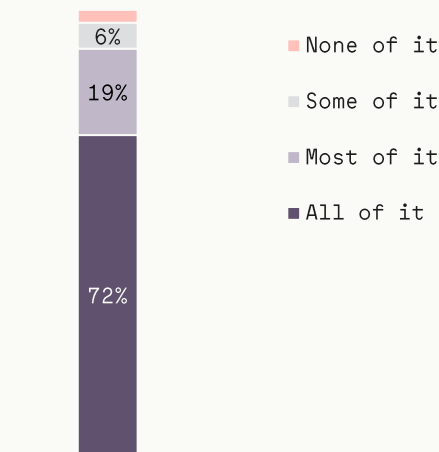
- Missing information (4 respondents)
- Imprecise information (4 respondents)
- Answered wrong question (3 respondents)
- No information provided (2 respondents)
- Generic recommendation (1 respondent)
- Referred to another source (1 respondent)

Experience

# 72% of the farmers we spoke to find ‘all’ the information on Mshauri ‘very relevant’ and 73% report ‘always’ getting timely responses.

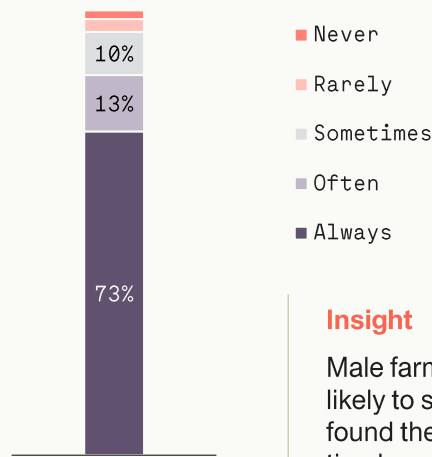
## Relevance

Q: How much of the information you received from DigiFarm Mshauri was relevant to the question(s) you asked? (n = 103)



## Timeliness

Q: How often did the DigiFarm Mshauri provide an answer to your question(s) within the time you needed? (n = 103)



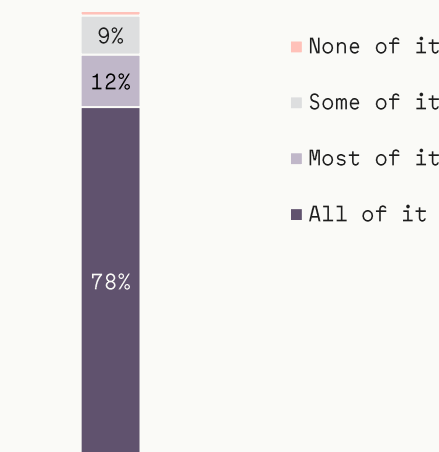
### Insight

Male farmers are more likely to say that ‘always’ found the information timely, compared to female farmers (79% vs 48%).\*

# 78% find ‘all’ the information easy to understand. Those who do not mention unclear or poorly explained terms.

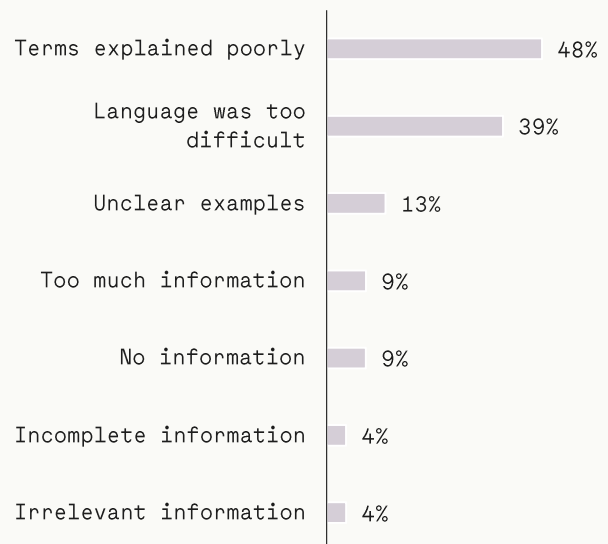
## Ease of Understanding

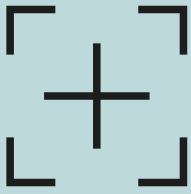
Q: How much of the information you received from DigiFarm Mshauri was easy to understand? (n = 102)



## Reason for Lack of Understanding

Q: Why was some of the information ‘not easy’ to understand? Select all that apply (n = 23)





# 03:

## Early Impact & Scalability

This section shows you the extent to which you are influencing farmers' farming knowledge and their ease of using digital tools.

We also explore scalability, future usage, and preferences. Also providing additional insights into suggestions for expanding services and identifying clear opportunities for improvement and growth.

The key indicators in this section are:

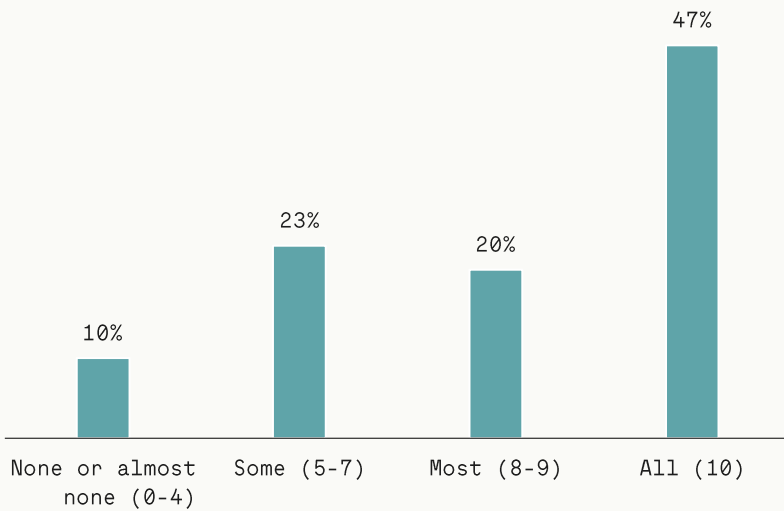
- **Application:** To what extent are your farmers applying the information they received from Mshauri?
- **Confidence:** Did Mshauri change farmers' confidence in making decisions about their farming practices?
- **Preferences:** Which language and mode do farmers prefer to receive information in?
- **Future Use:** Do they plan to continue using it as source of information?

[+] Impact

# 47% farmers say they applied all the information they received from DigiFarmer Mshauri to their farms.

## Application to Farming

Q: On a scale of 0-10, how much of the information you received from DigiFarmer Mshauri did you apply to your farming, with 0 being none of the information and 10 being all of it? (n = 103)



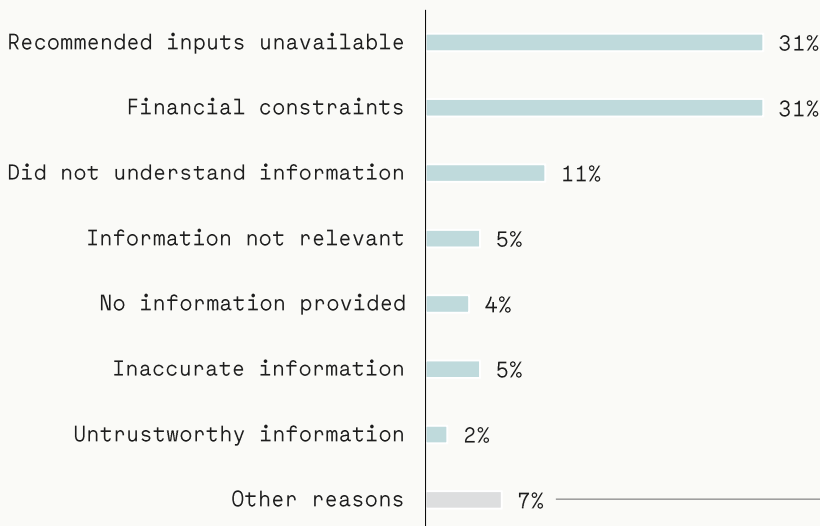
### Insight

Male farmers were more likely to apply all the information to their farming compared to female farmers (51% vs 29%).\*

# Farmers who don't apply all the information mostly cite limited access to inputs and financial constraints as top reasons.

## Reasons for Non-Application

Q: What was the main reason you did not apply all the information to your farming? Select all that apply (n = 55).



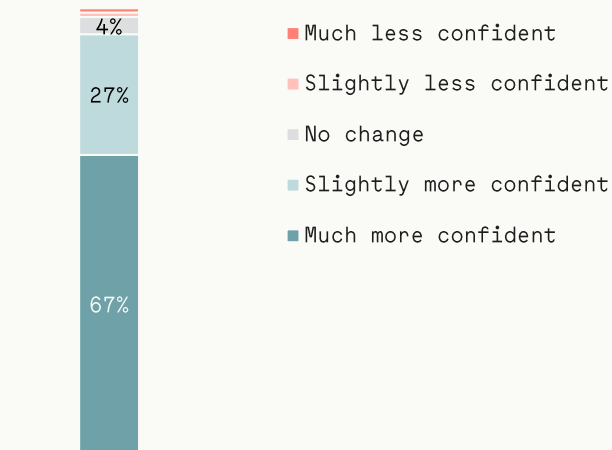
Farmers who say 'other' talk about the timing of season, gaps in information, and referral to other sources.

[+] Impact

# 67% of farmers report feeling ‘much more confident’ making farming decisions because of Mshauri.

## Change in Confidence

Q: After using Mshauri, has your confidence in making decisions about your farming practices changed? (n = 103)



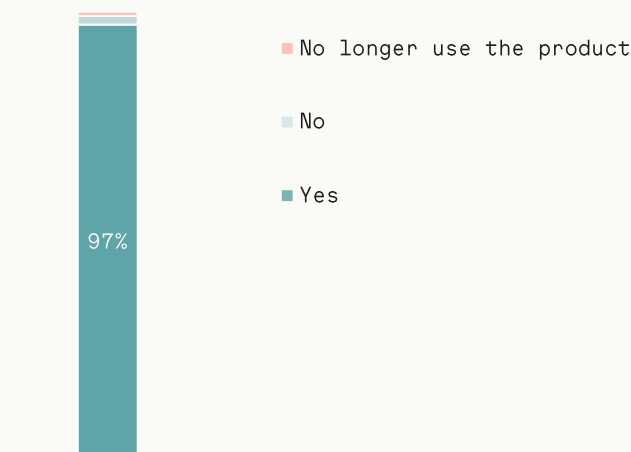
### Insight

Male farmers are more likely to say that they were ‘very confident in making farm decisions compared to female farmers (72% vs 46%).

# Nearly all farmers say they will continue using DigiFarm’s Mshauri.

## Future Use

Q: Do you plan to continue using the DigiFarm Mshauri for your farming? (n = 103)



“

The service provides instant and trusted feedback. I applied the information I received from the advisor and saw positive results.

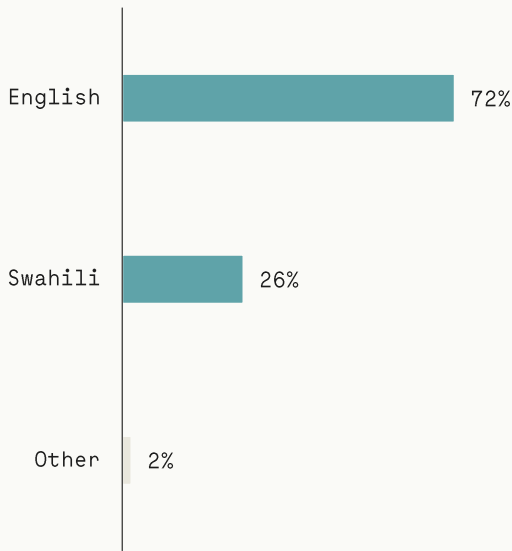
- Male, 36 years

[+] Impact

## Farmers are comfortable receiving farm-related information in English, preferably via WhatsApp and SMS.

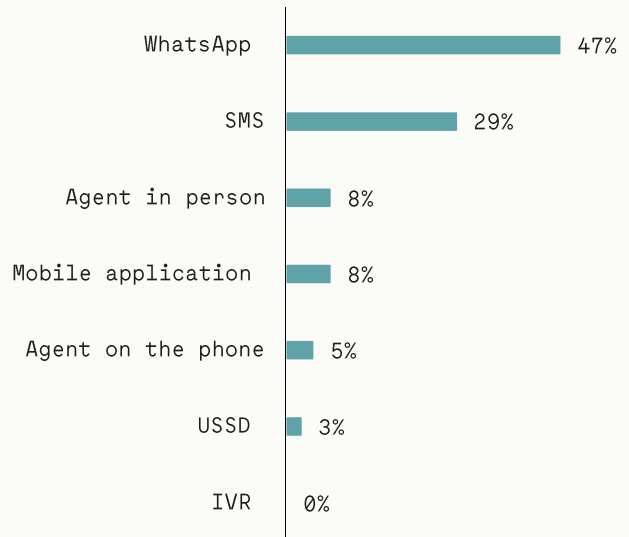
### Preferred Language

Q: What language(s) are you most comfortable receiving farm related information in. Select all that apply. (n = 103)



### Preferred Mode

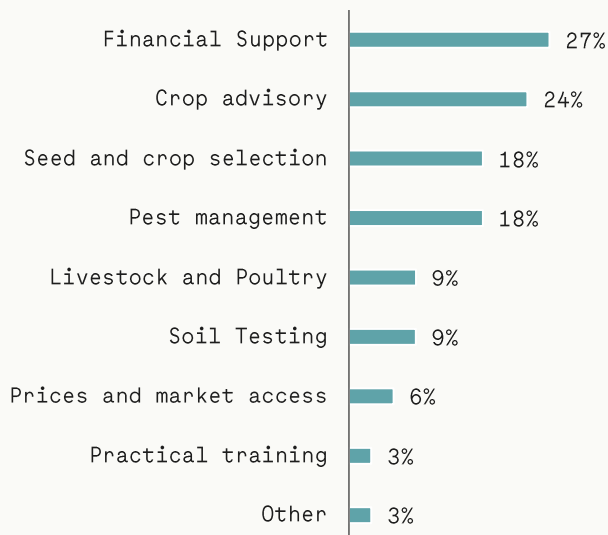
Q: Which channel would you most prefer to use for accessing DigiFarm Mshauri? (n = 103)



## The most common suggestions from farmers are to include advisory on financial support and crop farming.

### Suggestions from Farmers

Q: What type of information do you need that is not provided by Mshauri? (n = 33).  
Open-ended question, responses coded by 60dB



#### Insight

Overall, 68% farmers indicate that they found all the information they needed from Mshauri. These farmers also report a higher NPS of 57, compared to the average of 39.



# Appendix

# Methodology

## About the 60 Decibels Methodology

In April and May 2025, 60 Decibels trained enumerators from SafariComm to conduct 103 phone interviews with farmers using DigiFarm’s Service, Mshauri. The farmers were randomly selected from a random sample of DigiFarm’s contact database. Here is the breakdown of how we collected this data:

Country	<b>Kenya</b>
Contacts Shared	<b>500</b>
Interviews Completed	<b>103</b>
Response Rate	<b>75%</b>
Languages	<b>Swahili / Kiswahili</b>
Average Survey Length	<b>21 mins</b>
Confidence Level	<b>90%</b>
Margin of Error	<b>7%</b>

## Calculations and Definitions

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

### Metric

### Calculation

Net Promoter Score®

The Net Promoter Score (NPS) is a common gauge of client satisfaction and loyalty. It is measured by asking clients to rate their likelihood to recommend a product/service to a friend or family member on a scale of 0 to 10, where 0 is least likely and 10 is most likely. The NPS is the % of clients rating 9 or 10 out of 10 (‘Promoters’) minus the % of clients rating 0 to 6 out of 10 (‘Detractors’). Those rating 7 or 8 are considered ‘Passives’.

# Ideas for How to Use these Results

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

## Review Your Results

- Review your results and qualitative customer responses. There's a lot of interesting feedback in there!
- 

## Engage Your Team

- Send the report to your team & invite feedback, questions and ideas. Sometimes the best ideas come from unexpected places!
  - Set up a team meeting & discuss what's most important, celebrate the positives, and identify next steps.
- 

## Spread The Word

- Reach a wider audience on social media & show you're invested in your farmers.
- 

## Close The Loop

- We recommend posting on social media/website/blasting an SMS saying a 'thank you to everyone who took part in the recent survey with our research partner 60 Decibels, your feedback is valued, and as a result, we'll be working on XYZ'.
  - After reading this report, don't forget to let us know what you thought: [Click Here!](#)
- 

## Take Action!

- Collate ideas from team into an action plan including responsibilities.
- Keep us updated, we'd love to know what changes you make based on these insights.
- Set up the next Lean Data project – we recommend checking in again in 6 to 12 months.

## About 60 Decibels

[60 Decibels](#) is a global, tech-enabled impact measurement company that brings speed and repeatability to social impact measurement and customer insights. We provide genuine benchmarks of impact performance, enabling organizations to understand impact relative to peers and set performance targets. We have a network of 1000+ researchers in 70+ countries and have worked with more than 800 of the world's leading impact investors, companies, foundations, corporations, NGOs, and public sector organizations. 60 Decibels makes it easy to listen to the people who matter most.

### Project Team

Hanadi Al-Saidi

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## Thank You For Working With Us!

### Let's do it again sometime.

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