Farmer Insights for Ten Senses
Welcome To
Your Lean Data Results

We enjoyed hearing from 256 of your farmers – they had a lot to say!

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Company Performance Snapshot

Ten Senses is outperforming the 60 Decibels Agriculture benchmark in 3/11 metrics.

However, Ten Senses is outperforming the Stanford Seed benchmark in the following metrics:

- **NPS**
- **Improved Income Stability**
- **Timeliness of Payments**

Data Collection Details:

**Sample size:** 256
**Method:** Phone interviews
**Date:** June 2019
**60dB Benchmark:** Up to 54 Agri Companies, 8,876 farmers.

<table>
<thead>
<tr>
<th>60dB Agriculture Supplier Benchmark</th>
<th>Stanford SEED Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>23% live below the $3.2 line</td>
<td>38%</td>
</tr>
<tr>
<td>For 65%, first time they accessed Ten Senses’ offering</td>
<td>73%</td>
</tr>
<tr>
<td>67% say no good alternative to Ten Senses is accessible to them</td>
<td>66%</td>
</tr>
<tr>
<td>36% perceived quality of life had very much improved</td>
<td>34%</td>
</tr>
<tr>
<td>&gt; 43% said their nut production had very much improved</td>
<td>28%</td>
</tr>
<tr>
<td>36% said money earned from nuts had very much improved</td>
<td>26%</td>
</tr>
<tr>
<td>34% perceived that their income stability had very much improved</td>
<td>41%</td>
</tr>
<tr>
<td>&gt; 42% said timeliness of payment for nuts very much improved</td>
<td>-</td>
</tr>
<tr>
<td>36% said the price they got for nuts very much improved</td>
<td>-</td>
</tr>
</tbody>
</table>

- **Net Promoter Score of 19**
  - 34
  - 5

- **76% experienced ‘no’ challenges with Ten Senses**
  - 59%
  - 72%

- **74% see themselves working with Ten Senses after 1 year**
  - 100%
  - 77%

- **73% see themselves working with Ten Senses after 5 years**
  - 96%
  - 68%
We love hearing honest voices.
Here are some that stood out.

**Farmer Voice Snapshot**

**Impact Stories**

73% shared how Ten Senses had improved their quality of life

“Ten Senses has supported me and I have been able to sustain my family and send money back home when before it was a struggle to do all this.”

“I have been able to settle well and move my family back home. The children can go to school and we have started other businesses at home because of the money that we have earned from Ten Senses.”

“By getting good money from the macadamia, I have been able to construct a good house and fence. I have also cleared some loans I had as well as investing in dairy farming.”

“Ten Senses has supported me and I have been able to sustain my family and send money back home when before it was a struggle to do all this.”

“I did not have a job or access to money at all times but that has changed and life has improved for me.”

“Over the few years I have been able to really do well and manage my family’s upkeep. I have been able to take care of my mother’s medical bill.”

“My life has changed. I can keep feeding my whole family without asking for money from other family members. I’m saving some more money.”

**Opinions On Ten Senses Value Proposition**

40% were promoters and were highly likely to recommend

“They have made it sweet to take good care of the macadamia trees as the money has increased consistently since I started selling to them.”

“We are now selling more nuts than before. Ten Senses is a better system than the one we were using.”

“They provide transport and they have a lot of access to their more clients. I would recommend it because there are some clients that you cannot always rely on to buy your macadamia.”

“Their mode of payment and the fact that they [look after] the affairs of the farmers by giving them technical assistance on the ground.”

**Opportunities For Improvement**

83% had a specific suggestion for improvement

“They [should] improve on their payment timelines to eliminate the delays. They should come for the macadamia at our home place.”

“They should give farmers bonus as they promised when we started selling to them. They should not be giving agents money to pay customers as it is not very safe instead the company should be paying the farmers directly.”

“They should bring to us grafted trees as farmers are going as far as Thika and Muranga to purchase the seedlings. They could even establish a tree nursery at Chogoria where we can easily access the seedlings.”
## Top Actionable Insights

<table>
<thead>
<tr>
<th>Headline</th>
<th>Detail &amp; Suggested Action</th>
</tr>
</thead>
</table>
| **Operational excellence sets Ten Senses apart in a competitive setting.** | Ten Senses operates in an competitive market. 34% of respondents say they can easily access a good alternative buyer, another company, for their nuts. While price is typically what differentiates buyers in a competitive setting, Ten Senses' suppliers value its reliability as a buyer, timeliness of payments, use of innovative payment methods and year-round purchase as much as the high monetary returns it offers. See slides 12, 13, 14.  
**Suggested action:** market and build your brand around this unique competitive advantage |
| **Convert passives and leverage word of mouth.** | Despite reports of positive impact, Ten Senses' Net Promoter Score is on the lower side. This is driven by a large proportion of passive supporters who are not yet active promoters. See slides 17, 18, 19.  
**Suggested action:** convert the passives to promoters and track your NPS to solidify your market presence. |
| **Organic farmers are more satisfied with Ten Senses than conventional farmers.** | Across major metrics, organic farmers appear to be experiencing greater value and are reporting greater satisfaction than conventional farmers. The organic NPS is 41, compared to the conventional -5. The rate of organic farmers reporting improvements in quality of life is 43%, compared to the conventional rate of 29%. See slides 19, 30.  
**Suggested action:** what is the main barrier to connecting conventional farmers to organic farming? How can it be bridged? |
Deep Dive:
Insights Along Your Farmer Journey

Farmer Profile
- What are the characteristics of a typical Ten Senses farmer?
- What is the poverty profile of Ten Senses farmers compared to the Kenya average?

Acquisition

Experience

Impact

Retention

“Their services appealed to me, their convenience and the mode of payment.”
Who’s Your Typical Farmer?

The typical farmer we spoke to was over 46 years old and has worked with Ten Senses for an average of 2.5 years. A third of the farmers we spoke to were women.

The typical Ten Senses farmer owned land and planted on 6 acres of land in the past year. Roughly half of this land was planted with macadamia nuts.

About the Ten Senses farmer we spoke with

Data relating to farmer characteristics (N = 256)

- 31% female
- Average age 46
- Average tenure 2.5 years; ranging from 3 months to 15 years

- Average total farm acreage: 6 acres, with 3 acres under macadamia
- 95% sold more than half of their farm’s harvest
- 77% own most or all of their land

- 4.6 average household size
Is Ten Senses Successfully Reaching Low-income Farmers?

Using the Poverty Probability Index, we can reliably estimate the income profile of your farmers and compare it to the Kenya average. This reveals whether you are under- or over-penetrating a certain income segment.

54% of Ten Senses farmers live below $5.50/day relative to the Kenya average of 71%. This suggests that Ten Senses is serving wealthier farmers than the Kenya national and rural averages.

23% live below $3.20/day compared to the national rate of 47% and rural rate of 65%.
Earlier I was selling to Kenya Nuts but I was impressed with Ten Senses in that they pay via mPesa and their prices were much higher than those of [Kenya Nuts]. Also, they offer farm inputs.

Deep Dive: Insights Along Your Farmer Journey

- Farmer Profile
- Acquisition
  - How did farmers hear about Ten Senses?
  - What was their motivation to start selling to Ten Senses?
  - Are their alternatives in the market? How does Ten Senses compare?
  - Are farmers accessing new value added services? How many are paying for these?
- Experience
- Impact
- Retention
How Do Farmers First Hear About Ten Senses?

Ten Senses agents account for more than 65% of farmer acquisition. A third of the traditional farmers heard about the company from friends/family. Interestingly, organic farmers appear to be more than twice likely to hear about Ten Senses through friends and family while the majority of conventional farmers hear about Ten Senses from agents.

How could the strong word of mouth of organic farmers be leveraged?
Why Do Farmers Begin Selling to Ten Senses?

Farmers tended to list aspects related to price and payment as top reasons for deciding to become a Ten Senses supplier.

Ten Senses’ price, timely payments as well as training are the top motivators for farmers.

Motivation to sign-up

Q: What motivated you to sign up for Ten Senses? (N = 254) Open-ended, coded by Lean Data

- Favorable price: 26%
- Timely payments: 18%
- Access to training: 17%
- Use of mPesa for payments: 11%
- General access to market: 11%
- Access to inputs: 11%

"They promised to buy at good prices and sure they did, in addition they were making plans to give us seedlings which they also did."

"They give training and pay via mPesa which is very good."
Are There Alternatives In The Market?

Availability of alternatives provides insight into the competitive landscape and the degree to which Ten Senses is providing a scarce product/service.

A third of the farmers could easily find a good alternative to Ten Senses. Almost 60% of this group were veteran macadamia nut farmers.

The most frequently mentioned alternatives were other companies, indicating a competitive and relatively organized market.

34% say they could easily find a good alternative; of those, Kenya and Jungle Nuts were most commonly mentioned.

Access to alternatives
Q: Could you easily find a good alternative to Ten Senses? (N = 256)

- Yes: 19%
- Maybe: 15%
- No: 67%

Top alternatives mentioned
Q: Would you be comfortable sharing who these alternatives are? (N = 85)

- 42% mentioned Kenya Nuts
- 28% mentioned Jungle Nuts
- 34% mentioned another alternative, or were unable to name a company or organization directly.
How Does Ten Senses Compare To Alternatives?

Of those who could identify an alternative, two thirds believe Ten Senses is better than the alternative.

**Comparison of alternatives**

- 54% said better
- 16% said same
- 15% said slightly better
- 6% said worse
- 9% said much worse
- 1% said no other companies

**Top reasons Ten Senses is better or worse**

- **Better (N = 81)**
  - 23% said timely payments
  - 10% said use of mPesa

- **Same (N = 14)**

- **Worse (N = 24)**
  - “They don’t offer bonuses and they purchase nuts at lower prices compared to other companies.”

For those 85 that could find an alternative, 68% believe Ten Senses is better, suggesting a strong market position.

Most farmers believe Ten Senses is better than the alternative due to the mode of payment and timely delivery of funds.

Having a strong operational value proposition is likely to help Ten Senses continue to distinguish itself in a competitive market place.
Is Ten Senses More Or Less Convenient Than Alternatives?

To better understand Ten Senses’ positioning in the market, we asked farmers who could identify alternatives to rate the convenience of Ten Senses.

Most farmers believe Ten Senses is more convenient than the alternative due to their year-round and farm-gate purchase offering.

Of those who could identify an alternative, 58% believe Ten Senses is more convenient than the alternative

Comparison of convenience
Q: Do you think Ten Senses is less, same, or more convenient than the alternatives? (N = 254)

- 4% think Ten Senses is less convenient
- 17% think Ten Senses is the same
- 28% think Ten Senses is more convenient
- 51% think there is no other company

Top reasons Ten Senses is more or less convenient
Q: What makes Ten Senses more convenient?

More convenient (N = 72)

49% value year-round market access
“Ten Senses opens their buying centers throughout the year, and when you sell your macadamia they pay you instantly via mPesa. Also, Ten Senses agents at the buying centers do not select the macadamia very much so you get to sell almost 100% of all your produce.”

40% find Ten Senses location easy and convenient
"It is easier to follow up with Ten Senses as you can easily locate their offices.”

32% value access to transportation
“Sometimes, Ten Senses agents come for the macadamia at our homes. Ten Senses also pays instantly on buying the nuts.”
We asked farmers about the products and services they received from other sources before Ten Senses to understand the changes in support that they have experienced.

Compared to farmers’ prior experience, Ten Senses is filling gaps by offering technical assistance, training, inputs and credit.

65% of farmers are accessing a reliable buyer for macadamia for the first time through Ten Senses. This access is even higher for auxiliary services.

**Comparison of farmers’ access to services before Ten Senses and now**

Q: Before you started working with Ten Senses did you have access to the following products/services for your nuts? (N = 256)

<table>
<thead>
<tr>
<th>Service</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical assistance</td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>Training</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>Inputs</td>
<td>9%</td>
<td>91%</td>
</tr>
<tr>
<td>Credit</td>
<td>11%</td>
<td>89%</td>
</tr>
<tr>
<td>Reliable Buyer</td>
<td>35%</td>
<td>65%</td>
</tr>
</tbody>
</table>

Q: Have you purchased or received the following services for your nuts from Ten Senses? (N = 256)

<table>
<thead>
<tr>
<th>Service</th>
<th>No</th>
<th>Yes, purchased</th>
<th>Yes, received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit</td>
<td>2%</td>
<td>71%</td>
<td>27%</td>
</tr>
<tr>
<td>Inputs</td>
<td>14%</td>
<td>52%</td>
<td>34%</td>
</tr>
<tr>
<td>Training</td>
<td>75%</td>
<td>25%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Deep Dive: Insights Along Your Farmer Journey

- Farmer Profile
- Acquisition
- Experience
  - How satisfied and loyal are farmers? What are the drivers of loyalty?
  - What are the top challenges farmers are experiencing?
  - Do farmers believe Ten Senses’ value added services are good value for money?
- Impact
- Retention

“Ten Senses is a better middleman than others. I have had to deal with other middlemen that were not registered as any company and I did not like the experience.”
How Satisfied And Loyal Are Ten Senses Farmers?

The Net Promoter Score is a gauge of satisfaction and loyalty. Anything above 50 is considered excellent. A negative score is considered poor.

Ten Senses’ score of 19 suggests some room for improvement.

Asking respondents to explain their score highlights the main value drivers and dissatisfaction drivers; these are explored on the next page.

**Net Promoter Score (NPS)**

Q: On a scale of 0-10, how likely are you to recommend Ten Senses to a friend or family member? (N = 255)

**NPS Benchmarks**

Selected Lean Data Benchmarks
(N = 150+ companies, 70,000+ respondents)

- Lean Data Global average
  - 129 companies
  - 42

- East Africa average
  - 44 companies
  - 42

- Sector average
  - 47 companies
  - 40

- Supplier average
  - 3 companies
  - 34

- Stanford Seed average
  - 3 companies
  - 5

**Recommendation**

NPS is a helpful metric to track over time to detect subtle changes in farmer satisfaction.

Ten Senses has a Net Promoter Score of 19 which is fair, though lower than the Lean Data average globally, in East Africa, and agriculture specifically.
What’s Driving Satisfaction?

Qualitative data reveals that promoters value increase in income just as much as timely payments and training. The detractors complain about the lack of a bonus structure and poor prices for macadamia nuts.

40% are Promoters. They LOVE:
1. Income increase - 17%
2. Timely payments - 17%
3. Training or information - 16%

“I would recommend it especially to the youth around the area because it is a good source for starting up a business and making money.”

Tip: Highlight the above value drivers in marketing.

Promoters are powerful brand ambassadors – can you reward them?

38% are Passives: They like:
1. High quality of Ten Senses offering - 27%
2. Timely payments - 14%

But complain about:
1. Price fluctuation - 1%

“They are straightforward, you do your business transactions with them with no other agendas.”

Tip: Passives won’t actively refer you in the same way that promoters will.

What would it take to convert them?

21% are Detractors. They dislike:
1. The bonus structure - 43%
2. The price - 28%
3. Late payments - 9%

“They promised to gives us bonuses but I never received so they should honor their promises. Also, they should increase their prices as they are lower compared to other companies.”

Tip: Negative word of mouth is costly.

What’s fixable here?
There was a clear trend in the NPS by segment. Though there were few differences by gender, there were significant differences by farming type. Organic farmers appear to be more satisfied than conventional farmers, with an NPS of 41, compared to the conventional NPS of -5.

**Does Satisfaction Vary By Segment?**

Organic farmers had the highest Net Promoter Score; while conventional farmers had the lowest.

**Net Promoter Score by segment**

NPS by Farmer Type and Gender (N = 256)

<table>
<thead>
<tr>
<th></th>
<th>Promoters</th>
<th>Passives</th>
<th>Detractors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional</td>
<td>26%</td>
<td>43%</td>
<td>31%</td>
</tr>
<tr>
<td>Organic</td>
<td>53%</td>
<td>34%</td>
<td>13%</td>
</tr>
<tr>
<td>Female</td>
<td>41%</td>
<td>16%</td>
<td>23%</td>
</tr>
<tr>
<td>Male</td>
<td>40%</td>
<td>37%</td>
<td>21%</td>
</tr>
<tr>
<td>Total</td>
<td>40%</td>
<td>38%</td>
<td>21%</td>
</tr>
</tbody>
</table>

**Recommendation**

How can conventional farmers reap the benefits organic farmers are enjoying?
What Challenges Did Farmers Experience?

About a quarter of farmers experienced challenges with Ten Senses. Among those who did, almost all said that their challenge had not yet been resolved. Unresolved challenges can encourage negative word-of-mouth. The top challenges are listed on the right.

24% report challenges with Ten Senses; the most common ones are failure to receive a bonus and inadequacy of the price.

### Proportion of farmers reporting challenges

Q: Have you experienced any challenges working with Ten Senses? (N = 256)

- **24%** reported challenges
- **76%** reported no challenges

### Top challenges reported

Q: Please explain the challenge you have faced. (N = 60)

1. Failure to receive bonus (45% of total)
   
   “I have never received any bonus pay while I know of other farmers who have been receiving their bonus pay.”

2. Challenge with the price (23% of total)

   "Ten Senses do not collect all of the macadamias harvested. They leave a lot and they are supposed to be collecting macadamia from the whole farm. The prices for the nuts are meant to be increased. I have never received a bonus."

3. Didn’t receive payment on time (12% of total)

   “There was a time I sold to them macadamia on Saturday and I received the money on Sunday. So they inconvenienced me.”
"Our livelihood has improved with the boost of our finances because we can even afford healthcare unlike before."

Deep Dive: Insights Along Your Farmer Journey

- Farmer Profile
- Acquisition
- Experience
- Impact
- Retention

- How important are macadamia nuts and Ten Senses to the farmer household?
- How is Ten Senses impacting farm outcomes and experience? Are these attributable to Ten Senses?
- What is the impact of Ten Senses on crop income and overall financial health of the household?
- Is the Ten Senses improving overall quality of life of households? What are the top outcomes?
- Are there externalities from working with Ten Senses? Are farmers comfortable with these?
How Important Is Macadamia To Farmer Households?

To understand the importance of macadamia nuts to the farmer, we asked what proportion of their farm was planted with macadamia in the last 12 months. 45% of farmers said this was over three quarters of their land and a similar proportion said it was lower than half. Across the group, half of all acres were planted with macadamia.

To understand the importance of Ten Senses, we asked what proportion of their income came from selling to Ten Senses. 91% said more than half of their income in the last 12 months came from selling nuts to Ten Senses.

Even though macadamia nuts were planted on majority of land for half the farmers, it was the main source of income for 90% of them.

### Proportion of income from selling to Ten Senses

<table>
<thead>
<tr>
<th>Proportion</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A little bit (1-25%)</td>
<td>1%</td>
</tr>
<tr>
<td>Less than half (25-50%)</td>
<td>9%</td>
</tr>
<tr>
<td>More than half (50-75%)</td>
<td>58%</td>
</tr>
<tr>
<td>Almost all (75-100%)</td>
<td>32%</td>
</tr>
</tbody>
</table>

### Proportion of land dedicated to macadamia nuts

<table>
<thead>
<tr>
<th>Proportion</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25% of farm</td>
<td>9%</td>
</tr>
<tr>
<td>25-50% of farm</td>
<td>37%</td>
</tr>
<tr>
<td>50-75% of farm</td>
<td>8%</td>
</tr>
<tr>
<td>&gt;75% of farm</td>
<td>45%</td>
</tr>
</tbody>
</table>
We wanted to understand the type of changes that farmers may be experiencing in growing, harvesting, and selling their crop to Ten Senses.

Over 90% of farmers reported some improvements in productivity, production and their confidence in growing and selling a healthy crop. A similar proportion also reported improvement related to payments and price. Fewer respondents spoke about increasing the amount of land under macadamia nuts.

*Production is the total volume of crop harvested from all acres. Productivity is the volume harvested from a single acre.*

How Are Macadamia Outcomes And Selling Experience Changing?

Farmers are reporting improvements on a number of crop-related outcomes and various aspects of selling experience.

### Changes in farming experience

Q: Have the following changed because of Ten Senses? (N = 256)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Very much improved</th>
<th>Slightly improved</th>
<th>No change</th>
<th>Slightly worse</th>
<th>Got much worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>47%</td>
<td>44%</td>
<td>5%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>48%</td>
<td>43%</td>
<td>9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>45%</td>
<td>43%</td>
<td>7%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Timeliness of Payments</td>
<td>51%</td>
<td>42%</td>
<td>3%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Price</td>
<td>36%</td>
<td>56%</td>
<td>5%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Acreage</td>
<td>30%</td>
<td>45%</td>
<td>25%</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>
Are These Changes Attributed To Ten Senses?

21% of farmers say “almost none” of changes are due to situations or things other than Ten Senses.

To understand whether the changes that farmers experience are attributable to Ten Senses, we asked how many changes are due to things or situations other than Ten Senses. Extrapolating from this, we learnt to what extent changes could be attributed to the company.

Farmers attribute some changes to Ten Senses. For many, personal hard work and effort, alongside quality inputs and techniques also contributed to their positive outcomes.

Changes due to things other than Ten Senses

Q: How many of these changes happened due to things or situations other than Ten Senses? (N = 256)

<table>
<thead>
<tr>
<th>Attribution of change</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost all of them</td>
<td>14%</td>
</tr>
<tr>
<td>Almost none of them</td>
<td>19%</td>
</tr>
<tr>
<td>Some of them</td>
<td>21%</td>
</tr>
<tr>
<td>Cannot say</td>
<td>45%</td>
</tr>
</tbody>
</table>

How farmers attribute changes

Q: Please explain your answer. (N = 101)

“All the other years before I started selling to Ten Senses I had realized the value of macadamia and so I have been putting a lot of effort, like buying fertilizer using the money I get from the casual labours I do.”

“Climate change has greatly affected the production of macadamia such that by Easter Holidays this year there weren’t many nuts to sell but we are optimistic that in August the harvest will be plentiful.”

“This year during the flowering stage of the macadamia most of the flowers fell off and this lowered the production in a great extent.”

“Due to the long periods without rains the production and productivity of nuts has reduced. There is less wastage of the nuts as Ten Senses does not do much selection.”
How Has The Way of Doing Farming Changed?

To understand how Ten Senses is specifically impacting farmers’ livelihoods, we asked how their way of farming may have changed due to Ten Senses.

85% say their way of farming as “very much improved” or “slightly improved.” Most cite improvements such as harvest related improvements, and access to knowledge, improved inputs and techniques.

Perceived changes in way of farming
Q: Has your way of farming changed because of Ten Senses? (N = 256)

- Very much improved: 35%
- Slightly improved: 51%
- No change: 13%
- Got slightly worse: 1%

How way of farming has changed
Q: How has your way of farming improved / become worse? Why has it not changed?

Improved (N = 220)

34% said improved production
“Ten Senses is so involved in my farm that we have been able to plant new breeds of the macadamia and a lot more produce is coming from the farm.”

31% said improved knowledge
“I really did not know how to farm and I was loosing an excessive amount of seedlings, but I have been shown how to reduce on the amount of seedings and fertilizers that I waste and improve on the macadamia that will grow from my farm.”
To understand how Ten Senses is impacting farmers’ incomes, we asked how they money they earn may have changed due to Ten Senses.

92% say their money earned as “very much improved” or “slightly improved.”

### How Has Earning From Macadamia Changed?

92% say their money earned has improved due to Ten Senses.

#### Perceived changes in money earned

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very much improved</td>
<td>36%</td>
</tr>
<tr>
<td>Slightly improved</td>
<td>57%</td>
</tr>
<tr>
<td>No change</td>
<td>4%</td>
</tr>
<tr>
<td>Slightly worse</td>
<td>4%</td>
</tr>
<tr>
<td>Got slightly worse</td>
<td>0%</td>
</tr>
</tbody>
</table>

#### How money earned has changed

Q: Has the money you earn changed because of Ten Senses? (N = 256)

- **Very much improved**: Farmer saying “slightly improved”
- **Slightly improved**: Farmer saying “very much improved”
- **No change**: Farmer saying “no change”
- **Slightly worse**: Farmer saying “slightly improved”

“‘I get seedlings at a fair price and its brought at home so am able to save some money.’ – Farmer saying “slightly improved”

“The money I earn from macadamia has been increasing mainly because of increased production due to the high quality fertilizers provided as well as increase in price seeing that at the moment Ten Senses is buying at 160ksh per kilo.” – Farmer saying “very much improved”

“I only began selling my macadamia when I joined Ten Senses. Before I only used the macadamia in the house with my family but I did not sell it.” – Farmer saying “no change”

Even though Ten Senses lag behind in their pricing of macadamia their prices are still fair, increased production as well has enabled me to earn a considerable amount of money.” – Farmer saying “slightly improved”
By How Much Have Farmers’ Incomes From Macadamia Increased And Why?

For the farmers who said that the money they earned has improved, we asked them by how much their income from macadamia has increased, as well as the main reasons for the increases.

For this group, farmers’ incomes increased by 63% on average.

The top explanations for increases in income were increases in price and volume through productivity.

Among the 92% who say their money earned has improved, their incomes have increased by 63% on average.

### Increases in money earned from macadamia
Q: How much higher is the money you earn from macadamia compared to before you sold to Ten Senses? (N = 256)

- Almost all (75-100%): 18%
- More than half (50-75%): 44%
- Less than half (25-50%): 14%
- A little bit (1-25%): 17%
- Did not increase: 6%

### Reasons for income increases
Q: What were the main reasons for the increase in money earned? (N = 239)

- 84% cited increases in productivity
- 88% cited increases in price
- 12% cited reductions in cost
Has The Stability Of Farmers’ Income Changed Because Of Ten Senses?

In addition to whether farmers’ incomes had increased, we wanted to know whether working with Ten Senses impacted farmers’ income stability.

34% said the stability of their income had “very much improved.”

Among those who reported improvements in income stability, general income increases and that the price for macadamia being higher than other products were the top reasons.

85% say their income stability has improved to some extent.

Perceived changes in income stability

Q: Has the stability of your income changed because you started working with Ten Senses? (N = 256)

- Very much improved: 34%
- Slightly improved: 51%
- No change: 6%
- Got Slightly worse: 6%
- Got much worse: 3%
How Is Ten Senses Impacting Farmers’ Financial Health?

Beyond changes in income, we asked farmers whether working with Ten Senses impacted their ability to manage their finances.

Over 80% of all farmers said Ten Senses positively affected nearly all financial health outcomes, from the ability to invest in their businesses and their abilities to save and look after household needs.

Over 80% of farmers said engagement with Ten Senses positively affected economic ability and financial health outcomes.

Ten Senses’ impact on farmers’ finances

Q: Thinking back to the last 12 months, did working with Ten Senses affect the following? (N = 256)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Yes, positive</th>
<th>No, did not change</th>
<th>Yes, negative</th>
<th>Cannot say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to cover emergencies</td>
<td>83%</td>
<td>9%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Ability to save</td>
<td>87%</td>
<td>8%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Ability to cover household expenses</td>
<td>89%</td>
<td>6%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Ability to invest in crop</td>
<td>89%</td>
<td>6%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>
To gauge depth of impact, farmers were asked to reflect on whether their quality of life has changed because of Ten Senses. 36% said “very much improved” compared with the Lean Data benchmark of 56%.

Farmers who report “very much improved” quality of life are also more likely to be organic farmers. They report significant improvements at rates of 43%, compared to 29% of conventional farmers.
Farmers were asked to describe— in their own words—the positive changes they were experiencing because of Ten Senses. The top outcomes are shown on the right. Others included:

- Ability to manage large expenses (medical insurance, home building) (13%)
- Able to plan financially (7%)

What Outcomes Are Being Experienced?

Improved food security and harvests were the top social outcomes being experienced by over 90% of farmers.

**Top three self-reported outcomes for 93% of farmers who say quality of life improved***

Q: Please explain how your quality of life has improved. (N = 234). Open-ended, coded by 60 Decibels.

- **25% reported improved income**
  - "I'm now farming successfully which was not possible before. I'm earning enough money to support me and my child."

- **18% reported an ability to invest in other businesses**
  - "Ten Senses use to support me, I was able to build a shop. When we started I really improved and profited from the money."

- **14% reported an ability to pay for school fees**
  - "I have been able to get money to buy food at home as well as pay school fees. I have as well been able to get a health insurance for my family."

*Percentages shown are percentage of total respondents*
What Drives Positive Impact?

Using statistical analysis, we looked for correlations to understand what was common among the farmers who reported strong, positive quality of life improvements. This may indicate that improvements in harvest volume and income are the key to farmer satisfaction and impact value.

Survey questions most correlated to quality of life results (ranks from strongest correlation)
Exploring potential drivers of the quality of life readings (N = 256)

1. **Increase in money earnings**: Farmers whose earnings increased due to Ten Senses macadamia also reported the strongest improvements in quality of life.

2. **Long term retention**: Unsurprisingly we observed a strong statistical correlation between quality of life impact and intended loyalty. This shows how important positive social impact is in increasing farmer “stickiness”.

3. **Production and productivity**: Farmers reporting improvements in production or productivity (typically the same farmers) were more likely to report improvements in quality of life than farmers who were not experiencing the same improvements in quality of life.

Idea for discussion
How likely are Ten Senses farmers to continue working with Ten Senses in future? Why would they drop out?
What are the farmer’s top suggestions for improvement?

Quality of life changes were strongest in farmers who also reported money increases, long term retention, production and productivity.
Are There Externalities That Farmers Are Experiencing?

A third of the farmers say they invest more time and money in their macadamia because they started selling to Ten Senses.

We asked farmers whether the money and/or time they spend on their macadamia has changed because they began selling to Ten Senses to understand whether they are investing more.

Among those who report increases, over 90% are completely comfortable with this increase, indicating that the value addition of the time and effort increase is worthwhile.

### Changes in money and time spent on macadamia

**Q:** Has the money/time you spend on crop changed because you started selling to Ten Senses? (N = 256)

<table>
<thead>
<tr>
<th>Money invested</th>
<th>Very much increased</th>
<th>Slightly increased</th>
<th>No change</th>
<th>Slightly decreased</th>
<th>Very much decreased</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12%</td>
<td>20%</td>
<td>19%</td>
<td>44%</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time invested</th>
<th>Very much increased</th>
<th>Slightly increased</th>
<th>No change</th>
<th>Slightly decreased</th>
<th>Very much decreased</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24%</td>
<td>14%</td>
<td>9%</td>
<td>38%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Deep Dive: Insights Along Your Farmer Journey

I will continue selling my macadamia to Ten Senses as it has been very good doing business with them but they should honor their promises.

- What do farmers want more of?
Famers expressed strong loyalty to Ten Senses, as 74% “definitely” see themselves continuing to work with Ten Senses in 1 year and 73% in 5 years.

Among those who do not see themselves continuing to work with Ten Senses in 5 years, loss of income was the top reason mentioned.

Most farmers see themselves working with Ten Senses in both the near and distant future.

**Likelihood of future partnership with Ten Senses**

Q: Do you see yourself working with Ten Senses next year? Five years from now? (N = 256)

- **Next year**
  - Yes, definitely: 74%
  - Yes, maybe: 24%
  - No: 2%

- **5 years from now**
  - Yes, definitely: 73%
  - Yes, maybe: 25%
  - No: 2%

**Reasons farmers would not work with Ten Senses**

Q: Please explain why not. (N = 6)

- **Loss of income**
  - “I’m now experiencing losses with the sales because of Ten Senses and I have to increase the money I can make.”

- **Better alternatives**
  - “I will be selling the macadamia to the contractors that come with their lorries from Nairobi and Thika.”

- **Lack of market access**
  - “They stopped macadamia in our area.”
What Do Farmers Want More Of?

Majority of farmers requested for Ten Senses to pay a higher price including a bonus for macadamia supplied.

“They should give us bonuses depending on the kilos we sell to them.”

“They should maintain and improve their prices as brokers are flooding the market nowadays. Also, they should give the bonus they promised to give.”

“They should provide farmers with grafted seedlings. They should provide farmers with a pesticide to spray away the pests.”

Better payment terms and requests for additional inputs processes were top suggestions for improvement.

Suggested improvements
Q: What else can Ten Senses do to serve you better? (N = 248)

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better payment terms incl. bonuses</td>
<td>39%</td>
</tr>
<tr>
<td>Additional inputs</td>
<td>20%</td>
</tr>
<tr>
<td>Financial assistance</td>
<td>15%</td>
</tr>
<tr>
<td>Training and information</td>
<td>14%</td>
</tr>
<tr>
<td>Market access</td>
<td>7%</td>
</tr>
<tr>
<td>Fulfil promises</td>
<td>5%</td>
</tr>
</tbody>
</table>
Appendix
We try to draw insights from all angles of our work, and tested the following two experiments in the Ten Senses project: the regularity of studies like this one, and the willingness of household members to let us speak to a female adult.

We often found that structural factors keep us from speaking to female customers – often, male respondents tend to keep their household mobile or feel more able to respond to our questions. This experiment, replicated across the Stanford Seed projects, should allow us to see whether we can overcome this challenge by simply requesting to speak to a female household member.

### Engaged in multiple surveys

Q: Have you been asked to provide feedback to a company survey like this one before? (N = 250)

<table>
<thead>
<tr>
<th>Previous survey participation</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20% say they had been engaged in other surveys before.

### Gender inclusion in surveying

Q: If there’s another female adult, would they be available to speak to us if need be? (N = 29)

<table>
<thead>
<tr>
<th>Willingness to participate</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22/29 indicate that female adults in their home can be interviewed.
# Staff Quiz Results

How well does Ten Senses know its farmers?

<table>
<thead>
<tr>
<th>Questions the team got right (woohooo!)</th>
<th>Questions the team got wrong (on average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Smiley face]</td>
<td>![Sad face]</td>
</tr>
</tbody>
</table>

## Long term retention
- **Guess:** 70%
- **Actual:** 73%
- Yes/No: money earned “improved”
  - **Guess:** Yes
  - **Actual:** Yes

## % of promoters
- **Guess:** 60%
- **Actual:** 40%

## Top value driver
- **Guess:** Mode of payment
- **Actual:** Income increase

## % reporting quality of life “very much improved”
- **Guess:** 50%
- **Actual:** 36%

## % money earned improved
- **Guess:** Less than half (26-50%)
- **Actual:** More than half (51-75%)

## Top challenge mentioned
- **Guess:** Inconsistent purchasing
- **Actual:** Failure to reach bonus

---

**Lean Data Insights For Ten Senses**
## Summary Of Data Collected

256 phone interviews completed in June 2019

<table>
<thead>
<tr>
<th>Methodology:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey mode</td>
<td>Phone</td>
</tr>
<tr>
<td>Country</td>
<td>Kenya</td>
</tr>
<tr>
<td>Language</td>
<td>Kiswahili, English</td>
</tr>
<tr>
<td>Dates</td>
<td>27th May – 1st July 2019</td>
</tr>
<tr>
<td>Survey length (mins)</td>
<td>21 minutes</td>
</tr>
<tr>
<td>Sampling method</td>
<td>Randomized from a list of 1,500 phone numbers of farmers provided by company. These farmers had worked with the company in the last 12 months.</td>
</tr>
<tr>
<td>Response rate</td>
<td>51%</td>
</tr>
<tr>
<td>Organic/Conventional Split</td>
<td>53/46</td>
</tr>
</tbody>
</table>

### Total responses collected:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>256</td>
</tr>
<tr>
<td>Staff quiz</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>262</strong></td>
</tr>
</tbody>
</table>
Thank You For Working With Us!

We hope it’s not the last time.

About 60 Decibels

60 Decibels 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 farmers, suppliers, and beneficiaries. Its proprietary approach, Lean Data℠, brings customer-centricity, speed and responsiveness to impact measurement.

60 Decibels has a network of 120+ trained Lean Data℠ researchers in 32 countries who speak directly to farmers 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 Mumbai. To learn more, visit www.60decibels.com.

Acknowledgements

Thank you to David Ogiga for their support throughout the project.

This work was generously sponsored by Stanford Seed.
I can now plant on time.
I used to delay getting seeds.
I was interested in the payment plan.

My family is very
>healthy
>happy
>safe
>hopeful

now.

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