

M-shamba

Impact Performance Report



Overview

Introduction

Mercy Corps Agrifin and World Bank Kenya partnered with [60 Decibels](#) to assess the impact of the [Disruptive Agriculture Technology](#) partnership on the companies in its cohort as well as the end farmers affiliated with these companies.

60 Decibels surveyed 265 farmers engaged with M-shamba in Kenya. Farmers were asked about their experience with the company and the changes this interaction in enabling in their farms and lives. This report presents insights from these interviews. To learn more about our methodology please refer to the [Appendix](#).

We checked for trends by gender and tenure and called them out wherever statistically significant. A full breakdown of the key metrics by gender and tenure can be found on pages [19](#) and [20](#).

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Mercy Corps AgriFin Program (MCAF)



About MCAF

Mercy Corps' AgriFin is funded by Bill and Melinda Gates Foundation and Bayer Foundation to help organizations design, test and scale digitally-enabled services for Africa's smallholder farmers.

Goal

Our objective is to develop sustainable services that increase farmer income and productivity by 50%, with 50% outreach to women.

The model

- MCAF works as an innovation partner with private sector scale partners such as banks, mobile network operators, agribusinesses, as well as technology innovators and governments committed to serving smallholders at scale.
- Assist partners develop, test and scale bundles of digitally-enabled financial and non-financial services supporting partnership development between market actors that leverage their strengths.
- Combine MCAF team expertise with strategic subsidy to jointly implement iterative, fail-fast engagements with partners on a cost-share basis, sharing public learnings to drive market ecosystem growth.
- Since 2015, we have completed more than 200 engagements with over 150 partners across Africa. With this support, AgriFin has reached more than **17 million smallholders**.

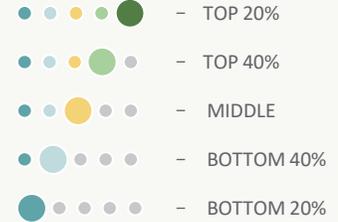
Performance Snapshot

The Benchmark Performance column shows how you compare to 60 Decibels Agriculture Benchmark.

Performance vs 60dB Benchmarks

Benchmark Overview

Africa geographical focus	Farmers as Customer sector focus	33 companies included	9k+ voices listened to
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Who are you reaching?

Benchmark Performance

Inclusivity Ratio	0.74	● ● ● ● ● ●
% accessing product/service for first time	71	● ● ● ● ● ●
% could not easily find a good alternative	73	● ● ● ● ● ●



What impact are you having?

% seeing 'very much improved' way of farming	46	● ● ● ● ● ●
% seeing 'very much increased' production	40	● ● ● ● ● ●
% seeing 'very much increased' money earned	36	● ● ● ● ● ●
% seeing 'very much improved' quality of life	41	● ● ● ● ● ●



How satisfied are your farmers?

Net Promoter Score	19	● ● ● ● ● ●
% experiencing challenges	31	● ● ● ● ● ●

Top Insights

1

Market Contribution: M-shamba is providing a unique service to an underserved market. 71% of farmers say they are getting first-time access to a service like M-shamba, with 73% saying they cannot find a good alternative for it.

36% of all M-shamba farmers live under \$3.20 per day, which is lower than the national (47%) and rural (65%) averages. This indicates that M-shamba is serving slightly well-off farmers.

For discussion: How can M-shamba diversify its customer base to cater to poorer farmers in Kenya?

See pages: [6-7](#)

2

Impact on Farm and Life: M-shamba is catalyzing a positive impact on the lives of its farmers. 93% of farmers report an improvement in their farming methods, with 46% reporting significant improvements. Farmers report seeing an increase in their production levels and the returns they get from their farming.

7 in 10 farmers have seen an increase in their savings and 4 in 10 are able to reduce their debt because of M-shamba. As a result, 87% of farmers are experiencing improved quality of life, with 42% reporting significant improvements.

M-shamba's impact performance is strongly associated with tenure. Farmers who have interacted with M-shamba for more than a year report better on experience and impact outcomes than those who have interacted with M-shamba for a year or less.

An idea: Incorporate these positive insights into your marketing material as evidence of your impact.

See pages: [9-12](#)

3

Farmer Experience: M-shamba has a Net Promoter Score® of 19, which is good and indicates that farmers are satisfied. Top drivers of satisfaction are access to training on farming techniques, improved farming methods, and increase in productivity. M-shamba's low challenge rate (31%) may also contribute to high customer satisfaction.

A recommendation: Focussing on farmer suggestions can help increase satisfaction. Top suggestions by farmers are around getting more farm inputs, consistent company support, timely access to quality seeds, and better-organized trainings.

See pages: [15-16](#)

Profile

“

I love that they were able to provide me with quality seedlings and fertilizers to boost my production. My outputs have since been very good. –
Female, 42

About the Farmer & Farm

The typical M-shamba farmer is 51 years old and lives in rural Kenya in a household with 5 other members.

6.1

Average household size

51

Average age

53%

Female

25

Average months of engagement with M-shamba

2

Average number of services received; Training on planting is most common

2.8

Acres cultivated by a typical farmer last year

81%

Of the land cultivated last year used M-shamba offerings

65%

Of household income last year came from crop

36% of M-shamba customers live in poverty. This is lower than the national average of 47% and the rural average of 65%, indicating that M-shamba is serving a slightly wealthier customer base. There is room for M-shamba to reach more lower-income farmers.

Farmers' Income Distribution Relative to Kenya's Average

% living below \$x.xx per person per day (2011 PPP) (n = 265)



Inclusivity Ratio

Degree to which M-shamba is reaching low-income farmers in Kenya

0.74

1 = parity with population;
> 1 = over-serving;
< 1 = under-serving.

See Appendix for calculation.

● ● ● ● - BOTTOM 40%

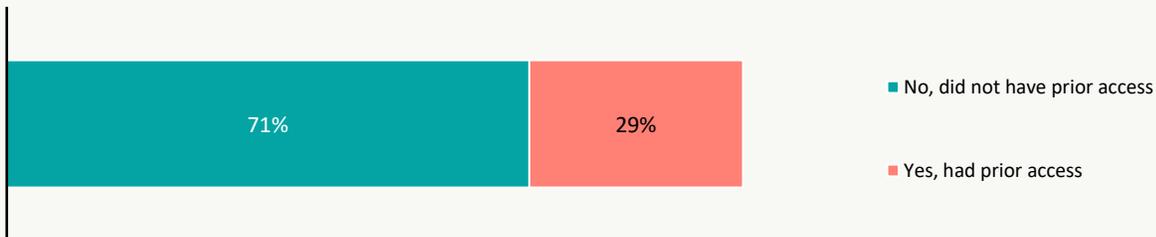
Access and Alternatives

7 in 10 farmers have no prior access to services similar to M-shamba. This indicates that M-shamba is filling a gap in the market.

First Access

Q: Before you started interacting with M-shamba, did you have access to trainings like those that M-shamba provides? (n = 265)

● ● ● - MIDDLE

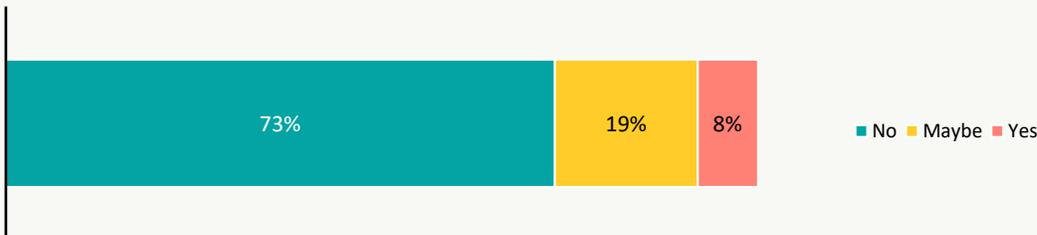


3 in 5 farmers are unable to find good alternatives to M-shamba, indicating that the service being provided is unique.

Access to Alternatives

Q: Could you easily find a good alternative to M-shamba trainings? (n = 249)

● ● ● - MIDDLE



Tenured farmers are less likely to find good alternatives (67%) compared to others (85%). This may be due to farmer perception of a 'good' alternative – more tenured farmers who may have experienced greater impact may thus find it difficult to find comparable alternatives.

Impact

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The training assisted me in learning many things, including how to care for my farm and good financial practices such as saving. – Male, 48

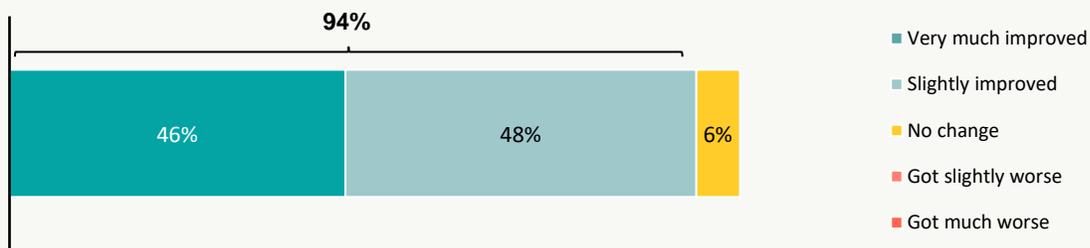
Way of Farming

Almost all farmers report an improvement in their way of farming because of M-shamba. The top reasons for improvement are planting quality seeds, using good quality fertilizers, and planting variety of crops.

Change in Way of Farming

Q: Has your way of farming changed because of M-shamba trainings? (n = 264)

● ● ● ● ● - TOP 20%



Top Reasons For 94% of Farmers Who Report Improved Way of Farming

Q: How has it improved? (n = 246). Open-ended, coded by 60 Decibels.

- 24%** report **planting quality seeds/seedlings** (22% of all respondents)

“I now plant seedlings that are improved varieties from the nurseries that we were taught to make. I also treat farming as a business.” – Female, 38
- 11%** mention **using good quality fertilizers** (10% of all respondents)

“I mix fertilizer with natural manure, which has improved the nutrition of my soil.” – Male, 65
- 10%** talk about **planting more variety of crops** (9% of all respondents)

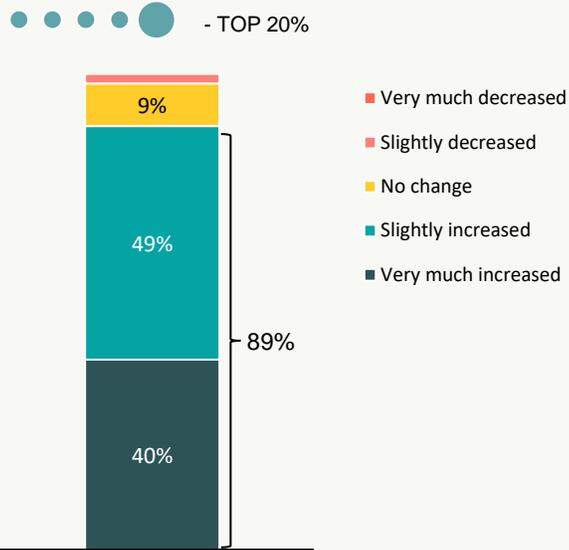
“I am now aware of various banana varieties I can grow and use specific pesticides for them. I also prune my shamba.” – Female, 53

Farm Production and Returns

89% of farmers report an increase in crop production. 82% of this group achieved this without planting additional land, suggesting an increase in productivity. Higher production and sale has resulted in increased revenue from farm for 87% of farmers.

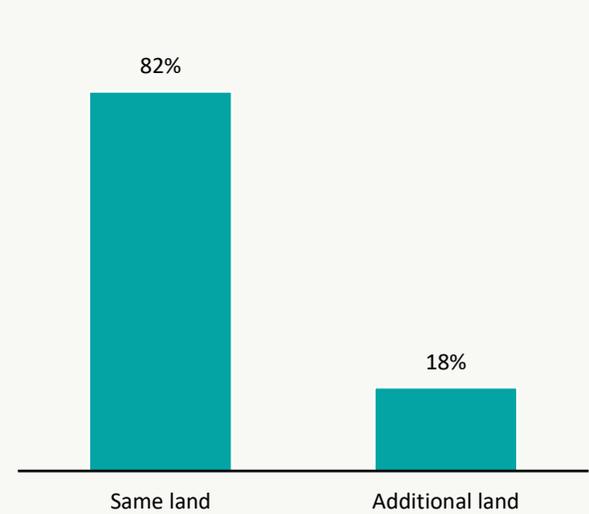
Farm Production

Q: Has the total production from your farm changed because of M-shamba trainings? (n = 265)



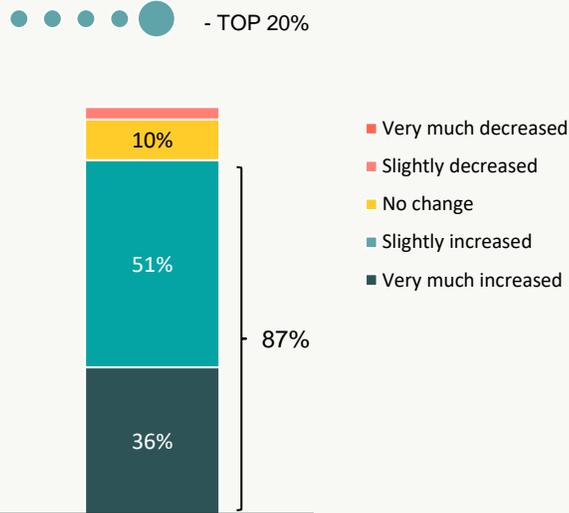
Reasons for Increased Production

Q: Was this increase because you [planted/reared] additional [land/livestock] or was it from the same amount of [land/livestock]? (n = 235)



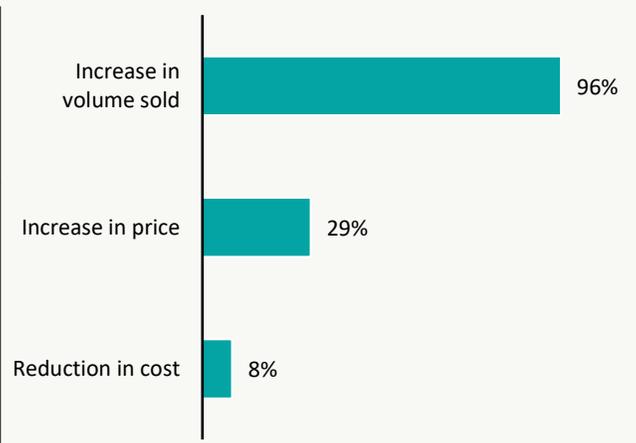
Farm Returns

Q: Has the money you earn from farm changed because of M-shamba? (n = 264)



Reasons for Increase in Returns

Q: What were the main reasons for the increase in the money earned? Select all that apply: (n = 227)



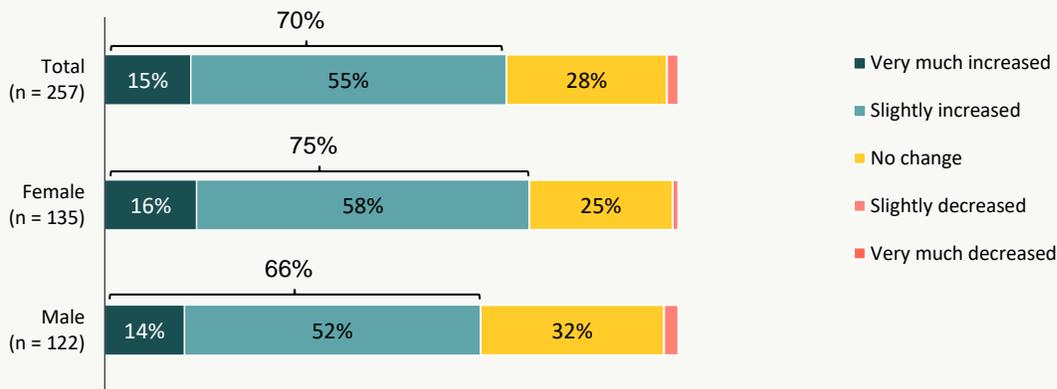
Farmers interacting with M-shamba for over a year are more likely to report 'very much increased' farm production (44%) compared to farmers interacting with M-shamba for less than a year (31%).

Decision Making & Household Finances

The majority of farmers say their influence in household decisions has increased due to M-shamba. Although not statistically different, women are slightly more likely to report increased influence in decision-making (75%) compared to men (66%). Farmers are financially better off due to M-shamba. 7 in 10 of them say their savings have increased and nearly 4 in 10 report decreased household debt.

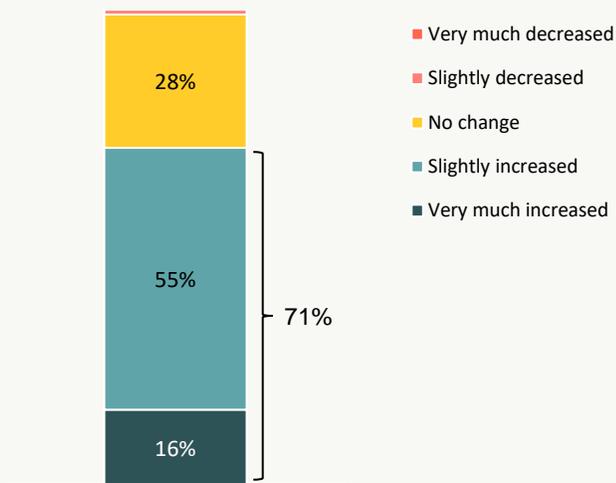
Influence in Household Decision Making

Q: Has your influence in household decisions changed because of M-shamba? (n = 257)



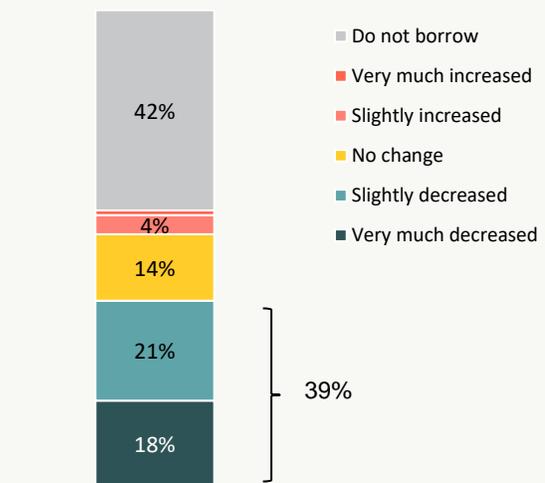
Household Savings

Q: Has the amount you save as a household changed because of M-shamba? (n = 265)



Household Debt

Q: Has the amount you need to borrow to meet your household expenses changed because of M-shamba? (n = 265)



More tenured farmers are more likely to report increased savings (72% vs. 68%) compared to less tenured farmers. Interestingly, a higher proportion of less tenured farmers experience an increase in their influence in decision-making compared to their tenured counterparts (76% vs 68%).

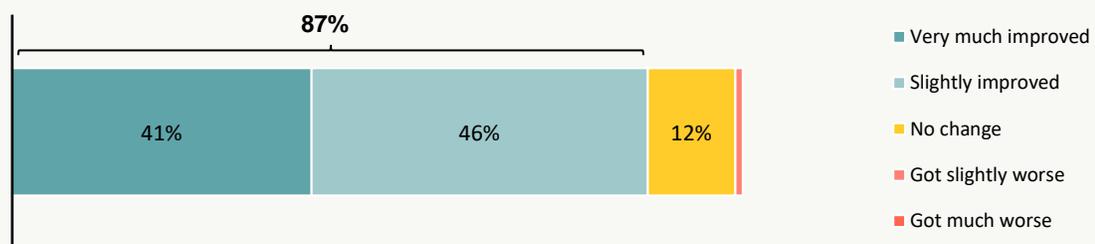
Quality of Life

87% of farmers experience an improved quality of life. The top reasons for improvement are increased ability to pay household bills, improved income, and improved ability to pay for education.

Change in Quality of Life

Q: Has your quality of life changed because of M-shamba? (n = 263)

● ● ● ● ● - MIDDLE



Top Outcomes

Q: How has it improved? (n = 229). Open-ended, coded by 60 Decibels.

- 45%** talk about **increased ability to pay household bills** (39% of all respondents)

“I have been able to expand my farm and also take care of my family and household expenses.” – Male, 68
- 33%** report **improved income** (29% of all respondents)

“I sell the chicks for a profit and use to pay for my grand children's school fee.” – Female, 62
- 25%** mention **improved ability to pay for education** (22% of all respondents)

“With the money I earned from selling bananas, I joined Mary Go Round Sacco, where I am able to save.” – Female, 36

Resilience to Climate Shocks

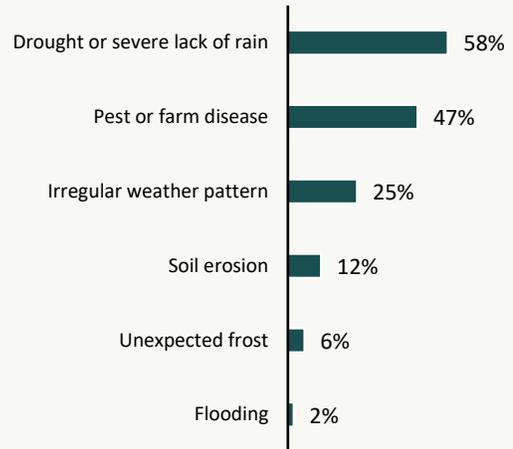
The majority of farmers have experienced a climate shock in their community that has also affected their household. Farmers have been mainly affected by drought followed by pest infestations and nearly half of them have not yet recovered from the shock.

87%

Of all farmers said their community experienced at least one shock in the last 24 months

Shocks Experienced by Household

Q: In the last 24 months, did any of these shocks affect your household? Select all that apply (n = 230)



Of this group of 230 farmers...

85%

Farmer households were affected by the shock that hit their community

56%

Have recovered fully

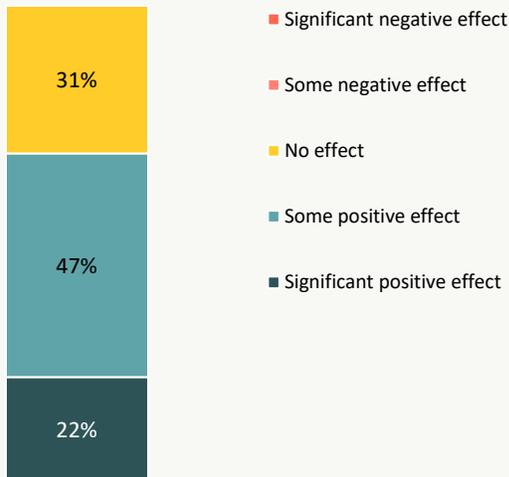
44%

Have not recovered

Of those who recovered, over two-third farmers report that M-shamba has a positive effect on their recovery.

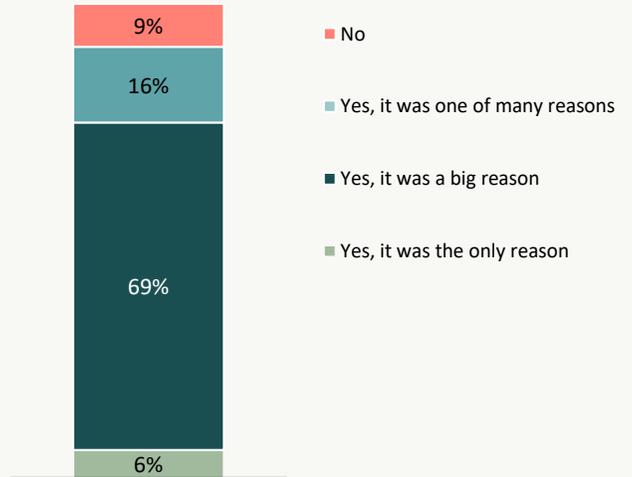
Contribution to Recovery

Q: Did your involvement with the M-shamba have a positive effect, negative effect, or no effect on your recovery? Has it (n = 193)



Contribution to Remaining Unaffected

Q: Did M-shamba contribute to your family remaining unaffected by the shock that affected your community? (n = 32)



Satisfaction

“

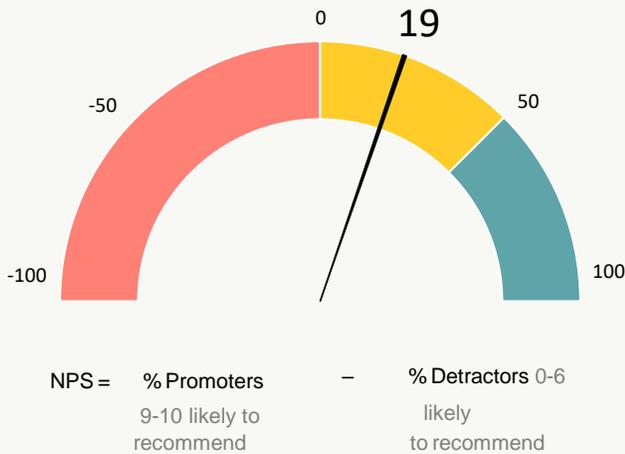
My life is now less stressful because I know how to better manage my potatoes, particularly in dealing with pests and disease. – Female, 34

Net Promoter Score®

M-shamba has a Net Promoter Score® of 19 which is good but has room for improvement. Resolving common challenges can help increase customer satisfaction (more details on the [next page](#)).

Net Promoter Score® (NPS)

Q: On a scale of 0-10, how likely are you to recommend M-shamba to a friend or family member, where 0 is not at all likely and 10 is extremely likely? (n = 268)



The Net Promoter Score® (NPS) is a gauge of customer satisfaction and loyalty. The NPS is the percent of customers rating 9 or 10 ('Promoters') minus the percent of customers rating 0 to 6 ('Detractors'). Those rating 7 or 8 are 'Passives'. The score can range from -100 to 100.

● ● ● ● ● - BOTTOM 20%

Creators of the NPS, Bain & Company, suggest that a score of*:

- Above 0 is good
- Above 20 is favourable
- Above 50 is excellent
- Above 80 is world class

Promoters value improved market access and increased farm production, while detractors want better market access.

35% are Promoters :)

They love:

1. Access to training on farming techniques (66% Promoters / 23% of respondents)
2. Improvement in farming methods (41% Promoters / 14% of respondents)
3. Increase in crop productivity (16% Promoters / 6% of respondents)

49% are Passives: \

They like:

1. Consistent access to trainings on farming techniques (30% Passives / 15% of respondents)
2. Improved access to good quality seeds (18% Passives / 9% of respondents)
3. Increased income (18% Passives / 9% of respondents)

16% are Detractors: (

They want to see:

1. Greater access to company representatives (7 respondents)
2. Better market access (7 respondents)
3. Improved quality of farm equipment (6 respondents)

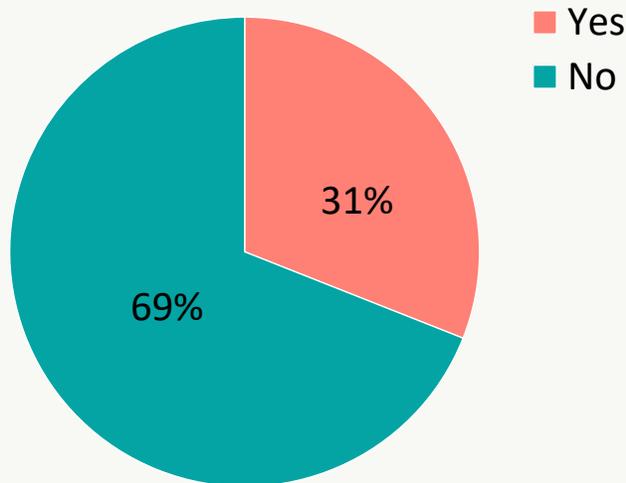
Challenge Experience

Nearly 7 in 10 of farmers have not experienced any challenges with M-shamba. Farmers reporting a challenge talk about bad quality of products, poor company representatives, and bad delivery of services as their top challenges.

Farmers Reporting Challenges

Q: Have you experienced any challenges with M-shamba? (n = 264)

● ● ● ● ● - BOTTOM 20%



Segments	NPS
Challenges	-18
No challenges	38

Most Common Challenges

Q: Please explain these challenges. (n = 83). Open-ended, coded by 60 Decibels.

- 28%** report **bad product quality**
(9% of all respondents)

“The incubator we were given was defective. We were told it would be repaired, but it wasn’t.” – Female, 40
- 27%** talk about **poor company representatives**
(8% of all respondents)

“I was only taught once and then they disappeared. Other companies have come since, to train us on the same topic.” – Male, 40
- 13%** mention **bad delivery or installation**
(4% of all respondents)

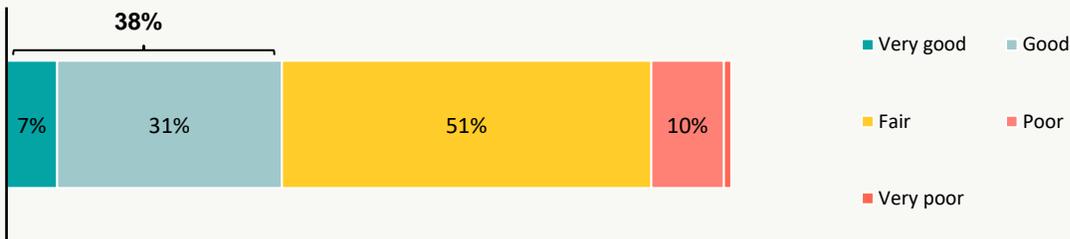
“They normally delay the delivery of seeds and keep asking us to wait. Then planting season passes, and we get in trouble.”
– Male, 75

Price Perception & Suggestions

We asked farmers who purchased inputs from M-shamba how they would rate the price. About 2 in 5 farmers say the price is 'very good' or 'good'.

Price Perception

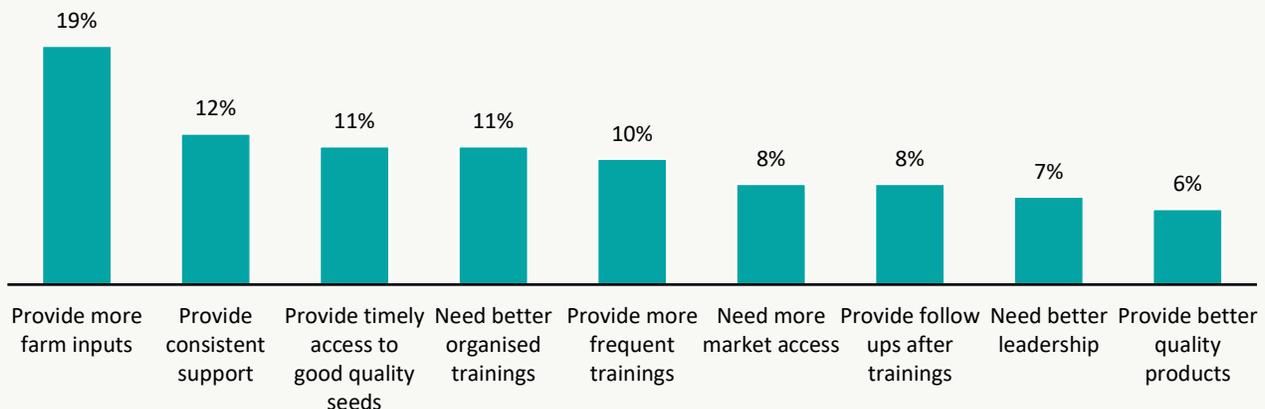
Q: [asked only if farmer purchased inputs] Do you think the price offered by M-shamba is? (n = 71)



99% of farmers had a concrete suggestion for improvement. They would like to see access to more farm inputs, consistent support, timely access to quality seeds, and better-organized trainings.

Suggestions for Improvement

Q: What about the services being offered by M-shamba could be improved? (n = 265). Open-ended, coded by 60 Decibels.



Farmers who have interacted with M-shamba for over a year are more likely to report the price as 'very good' or 'good' (27%) as compared to less tenured farmers (11%). The higher impact experienced by more tenured farmers could be a reason for them finding more value for money in M-shamba and rating the prices higher.

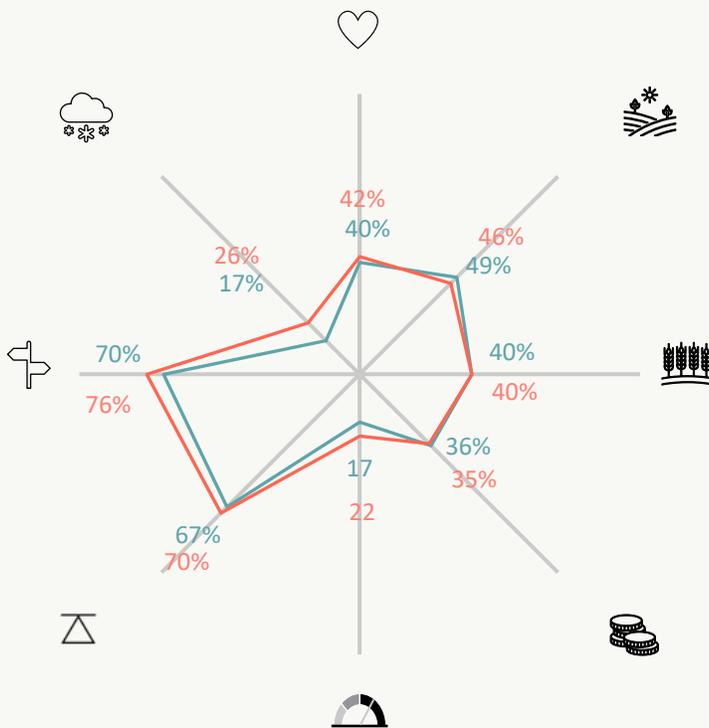
Segmented Analysis

“

It's nice to know that my grandchildren will have something to eat. I also keep cash on hand so that when my children send me money, I can put it to good use. —
Female, 65

Gender Focus

M-shamba has a similar positive impact on both male and female farmers.



Key*

- Quality of Life**
% very much improved
- Way of Farming**
% very much improved
- Production**
% very much increased
- Money Earned**
% very much increased
- Net Promoter Score®**
% Promoters - % Detractors
- Challenge Rate**
% no challenges
- Recovery from Climate Shock**
% significant positive effect of M-shamba
- Access to Alternatives**
% no access

Results

- Male
n = 124
- Female
n = 141

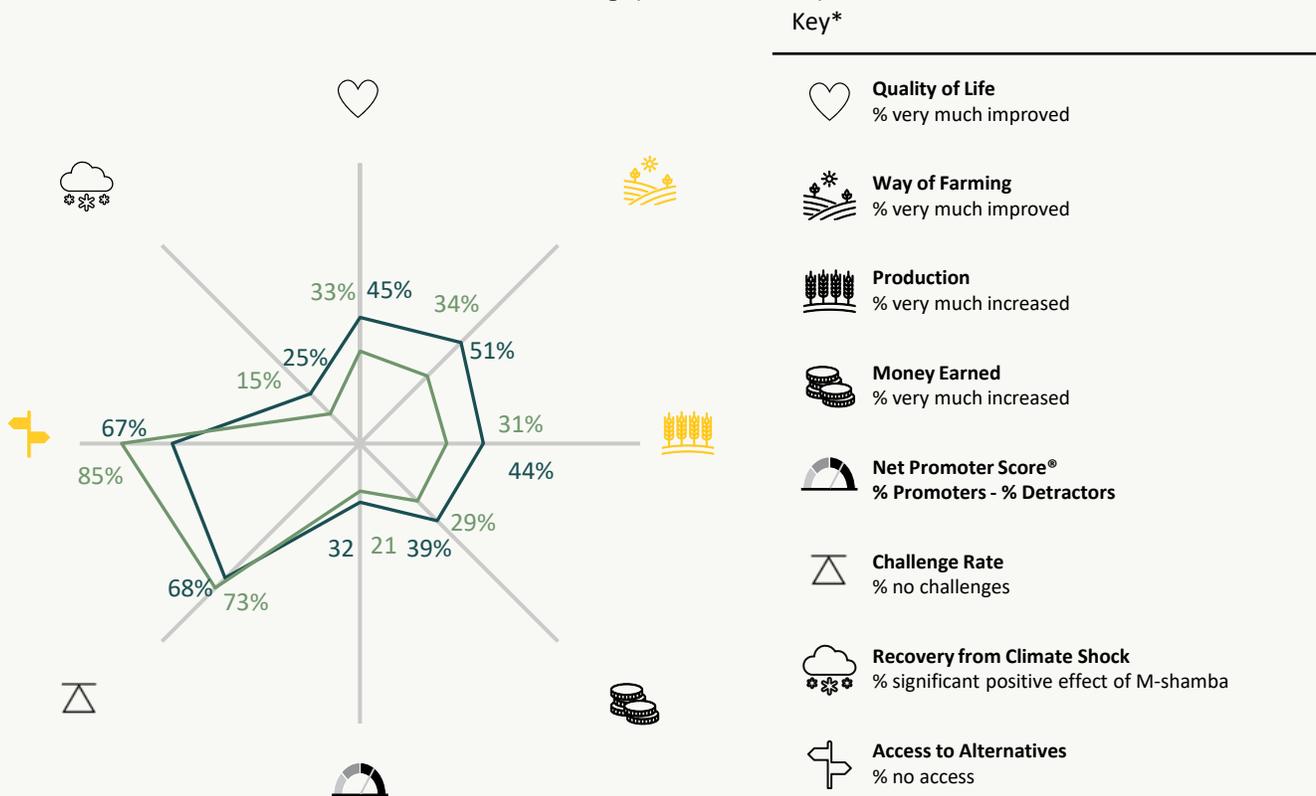
“They gave me a huge boost when I was in such a bad financial situation. I learnt how to increase crop production and earn more money.” - Female, 35

“They basically gave us everything we needed to start farming and being self-sufficient. We were given fertilizer, training, and pesticides, among other things.” - Male, 36

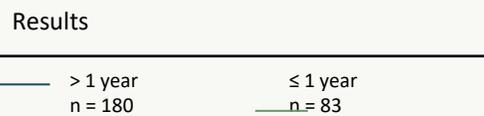
*Results that are statistically significantly different are colored in yellow

Tenure Focus

M-shamba's impact improves with time. Farmers who have interacted with M-shamba for more than a year report a better positive impact on their farming outcomes when compared to those who have interacted with M-shamba for a year or less. Besides the key metrics indicated on the chart, tenured farmers are also more likely to have higher savings (72% vs 68%) and report M-shamba's services as better priced (57% vs 25%). Lesser tenured farmers see a greater influence in household decision-making (76% vs 68%).



“I've switched from mixing crops in the same beds to separating them in different spaces. I usually do crop rotation. It makes weeding and spraying crops much easier and more accessible without having to step inside the beds.”
- Male, 62



“I get the best and healthiest crops because my farm's soil was tested, and I was given the best seedlings to plant. We were also educated on types of cattle feed, so my cattle is healthier now.” - Female, 67

*Results that are statistically significantly different are colored in yellow

Appendix

“

I have been able to earn enough money to take care of my household expenses as well as save extra money for future needs. – Male, 48

What Next?

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 farmer 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.

Methodology

About the 60dB Methodology

In November 2022, 60 Decibels’ trained researchers conducted 265 phone interviews with M-shamba farmers. The farmers were randomly selected from M-shamba’s contact database. To the right is a breakdown of the data collected.

While the findings of this study are internally valid (hold true for the surveyed farmers), we cannot ascertain external validity (whether findings hold true for the entire population of the company’s farmers) because:

- **Contacts received:** We received a non-random sample of 865 farmers from a larger group that M-shamba works with. We do not have information on the wider group of farmers to ascertain representativeness of our sample.
- **Response rate:** We made up to 5 attempts to reach a respondent. We completed surveys with nearly 6 in 10 attempted surveys. While this is high, our results do not present the views of 4 in 10 eligible farmers.
- **Interpreting the results:** All references to figures, proportions and trends hold true for that sample that we interviewed; these may or may not be extrapolatable to the whole of your population.
- **Confidence:** A sample of 265 farmers provides a confidence level of 90% and a margin of error of 4% in results for the farmer base we had phone numbers of.

Country	Kenya
Contact base Shared	865
Interviews Completed	265
Response Rate	59%
Languages	Swahili
Average Survey Length	20 mins
Confidence Level	90%
Margin of Error	4%

*Our confidence level cannot account for two unknowns for this population: mobile penetration and extent of completeness of M-shamba’s farmer phone number list.

Calculations and Definitions

Metric	Calculation
Net Promoter Score®	<p>The Net Promoter Score® is a gauge of satisfaction and loyalty. Anything above 50 is considered very good. A negative score is considered poor.</p> <p>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'.</p>
Inclusivity Ratio	<p>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:</p>

$$\frac{\sum_{x=1}^3 \frac{([Company] Poverty Line \$x)}{(Country Poverty Line \$x)}}{3}$$

Get in Touch



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