

About 60 Decibels

60 Decibels is a global, tech-enabled social impact measurement company that brings speed and repeatability to impact measurement and customer insights. We provide genuine benchmarks of impact performance, enabling organisations to understand impact relative to peers and set performance targets.

We have a network of 1,200+ researchers in 80+ countries and have worked with more than 1,000 of the world's leading impact investors, companies, foundations, corporations, NGOs, and public sector organisations. 60 Decibels makes it easy to listen to the people who matter most.

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Thank You

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We are grateful for the contributions of additional partners who supported coffee cooperatives to participate in the Farmer Thriving Index. These partners include Aceli Africa, Counter Culture Coffee, Global Partnerships, Incofin, Rabo Foundation, Thanksgiving Coffee and SIDI.

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We'd also like to show our appreciation to the cooperatives and coffee companies that graciously allowed us to engage with their farmer suppliers. These organizations have demonstrated a commitment to listening to the farmers they serve—going above and beyond to truly understand their wellbeing and identify ways to improve.

Most importantly, we thank the farmers who shared their time and voices with us. Running a coffee farm is demanding, and we know your time is valuable. Your voice and your experiences matter, and we hope we've represented them well in this report.

List of Coffee Cooperatives:

Abateraninkunga Ba Sholi Abakundakawa Rushashi Cooperative

Dukunde Kawa Musasa

Just Know Your Coffee Cup

Mountain Harvest

Namanyonyi Cooperative

Rwanda Trading Company

Zombo Coffee Partners

Coopade Coffee Cooperative

FOUN EDATION

















7 Things We Learned From Farmers in the Coffee Supply Chain

01

Profitability is not a given for all coffee producers.

More than a third of Ugandan coffee farmers say that they did not earn a profit last year, with 21% saying they made a loss in their farming. Growers are vulnerable to market fluctuations and climate conditions, which makes harvest seasons unpredictable. 22% described the prices they received this season as poor and 20% said the season was worse than an average year, which may have contributed to the low profitability.



02

Half of the coffee farmers surveyed are vulnerable to financial shocks.

46% of Ugandan farmers report not saving at all in the last 12 months, and 22% saved sporadically, or once every few months. When asked about how easy or difficult it would be for them to access funds in an emergency, a similar proportion of farmers said it would be challenging. Farmers who rely on coffee for more than half their household income are more likely to save regularly and find it easy to afford emergencies. Owing to higher incomes in the region, Central Ugandan farmers can more easily access emergency funds than their peers in other regions.

03

Access to critical services is low.

Only 19% of the Uganda coffee farmers we spoke to have reliable access to agricultural extension which promotes adoption of resilient agronomic practices. Although intercropping is prevalent among farmers (71%), less than half compost and less than a quarter of all farmers conserve water or use biological pest control. Extension coverage varies by region with 41% of farmers in Western Uganda reporting access. Access to other essential services is also low—insurance (2%), weather alerts or information (12%), and credit (11%)—and varies by region.

04

1 in 3 households are food stressed.

Overall, 57% of Ugandan coffee farmers are classified to be experiencing 'minimal' food insecurity as per the IPC's definitions. 29% of farmers are classified as food 'stressed'—more so among households who were surveyed during the growing season (when they were not harvesting). Food security is also slightly lower in the Northern region.



05

Yet farmers aren't giving up on coffee.

Nearly all farmers surveyed expect to produce coffee for at least the next 5-10 years. To assess how farmers perceive the longevity of their livelihoods we asked whether they would like their children to grow coffee as adults. 81% of farmers strongly agreed. 73% of growers plan on increasing their investment in coffee for the upcoming seasons primarily by expanding their land or adopting better practices or inputs.

06

Coffee processing adds value for farmers.

55% of Ugandan farmers report selling most of their coffee as parchment while the remaining sold most of their harvest as raw cherries. Selling coffee processed as parchment is correlated with farmers receiving better prices and reporting profitability. These outcomes have a downstream relationship with farmers' financial resilience: parchment sellers are more likely to be saving regularly and can afford emergencies easily compared to their peers selling raw cherries. Their households are also more food secure.



07

The participating cooperatives are enabling farmer wellbeing.

Farmers associated with the four Uganda cooperatives that participated in the study are significantly more likely to report reliable access to at least one essential service compared to the average Ugandan farmer (80% vs. 51%). Expectedly, agricultural extension access is much more prevalent among cooperative farmers: nearly all of them report adopting at least one resilient agronomic practice, with a high adoption rate of intercropping, composting and water conservation. They are also more likely to report receiving good prices, earning a profit, saving regularly, and affording emergencies with ease.

01

Introduction

Why a Farmer Thriving Index?

Oh, to take that first, delicious sip of your morning coffee or to nibble on something chocolatey and scrumptious in the afternoon...

For so many of us, the parts of our day when we are at our happiest, and when we might even consider ourselves as thriving, involve food. We almost take this minor leisure for granted, yet that cup of coffee and biscuit is something of a minor miracle, involving long and complex food systems that all start with a farmer. Someone hardworking, persistent, and resilient enough to put a seed in the ground, or tender a tree, year after year.

So, if we thrive when we eat or drink something fantastic, wouldn't it be nice to know that the farmer that was essential to us being able to do that, was thriving too?

So how are (coffee) farmers faring?

Despite the rising demand for coffee globally, farmers are not necessarily faring well. Nearly half of all coffee-growing households still live below the poverty line. Some research estimates that proportion to be as high as 80%. More than half the world's coffee is grown on small family farms by 12 million smallholder producers who rely on coffee for their livelihood. These farmers are vulnerable to the changing climate—with models predicting that land suitable for coffee cultivation could be cut in half by 2050—and to fluctuating global coffee prices.

Help at hand

A plethora of foundations, NGOs, and coffee companies collectively invest millions of dollars in programs and certifications aimed at improving the lives of these farmers. Platforms like the <u>Sustainable Coffee Challenge</u> bring together 100+players from across the industry to encourage ethical coffee sourcing while committing to fair payments and supporting farmers with the adoption of sustainable farm practices.

And yet across these programs, the farmers' own perspective of what does or does not improve their wellbeing is rarely measured or measured inconsistently.



¹Ruben, R. (2023). Why do coffee farmers stay poor? Journal of Fair Trade, 4(2).

 $^{^2}$ TechnoServe (2024). <u>How We Support Smallholder Coffee Farmers.</u>

Dimensions of the Farmer Thriving Index

Measuring farmer wellbeing

Farmer wellbeing is multidimensional and context-dependent, and usage of the term varies.³ The coffee industry most commonly relies on measures of income or productivity as a proxy for farmer wellbeing. Some academic studies have used measures such as consumption per adult,⁴ quality of life,⁵ or food security, and in a 2019 study of Ugandan coffee farmers, Bartl developed a composite measure of wellbeing based on 10 indicators of trust, security, housing, and landholding.⁶ Despite these efforts, the sector has no generally-accepted, holistic, clear way of understanding farmer wellbeing that is grounded in the perspectives of the farmers themselves.

If the coffee sector can consistently measure and compare where, why, and how farmers are faring, we can all be more effective at addressing the challenges faced by them.

The **Farmer Thriving Index** is an attempt to provide this kind of measurement. The index is a standardised survey instrument that can be delivered cost effectively by phone. It measures the wellbeing of farmers across four key themes: living standards, food security, resilience, and a farmers' own outlook on the future of coffee as a livelihood.

A future of learning, improving, and creating greater impact for farmers

Listening directly to farmers is a simple yet effective way of discerning the changing realities of growers and adapting interventions meaningfully. Because the tool can be implemented repeatedly, we can produce benchmarks of where farmers' lived experience is better or worse. Benchmarks provide an invaluable yardstick by which to judge our impact performance and to learn lessons regarding the most effective ways to support and uplift farmers.



³ Isaac, Marney E., et al. "Multidimensional measures of farmer well-being: A scoping review." Agronomy for Sustainable Development 44.4 (2024): 39.

⁶ Bartl, A. L. (2020). The wellbeing of smallholder coffee farmers in the Mount Elgon region: a quantitative analysis of a rural community in Eastern Uganda. Bio-Based and Applied Economics. 8(2), 133–159.

Each dimension of the Index represents an integral facet of farmers' wellbeing and their ability to thrive within the coffee value chain. Each dimension has a maximum score of 25. Learn about the detailed FTI Scorecard in the Appendix.

On a scale of 0 to 100, a typical farmer we spoke to scores 58, suggesting that nationally, Ugandan farmers are 'surviving'. A 'thriving' farmer typically has access to resilience-enabling services, uses good agronomic practices, can save, earn a meaningful livelihood from coffee, and feed their families.









Living Standards

> Are the household's recent consumption patterns reflective of earning sufficient income to afford a decent standard of living?

Resilience

- > Financial resilience: How easy or difficult is it for farmers to afford emergency expenses?
- > Savings: Are farmers saving regularly?
- > Access to enabling services: Do farmers have reliable access to essential services?
- > Resilient agronomic practices: To what extent have farmers adopted good agronomic practices?









Coffee Farming Outlook

- > Perceived profitability: Are farmers earning more than they spend producing coffee?
- > Fair purchase price: How do they perceive the typical price received for their coffee?
- > Investment in farm: Do farmers expect to invest more into coffee farming in the future?
- > Livelihood longevity: Do farmers see themselves growing coffee in the next 5-10 years?
- Intergenerational outlook: To what extent to they want their children to grow coffee as adults?

Food Security

> Reduced Coping Strategy Index (RCSI): Do households rely on coping strategies to feed their families?

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⁴ Ahmed, M. H., & Mesfin, H. M. (2017). The impact of agricultural cooperatives membership on the wellbeing of smallholder farmers: empirical evidence from eastern Ethiopia. Agricultural and Food Economics 5(6).

⁵ Bacon, C. (2005). Confronting the coffee crisis: Can fair trade, organic, and specialty coffees reduce small-scale farmer vulnerability in northern Nicaragua? World development 33(3): 497-511.

What's Behind Your Brew?

Before we dive in, let us quickly get familiar with some of the basics of coffee. A daily staple across households, the humble coffee bean goes through many stages and stakeholders before it is packed in a burlap sack and transported to companies around the world.

The journey starts with young coffee seedlings mostly grown on small family farms.

Most growers cultivate one of two main varieties: robusta or arabica. Arabica is the preferred variety in international and specialty markets and requires more intensive cultivation. Robusta is generally more resilient to climate stresses, pests, and requires less specialised production practices. Different regions can be better suited to arabica or robusta based on altitude, temperatures, rainfall, or other characteristics.



Once the shrub is planted, the farmers use various practices such as pruning, pest management, planting shade trees, and intercropping other crops such as bananas.

Some growers participate in coffee certification programs, such as organic, Fairtrade, or Rainforest Alliance. These programs have specific requirements for the practices that growers must follow.



As the coffee plant matures, over a span of 3-5 years, ripe red coffee cherries are harvested – typically by hand.

In most origins, farmers experience two harvest seasons in a year: a main crop season, and a fly or mid-season. The latter is a secondary harvest season of the year, with slightly lower yields.

Farmers can sell their cherries raw or in processed form which requires rounds of fermentation and drying. At this stage, the dried husk of the fruit or the 'parchment layer' is separated from the bean. Coffee beans are often stored with the parchment intact (as parchment coffee) until they are ready for further processing or export.



Smallholder farmers often sell their coffee through a cooperative (co-op) or farmer group that aggregates and sells to larger buyers.

These co-ops may provide a range of services such as advisory or extension, credit, or inputs. Once the coffee reaches a larger coffee company, there is another round of rigorous grading and sorting after which the coffee beans are ready for roasting and then packaged for sale.

Approximately 1.7 million Ugandan farmers grow coffee. This report is a glimpse into the voices of these smallholders' lived experience in the coffee supply chain.



Who Did We Talk To?

The data in this report comes from conversations with farmers 60 Decibels engaged with in one of two ways:

Uganda National Survey

In October 2023, we worked with a Ugandan partner to identify coffee farmers to participate in the survey. Farmers were selected at random from coffee producing districts across Uganda. Farmers in the national survey are not associated with any one cooperative or buyer. Our goal in speaking with these farmers was to gain an understanding of the 'typical' Ugandan coffee producer and establish a benchmark for their wellbeing. For more details on the national survey methodology, head to the Appendix.

Cooperative Surveys

Four Ugandan cooperatives participated in the Farmer Thriving Index. For each, we spoke with a random subsample of members from the contacts shared by the co-ops. Four Rwandan cooperatives also participated. Their results are featured on page 25. We also conducted a study with one cooperative in DRC.

Throughout the report, we draw insights from the Ugandan national survey, pointing to differences and trends related to the cooperatives as relevant. Each cooperative has also received a detailed report with insights from their own farmers which can be compared to the national survey.

Ugandan Cooperatives

Co-op A (n = 303)

- 34% Female
- Central region
- 62% robusta · 75% parchment
- Co-op B (n = 275)
- 31% Female Eastern region
- 90% arabica
- 56% parchment

Co-op C (n = 142)

- 37% Female
- · Eastern region
- 99% arabica
- 88% parchment

Co-op D (n = 297)

- 15% Female
- · Northern region
- 93% arabica
- 29% parchment

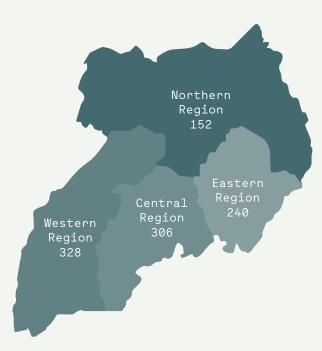


The Uganda National Survey

1026 Farmers

Regional Distribution

Number of farmers interviewed



47

Median age of farmer

33%

Female farmers

22%

99% Primary school as

Own their coffee

45%

education **

55%

Sold raw cherries Sold parchment

highest level of

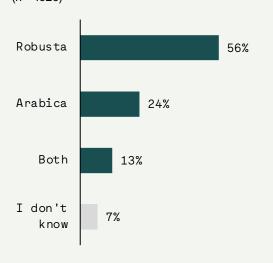
Median acres of total land cultivated

Median acres of land cultivated for coffee

Median household size

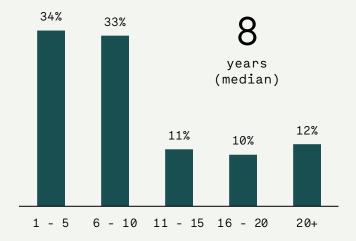
Variety of Coffee

Q: Which variety of coffee do you produce on your farm? (n = 1026)*



Age of Coffee Trees in Years

Q: What is the average age of the coffee trees on your farm? (in years) (n = 1026)



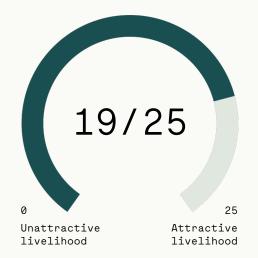
^{*}Segmented analysis based on coffee variety excludes farmers who report 'both' or 'I don't know' **76% completed schooling beyond primary. 2% reported no schooling

want to use techniques new season next like pruning fresh more branches growing. Male, 21 2024 Coffee Farmer Thriving Index

02

Coffee Farming Outlook

Total Score





Talk about sustainability is ubiquitous, but how often are the farmers themselves asked their views on the prospects of their livelihood?

Coffee as a livelihood is vulnerable to the changing climate and fluctuating world coffee prices, among other factors. So, for coffee companies to ensure the sustainability of their supply chains, they need to know—how do farmers perceive coffee in the long term?

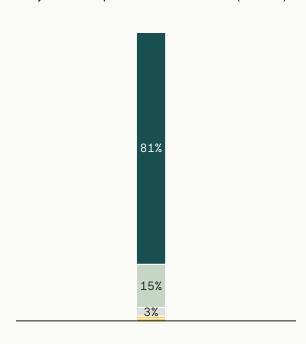
We assess this in the first dimension of the Farmer Thriving Index. We asked growers if coffee production is profitable and if they are optimistic about it as a source of income in the future.

The results were overwhelmingly optimistic. In the national survey, 98% of farmers say they plan to continue producing coffee in the long term, and 96% say they want their children to produce coffee as adults. The results were similar in the cooperative surveys.

76% of farmers plan to increase their investment in their coffee farms next season. Farmers who have access to agricultural extension services are more likely to plan to increase investment in coffee in the next season compared to those with no access to agricultural extension (85% vs 74%).

Intergenerational Outlook

Q: To what extent do you agree with the following statement: I want my children to produce coffee as adults. (n = 1020)



- ■Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Perceived profitability and coffee prices

Two-thirds of farmers report that they earned a profit from their coffee farm in the past year.

Profitability is correlated with farmers' perception of the price they receive for their coffee. More than a third of all farmers find the price they received for their coffee in the most recent season to be good. Farmers selling most of their coffee as parchment are more satisfied with the price they received and farmers selling robusta appear more satisfied than those growing arabica. Further, farmers who depend on coffee for more than half of their household income are more likely to report receiving a good price (51% vs. 29%) compared to others.

This can partially explain why farmers selling parchment—who are also more likely to report good prices—are more likely to report a profit in the last season. It also helps to explain why farmers are optimistic about the future of coffee, even when a third of them are losing money on it—they may expect prices to rise in future seasons.

The relationship between profit and the form in which coffee is sold is more pronounced among robusta growers. 76% of robusta farmers selling their coffee as parchment made a profit compared to 48% of robusta farmers selling raw cherries. Among farmers growing arabica, the form in which they sell their coffee is not significantly related to profits.

Profitability is also related to a household's dependency on coffee as a source of income. Compared to less-dependent households, farmers who depend on coffee for more than half of their household income are more likely to report earning a profit. This can be partially explained by these farmers reporting cultivation on more land, higher yields compared to others, along with higher prices for their harvest.

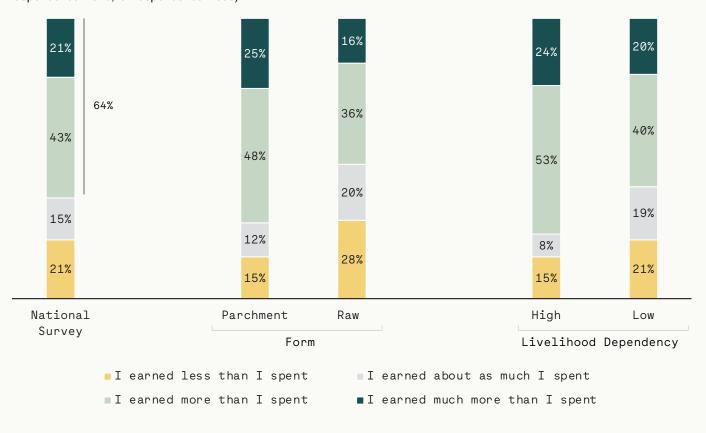
Fewer farmers in the Northern region report earning a profit from coffee. They are also less likely to sell in parchment form and report lower satisfaction with the price they received.

Profitability does not vary by the gender of the farmer, the variety of coffee grown, or the farm size.



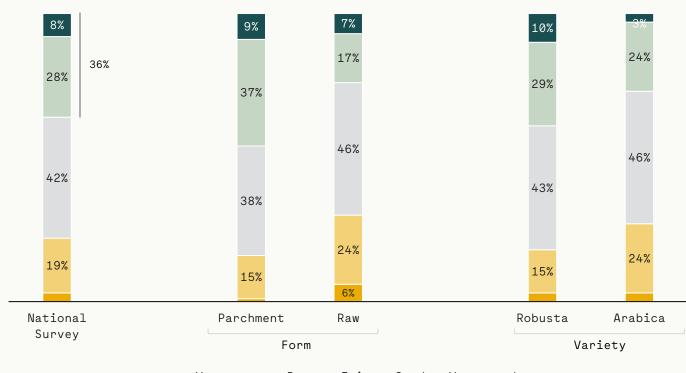
Profitability

Q: Think about how much money you earned from your coffee farm in the last 12 months, and how much you spent on farming. How did the amount you earned compare to the amount you spent? (n = 980 | parchment = 541, raw cherries = 438 | high dependence = 326, low dependence = 586)



Fair Purchase Price

Q: How do you rate the price you typically received for your coffee last season? (n = 979, parchment = 541, raw cherries = 438 | robusta = 548, arabica = 229)

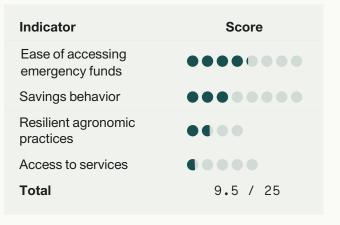


03

Resilience

Total Score





A farming household's resilience—or capacity to absorb and respond to shocks—is increasingly critical as climate shocks become more frequent.

East African coffee producers are particularly vulnerable to climate events. Changes in temperature and rainfall can drastically affect coffee yields and unpredictable weather events such as droughts and pests can devastate crops. Beyond climate, farming households can be vulnerable to other types of shocks, such as fluctuations in the global price of coffee, health events, or other unexpected emergencies that require financial resources.

A household's ability to absorb these financial shocks without resorting to coping strategies such as borrowing from loan sharks or withdrawing children from school is critical to minimizing the long-term negative consequences which can alter a household's wellbeing for generations.



Financial Resilience

A third of the Ugandan coffee farmers we spoke to regularly save a part of their income, while 46% are not able to save at all, leaving them vulnerable to financial shocks.

Farmers who rely on coffee for more than half their household income are more likely to save regularly than their less-dependent peers. Farmers selling their coffee in parchment form are also more likely to save regularly than their peers selling coffee as raw cherries (34% vs. 26%). These differences may partially be due to these farmer groups being more likely to earn a profit (page 10).

To gauge household's ability to absorb a financial shock, we asked each respondent how easy or difficult it would be to for them to come up with approximately \$45 in the next month for an emergency. Farmers were near evenly split on this with 43% saying it would be 'easy' or 'very easy' and 37% saying it would be 'difficult' or 'very difficult.'

More robusta farmers compared to arabica farmers say it would be easy (48% vs. 34%). Following the trend of profitability and savings, farmers selling their coffee as parchment and derive more income from coffee are more likely to find it easy to come up with emergency funds.

We found no significant trends in financial resilience by gender or land size.

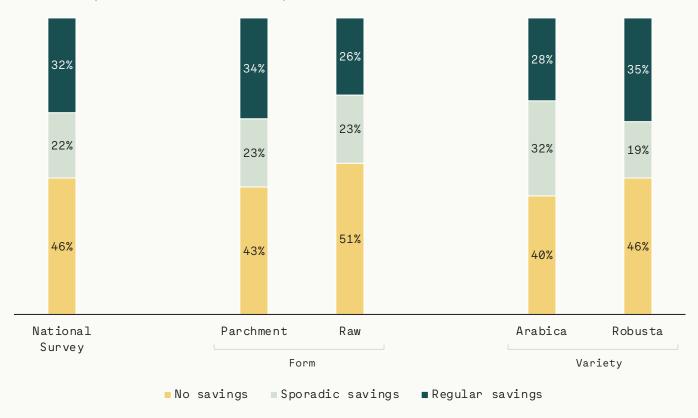
The price is very poor for a farmer to keep farming as it requires financial stability to farm properly where we are able to buy some inputs.

- Male, 57



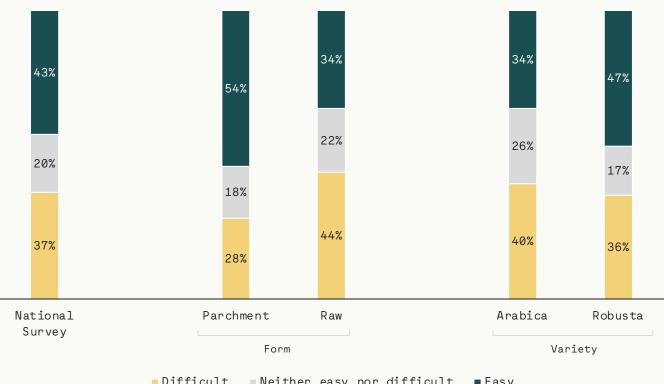
Savings

Q: In the past 12 months, how frequently were you able to save a portion of your household income? (n = 1026 | robusta = 548, arabica = 229 | parchment = 541, raw cherries = 438)



Ease of Affording Emergency Expenses

Q: Imagine that tomorrow you have an unexpected emergency and need to come up with 169,000 UGX within the next month. How easy or difficult would it be to come up with this money? (n = 1026 | robusta = 548, arabica = 229 | parchment = 541, raw cherries = 438)



Savings and Emergency Expenses by Cooperative

--- Uganda National Survey Benchmark (2023)

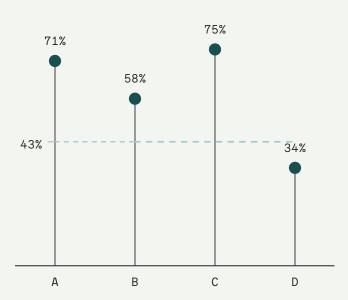
Regular Savings

% of respondents who report saving every month or in > 8/12 months



Ability to Cover Emergency Expenses

% of respondents who would find it 'very easy' or 'easy' to afford emergency expenses.

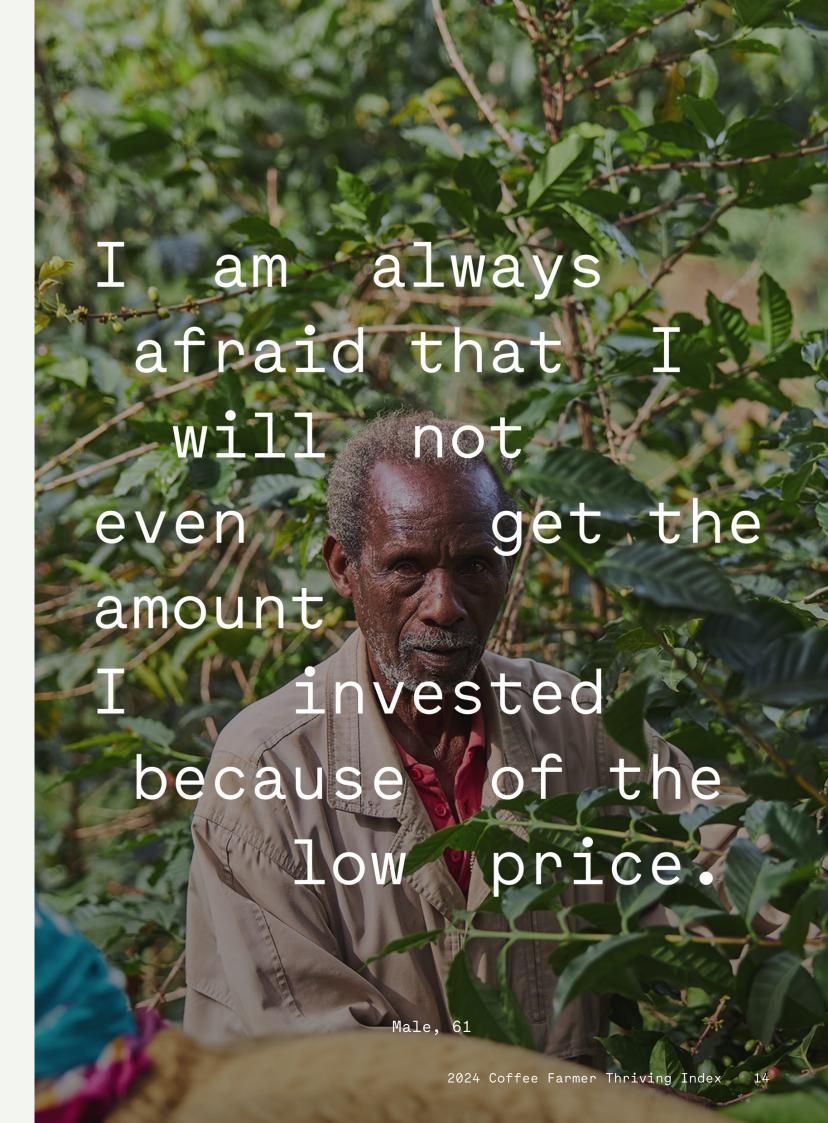


Cooperative Focus: Financial Resilience

In terms of savings and ease of affording emergencies, all four cooperatives perform better than the national Ugandan average. Cooperatives often encourage informal savings or participation in SACCOs, which could be aiding farmers' ability or willingness to save more or plan their finances.

As in the national survey, savings appear to be significantly higher among cooperative farmers selling most of their coffee as parchment. Improving farmers' access to coffee washing or processing stations nearby could help them fetch a higher price for their coffee and strengthen their seasonal earnings and financial resilience.

Farmers in Cooperative D are less likely to be able to cover emergency expenses which is reflective of its location in Northern Uganda and most of its farmers selling some or all their coffee as raw cherries.



Access to Resilience-Enabling Services

Half of Ugandan coffee farmers report no reliable access to resilience-enabling services.

Farmers' access to resources can determine their resilience to unexpected weather events.

We asked each farmer about their access to five essential services:



Weather information services that can provide farmers with early warnings, enabling them to prepare or adapt.



Agricultural extension services that advise farmers on which types of inputs and practices are best suited for the changing local conditions.



Credit, which enables farmers to invest in adapting their farm to the changing climate.



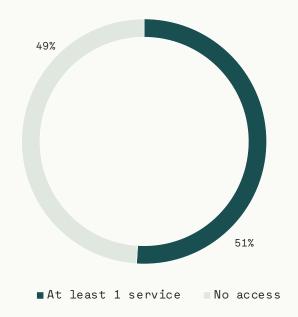
Insurance, which reduces the financial risk associated with unexpected shocks.



Electricity, which can enable household resilience through multiple pathways—from ensuring access to communications to reducing disruptions in productive activities to health outcomes.

Access to Services

Q: To which of the following services did you have reliable* access in the past 12 months? Select all that apply. (n = 1026)



Access to Services % of Ugandan farmers reporting	access to services
Electricity	24%
Agricultural extension	19%
Weather info	12%
Credit	11%
Insurance	2%

Too much sunshine affected the coffee in the last season. don have anything invest coffee. Female, 34 2024 Coffee Farmer Thriving Index

^{*}Farmers answered based on what they perceived as 'reliable.' If additional clarification was required, enumerators prompted them to consider if they could access the service when they needed it.

51% of Ugandan coffee farmers have reliable access to at least one of these services, but access to services varies across regions.

Reliable Service Access by Regions

Access to electricity is the most common, with 1 in 4 households connected. This is driven by the high connectivity in Central Uganda (51%) while just 6% and 11% have electricity in Western and Northern, respectively.

1 in 5 farmers have reliable access to agricultural extension, and even fewer cite access to weather information. Extension is more prevalent in Western Uganda, with 41% of farmers saying they have access. However, access to credit is very low in Western (3%) compared to 11-18% in the other regions.

Region	Eastern (n = 240)	Central (n = 306)	Western (n = 328)	Northern (n = 152)
Access to at least 1 service	38%	69%	46%	45%
Agricultural extension	5%	8%	41%	17%
Credit	18%	16%	3%	11%
Insurance	0%	3%	2%	1%
Electricity	23%	51%	6%	11%
Weather information / early warning	3%	14%	8%	28%

Cooperative Focus

Access to services is much higher among the four cooperatives surveyed than nationally, which likely reflects that the cooperatives provide their members with services such as agricultural extension. In Eastern Uganda, only 5% of farmers in the national survey reported reliable access to extension, while the two cooperatives located in Eastern reported 62% and 71% access (Cooperatives B and C).

Other services could be indicative of cooperative members living clustered in one location. For example, 79% of Cooperative C farmers have electricity, while just 6% of farmers surveyed in Eastern Uganda reported electricity—likely indicating that Cooperative C is in an area connected to the grid.

Cooperative D has the lowest access to services, which reflects its location in Northern Uganda.

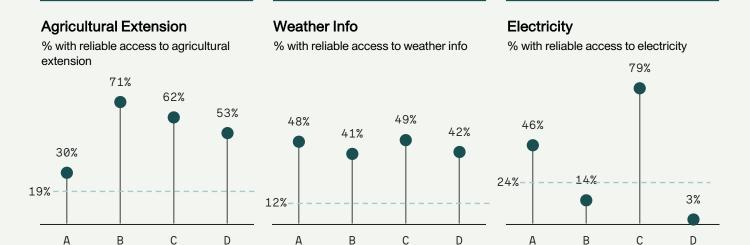
Access to Services Across Uganda Cooperatives

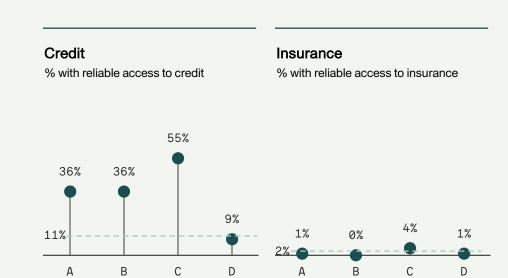
--- Uganda National Survey Benchmark (2023)

Δ

Access to Services % with access to at least 1 reliable service 90% 70% 51%

В





D

Resilient Agronomic Practices

Low access to agricultural extension is associated with lower adoption of resilient farming techniques.

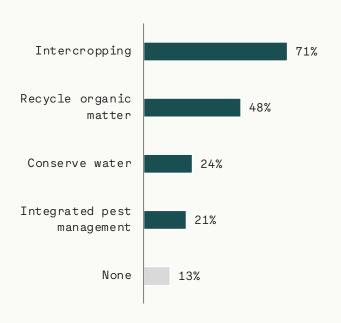
Most Ugandan coffee farmers report using at least one of the four key practices we asked about: intercropping, composting, water conservation, and biological pest control. This is mainly driven by the 71% of farmers who intercrop coffee with another crop. Arabica growers are significantly more likely to report intercropping compared to robusta growers (86% vs. 66%).

Ugandan farmers with reliable access to agricultural extension are more likely to report using the resilient practices we asked about. Farmers with reliable access to agricultural extension report using a median of two resilient practices. In contrast, those without reliable access to advisory typically report the adoption of just one practice. More specifically, growers with reliable agricultural extension are significantly more likely to say they recycle their organic material (compost) than those without reliable access. Expectedly, practice adoption is much lower among farmers with limited exposure to consistent advisory.



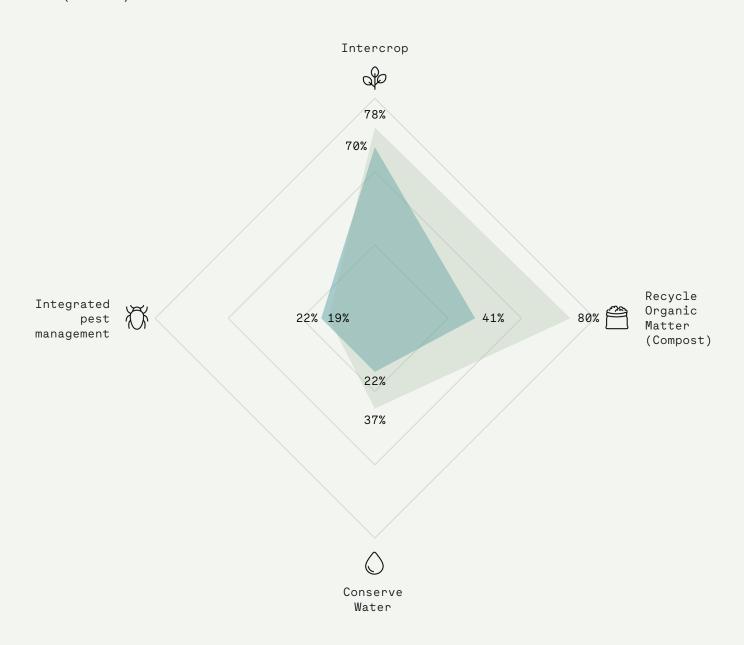
Resilient Practices

Q: Which of the following did your household do in the past 12 months? (n = 1026)



Resilient Practice Adoption by Access to Reliable Agricultural Extension

- Reliable agriculture extension (n = 197)
- No reliable access to agriculture extension (n = 829)



Cooperative Focus

All four participating cooperatives report higher adoption of resilient practices than the national average, which is likely associated with their greater access to agricultural extension.

Cooperatives B and C, both in Eastern Uganda, report near universal adoption of intercropping and composting.

66

I'm still researching which pesticide will work best because at the end of the day, our output is low because of the pests eating our crops. I feel I might invest a lot to control the pests.

- Female, 53

66

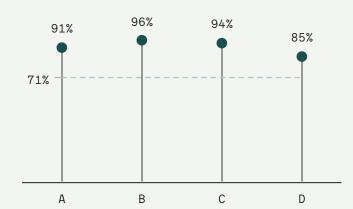
[Cooperative]
provides training to
farmers so that we
produce a lot and
earn money and they
give bonuses for
farmers who have sold
a large quantity of
coffee to the market.

- Female, 35

Practice Adoption Across Ugandan Cooperatives

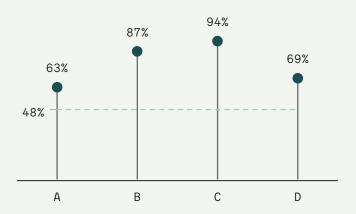
--- Uganda National Survey Benchmark (2023)

Intercropping % intercropping



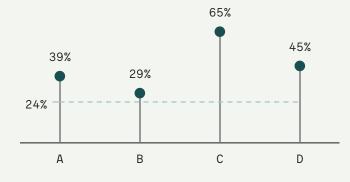
Recycling Organic Matter

% recycling organic matter



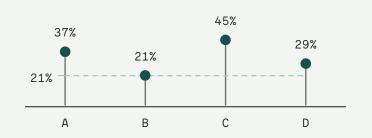
Conserve Water

% adopting water conservation practices



Integrated Pest Management

% practicing integrated pest management



Food Security

Overall, we find that Ugandan coffee farmers are fairly food secure, with just 14% of our sample classified as 'crisis' by IPC definitions.

Food security means that a household has access to sufficient, safe, and nutritious foods to meet its dietary needs.

We measure food security using the Reduced Coping Strategies Index, a proxy indicator for household food insecurity. The indicator is based on how many times in the past week each household has relied on a defined set of five coping strategies.

Farmers' food security is likely derived from growing their own food rather than relying solely on coffee income to feed their families. 64% of farmers estimated that less than half their annual income came from coffee, and 71% intercrop their coffee with other crops. Banana is a staple food in Uganda and commonly intercropped with coffee.

We did not identify any trends in food security levels by coffee variety. Farmers surveyed during their main harvest season reported greater food security than those in the growing period, which reflects the seasonality of farm income, and that households typically have more cash on hand during the harvest. Furthermore, 17% of robusta farmers are classified as being in 'crisis', compared to 7% of those growing arabica.

Farmers who sold most of their coffee as parchment report higher levels of food security than those selling most of their coffee as raw cherries. This is in line with what we have previously noted about the higher profitability associated with selling parchment compared to raw cherries. We also observe lower food security in Northern Uganda, where farmers also report poorer prices and lower profits.

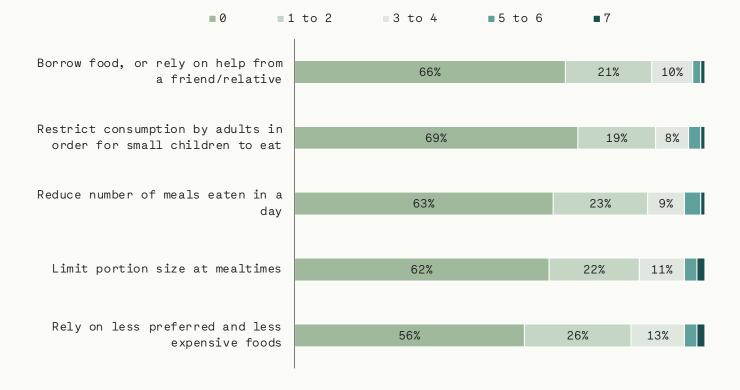
Total Score



2024 Coffee Farmer Thriving Index

Food Security

Q: In the past 7 days, if there have been times when you did not have enough food or money to buy food, how often has your household had to...? (n = 995)



Insights from Cooperatives

Farmers from three out of the four cooperatives we spoke to have better food security scores compared to the national average. In the sole cooperative with a lower food security score, more than a quarter of its farmers report being in the growing season when we spoke to them (the highest proportion among all cooperatives) which may explain lower food security among its farmers.

A	B	C	D
Central	Eastern	Eastern	Northern
22.2	20.7	16.7	20

We have been taught that coffee and more money eventually make rich Male, 30

Living Standards

A 'living income' is defined as the net income required for a household to maintain a decent standard of living for all its members. This encompasses essentials such as food, shelter, education, healthcare, and other basic needs.

Brands, such as coffee companies that source from smallholder farmers, have embraced this concept. In addition to demonstrating a commitment to go above and beyond the concept of a poverty line, the living income benchmark provides a way to establish a 'living income reference price' – that is, what the company needs to pay farmers for their produce to ensure they earn a living income.

The concept of a living income is commendable and has undoubtedly advanced the coffee and cocoa sectors in terms of considering and addressing the wellbeing of their suppliers. However, while companies set performance targets related to living income, they often lack a practical way to measure their performance against these targets.



Why living income is tricky

It requires a benchmark value. The Anker Research Institute has developed a methodology for estimating living costs in different regions, but this approach is resource-intensive and highly context-specific. For example, in Uganda, the only available benchmark is for the Lake Victoria Basin region, which does not coincide with our study area. In some regions, no benchmark value exists at all.

It is sensitive to inflation. In high-inflation settings, the definition of a living income can fluctuate from month to month—faster than benchmarks can be updated. While Uganda's currency stabilised in 2023, making this less of a challenge, other regions, such as Ghana, have faced inflation rates exceeding 40%, occasionally rendering income benchmarks outdated.

It includes all sources of household income. Coffee-growing households typically have multiple income sources that vary throughout the season. Even if a coffee company commits to paying the Living Income Reference Price, it is unlikely to ensure that the household remains above the benchmark since their income depends on many other factors.

Income is seasonal and hard to measure. Accurately measuring living income requires recalling all sources of income (and production costs) for all family members over an entire year. In informal economies, households rarely keep detailed records of their income. Thus, even in long detailed interviews, the best measure is often a rough estimate, subject to recall and saliency biases.

In pursuit of Lean Data for living income

At 60 Decibels, we love a challenge, and we love helping companies find easier ways to measure impact. So, we've tested several ways to tackle this in both the coffee and cocoa supply chains. (Not interested in getting into the weeds on methodology? Go ahead and skip this page!)



Direct Income Questioning

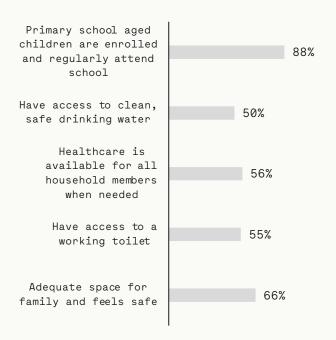
In several cocoa-producing regions, 60 Decibels has directly asked producers about their earnings. This includes a basic module estimating production costs, sales volume, and average sales price for the past month, along with an estimate of all other household income sources. The module takes about 10 minutes and relies on farmer recall and estimation. This methodology is effective only when a household has one primary crop that constitutes a substantial portion of their income and for crops where costs and sales remain fairly consistent throughout the year.

Living Standards

In a few studies, we dug into the components that define a living income. We asked households about their access to water, sanitation, education, shelter and food. This methodology doesn't yield a quantitative headline statistic against a benchmark – but it does give you a true sense of how the household is faring. See the chart below.

Alternative Measurement of Decent Living Standards – Example from Ghana

% who 'strongly agree'



Consumption-Based Poverty Likelihood Estimates

The Poverty Probability Index (PPI®) is a poverty measurement tool for organisations and businesses with a mission to serve the poor. The PPI is statistically-sound, yet simple to use: the answers to 10 questions about a household's characteristics and asset ownership are scored to compute the likelihood that the household is living below the poverty line. 60 Decibels uses this methodology in many of our studies to estimate the portion of participants below the poverty line.

We collaborated with Innovations for Poverty Action to adapt the PPI methodology for the living income benchmark. However, instead of using questions about assets—like roof materials or television ownership—that are slow to change, we built the tool using questions about a household's consumption in the past week that are predictive of their overall household income. In our initial versions of this methodology, we used consumption values in currency (think: \$ spent on eggs this week) but adapted to incorporate volume measures (think: # of eggs purchased this week) to reduce sensitivity to inflation.

This methodology was used for this report and to draw the conclusions on the following page. It has several advantages: it is easy to administer and captures all household income sources. However, it also has limitations. It is based on a national dataset from 2020, assuming that consumption patterns predictive of living income have remained constant. It is highly seasonal and assigns a likelihood based on a household's region, making differentiation within a region impossible.

It's not perfect, but it's a start—and it allows us to compare cooperatives to a national benchmark, and to identify trends in the data.

66

Due to the prices the [cooperative] offers when buying my coffee, I now have land of my own and I also participate in the savings group in our community.

- Male, 68

What we learned about coffee farmers and living standards

Nationally, 46% of coffee farmers in Uganda are above the living income benchmark, based on their expenditure patterns in the 7 days prior to the survey.

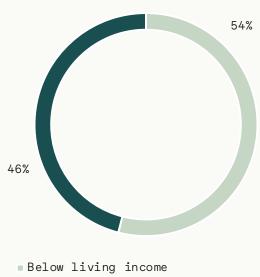
This varies seasonally, based on when the respondents were surveyed – those who were not harvesting at the time of the survey were less likely to be above the benchmark (38%), compared to those who were in their 'main' harvest season (51%) or the fly-crop season (41%).

Male and female farmers fare similarly in terms of being below the living income benchmark (52% vs. 56%).

Growing robusta is associated with a higher likelihood of being above the living income benchmark – this is likely because robusta is more common in Central Uganda, where incomes are higher and so is the dependence on coffee as a main source of household income. Farmers with a high dependence on coffee are more likely to be above the living income line than those with lower income dependency on coffee (57% vs. 43%).

Uganda National Survey: Living Income Results

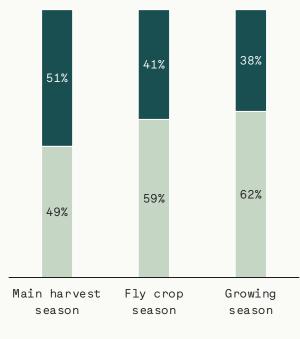
% of households above or below the living income benchmark, based on consumption likelihood estimates



■ At or above living income

Living Income by Season

% of households above or below the living income benchmark, based on consumption likelihood estimates



■ Below LI ■ At or above LI

Cooperative Focus

Expectedly, Cooperative A in Central Uganda fares well, with more than half of their farmers being above the living income benchmark. This is in line with trends for the Central region and for robusta growers.

For Cooperatives B and D, more than half the farmers are below the living income benchmark and below the national average. However, both are aligned with the averages for their respective regions (Eastern and Northern). Both cooperatives' farmers are more likely than others to find the prices offered for their coffee to be 'very poor' or 'poor'.

National Survey (n = 1,026)	A Central (n = 303)	B Eastern (n = 275)	C Eastern (n = 328)	D Northern (n = 152)
	62% robusta 75% parchment	90% arabica 52% parchment	99% arabica 88% parchment	93% arabica 29% parchment
46%	53%	38%	45%	34%



So how should coffee companies think about living income?

We urge coffee companies to continue doing everything possible to help farmers earn a living income. We applaud your commitment to their wellbeing, and as coffee lovers, we naturally want to see the sector thrive.

Our aim here is to provide nuance around the concept of living income and to encourage the sector to give itself some grace. You may not be able to affect—or even measure—whether the farmers in your supply chain are above the living income benchmark.

However, there are other indicators of farmer wellbeing that you can impact and measure. Do they have enough to eat? Are their children in school, or are they working on the farm? Ask the farmers what matters most to them and what they need. By finding ways to listen to them regularly, we promise you will gain insight into whether they have a 'decent' standard of living.

66

I managed to pay school fees for my children because of the total sales I get from selling my coffee. This is all possible because of the energy I have put into farming. Also, paying for medical bills is not a problem in my family anymore.

- Male, 33



Rwanda Spotlight

We spoke to farmers working with four Rwandan cooperatives.

As in Uganda, we invited Rwandan coffee cooperatives to participate in the Farmer Thriving Index to understand the wellbeing of their farmers. However, we did not conduct a national survey in Rwanda, so we do not have benchmarks for comparison.

In Rwanda, 60 Decibels surveyed **1071 farmers** working with **four cooperatives**. We sampled randomly from the database of farmers shared by each cooperative (read more about our methodology <u>here</u>). These farmers differed from those we spoke to in Uganda. Among the four Rwandan cooperatives, nearly all farmers grow arabica and sell their coffee cherries raw. Most were in the growing season when we spoke with them.

The four Rwandan cooperatives performed similarly on the Farmer Thriving Index, with total scores ranging from 57-64 out of 100.

66

No doubt there will be an increase in my investment in comparison to previous years. I have increased the number of trees and the price of inputs have increased too. This requires me to prepare enough capital for next year.

- Male, 60

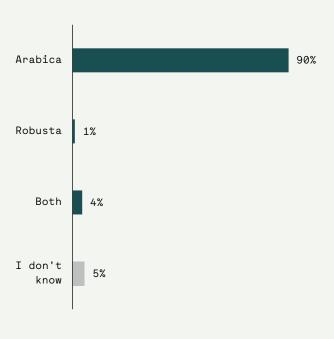


Rwanda Cooperatives

1071 Farmers

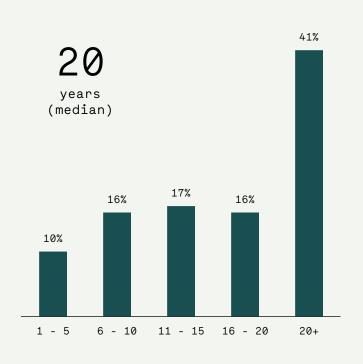
Variety of Coffee

Q: Which variety of coffee do you produce on your farm? (n = 1026)



Age of Coffee Trees in Years

Q: What is the average age of the coffee trees on your farm? (in years) (n = 1071)



52

Median age of farmer

24%

Female farmers

100%

raw cherries

82%

Household size of 4 or more

45%

Sold

92%

Primary school as highest level of education

In the growing season

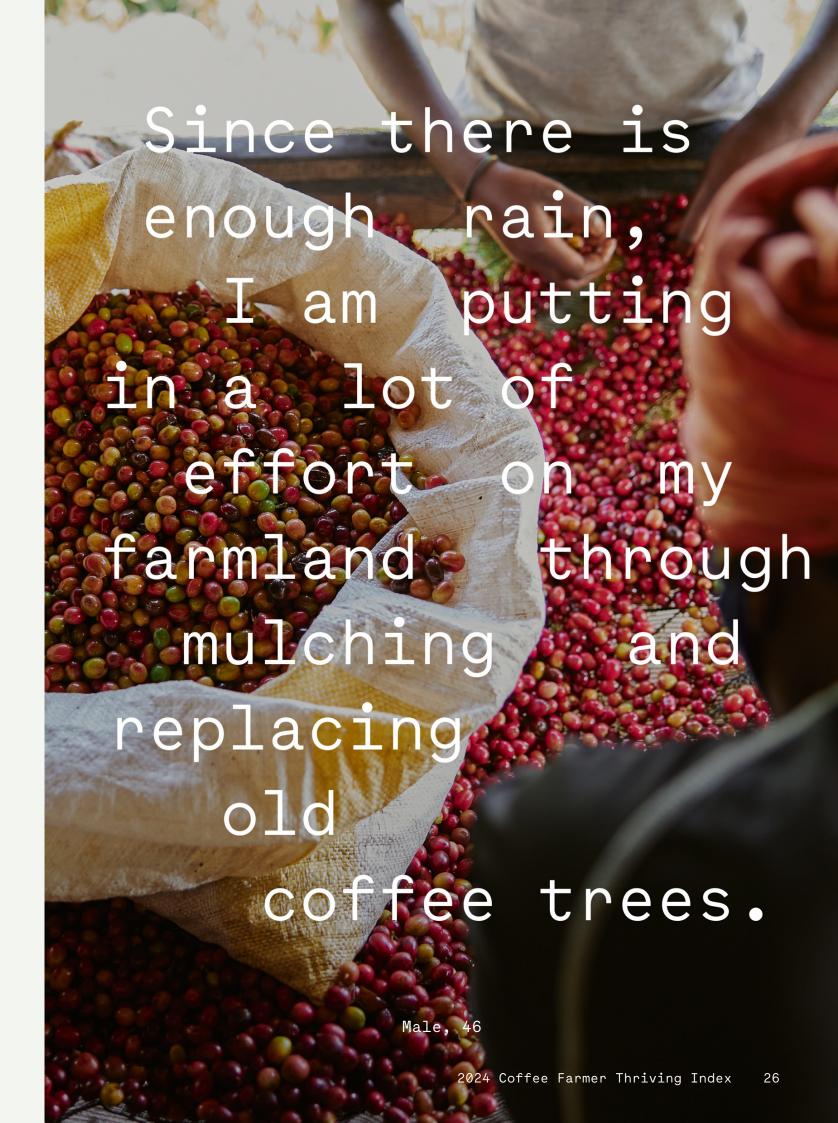
3.7

Median acres of total land cultivated Median acres of land cultivated for coffee

66

I'm determined to put more effort into my coffee farming compared to last season in order to increase my production. I plan to hire additional workers to assist with tasks.

- Female, 34



Rwanda Spotlight

The majority of farmers working with Rwandan cooperatives were surveyed during the growing season (i.e. they were not harvesting). With lesser cash on hand and expenses to incur for the farm, it is expected that farmers reported consumption patterns reflective of earnings below a living income. However, despite this, farmer households are largely food secure.

Unsurprisingly, farmers who received good prices for their coffee are more likely to think that this season was better than an average year compared to those who would rate the price poorly (60% vs. 35%). However, despite 62% finding the price poor, over half of the farmers (54%) report being profitable. Resultantly, farmers are optimistic about growing coffee in the future.

More than half of the farmers surveyed report saving regularly and 43% would find it easy to come up with emergency funds.

Nearly all report having reliable access to resilience-enabling services in the last 12 months, which is significantly higher than the national survey results in Uganda (51%). In particular, access to insurance is much higher among Rwandan cooperatives than in Uganda (68% vs. 2%).

60%

of Rwandan cooperative farmers reported consumption below a Living Income

81%

want to increase their investment in coffee in the upcoming seasons

59%

of households are food secure

56%

said this season was worse than the average year

94%

want their children to grow coffee

99%

Had reliable access to at least 1 enabling service

73% agricultural extension

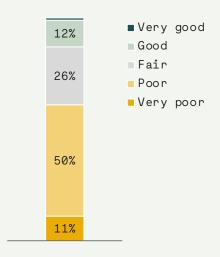
68% insurance

35% weather information

31% credit

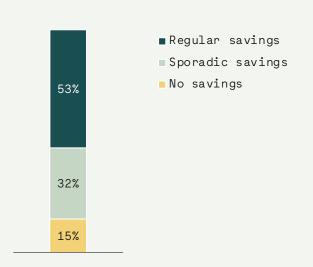
Fair Purchase Price

Q: How do you rate the price you typically received for your coffee last season? (n = 1069)



Savings

Q: In the past 12 months, how frequently were you able to save a portion of your household income? (n = 1070)



98%

Adopted at least 1 resilient practice

| 90% integrated pest management

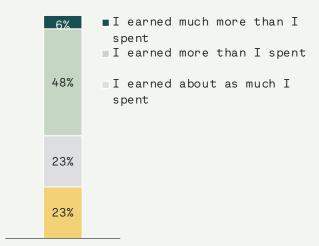
72% recycle organic matter

35% intercrop

35% conserve water

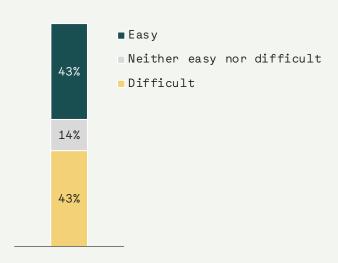
Profitability

Q: Think about how much money you earned from your coffee farm in the last 12 months, and how much you spent on farming. How did the amount you earned compare to the amount you spent? (n = 1067)



Financial Resilience

Q: Imagine that tomorrow you have an unexpected emergency and need to come up with 170,000 RWF within the next month. How easy or difficult would it be to come up with this money? (n = 1071)



What's

Next?

Recommendations

Coffee producers—much like cups of coffee—vary widely. Even within Uganda, altitudes, microclimates, varieties, and access to services change the lived experience of growing coffee. Therefore, we have no universal recommendation to improve farmer wellbeing beyond this: **listen to the farmers.** They know if they are thriving or barely surviving, and they know what they need.

With that caveat, we did learn a few things that, once contextualized, will contribute to farmer wellbeing. These insights align with conventional wisdom in smallholder farming systems—but hearing them directly from farmers reflecting on their own wellbeing should underscore their importance.

- Expand training and advisory. Across Uganda, access to extension and information services is low. This is a critical service that contributes to productivity and resilience across crops and contexts.
- > Support coffee processing. Processing is called value addition for a reason! While we cannot directly attribute wellbeing to processing, we did find that farmers selling coffee as parchment are generally better off. Processing typically requires equipment or infrastructure, like a washing station, that may be shared among a group of farmers.



66

I am busy planting more coffee and I expect them to mature in the future. I am also putting in more effort in caring for the coffee trees.

- Female, 50

Suggestions for future research

We know we've just scratched the surface of the coffee sector in East Africa. Here are a few themes that piqued our interest, but were outside the scope of the study:

- > Is robusta production more profitable than arabica? Although arabica fetches a higher price, robusta prices are rising, and the variety is gaining appeal for its climate resilience properties and relatively low intensity of production. Our study did not observe a difference in perceived profitability between the two varieties.
- > What drives regional differences? We observed differences between the four regions of Uganda studied across the dimensions but on average, wellbeing was similar. For example, in Northern Uganda, food security and perceived profitability is lower, but access to weather information is substantially higher than in the rest of the country. Additional research on the regional difference could help to contextualize some of these insights.

What's next for the Farmer Thriving Index?

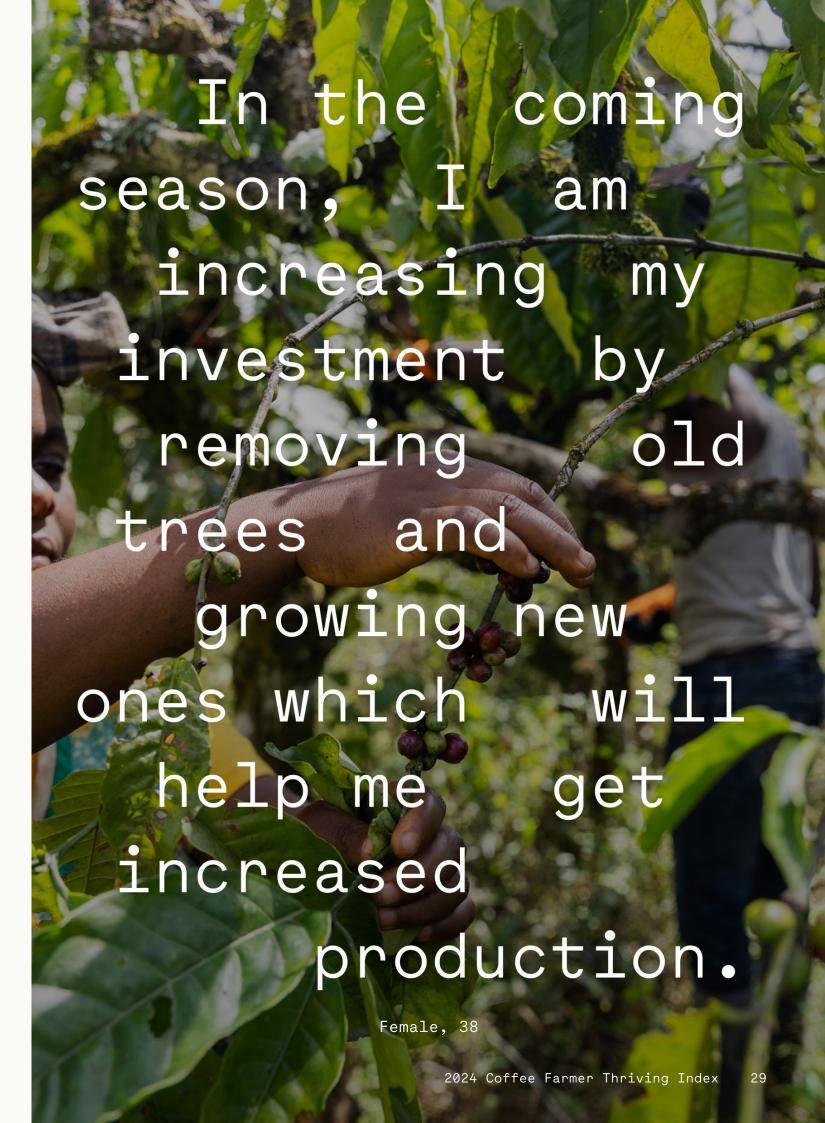
Our collective vision is to encourage the coffee sector—and all sectors that source from smallholders—to listen directly to farmers about their own wellbeing. We believe that standardized measures of farmer wellbeing can increase transparency and help companies remaining accountable to the farmers they work with.

This initiative was a pilot, to test the concept, and demonstrate the power of standardized measurement grounded in farmer voice.

We learned an enormous amount–from the thousands of farmers we spoke with, and from the coffee brands, cooperatives, and exporters we partnered with–and we will continue to learn more as we share this report with the sector. We also want to hear from you! Please share your thoughts, questions, and feedback with aayushi@60decibels.com.

All of this learning will inform our plans for if, when, where, and how to scale up the Farmer Thriving Index in 2025 and beyond.

Stay tuned!



Appendix

Farmer Thriving Index: Additional Modules

To customize the Lean Data study to meet their needs, some partners chose to include additional survey modules that would help them gain a more nuanced insight into their farmers.



Impact of Cooperative on Farm and Life

- > Changes in way of farming practices
- > Changes in quality of life and drivers
- > Changes in money earned
- > Changes in household health & healthcare expenditures



Farm Profile

- > Other crops grown on the farm to supplement coffee income
- > Perception of certifications' value



Farmer Experience & Satisfaction

- > Access to alternatives in the market
- > Net Promoter Score®
- > Challenge rate
- > Mode of receiving information or advisory
- > Engagement with cooperative agents



Market Access & Credit

- > Time taken to receive payments post-sale
- > Access and use of advance financing
- > Fees or interest charged for advance financing
- > Mode of coffee collection



Deep Dive: Farmer Thriving Index Scorecard

Each dimension has a maximum possible score of 25. For Resilience and Coffee Farming Outlook, metrics that constitute the dimension have been assigned individual scores, based on their weightage within that dimension. A total score of more than 60 is classified as 'thriving'.

Indicator	60dB Uganda National Survey	Maximum Possible Score
Total Score	58	100
Living Standards	11	25
Consumption	11	25
Resilience	9.5	25
Ease of accessing emergency funds	4.1	8
Savings	3.0	8
Access to services	0.7	5
Resilient agronomic practices	1.7	4
Coffee Farming Outlook	19.1	25
Perceived profitability	2.5	5
Fair coffee purchase price	3.0	5
Investment in farm	4.0	5
Livelihood longevity	4.9	5
Intergenerational outlook	4.7	5
Reduced Coping Strategy Index	18.2	25
Food security coping strategies	18.2	25



Methodology

The farmers in the national survey and those working with cooperatives were surveyed by enumerators based in the country of research, speaking local languages. Interviews were done over the phone and a typical survey was ~20 minutes long.

Uganda national survey:

We established a sample frame using data from the Uganda Coffee Development Authority and Uganda census data, to identify farmers from coffee-growing districts. With support from our onground partner, Aareton Blue, we recruited farmers to participate in the survey using a stratified. random selection of sub-counties. Within each selected sub-county, the research team collaborated with local authorities to identify coffee-growing villages, randomly selected a landmark within each village, and used a random walk methodology to identify coffee growers. We aimed to survey an equal number of robusta and arabica farmers. All four regions are represented in the final sample within which we focused on high productivity coffee zones when selecting districts. Each region has an equal number of male and female farmers surveyed. Within a household, the member most knowledgeable about the family's coffee farming was selected to participate in the interview.

Cooperative surveys:

All cooperatives were asked to share a list of phone numbers of farmers who had engaged with them over the past year. The 60 Decibels team then randomly selected farmers for surveying from this contact base to ensure that our final sample for each cooperative resembled the database provided as closely as possible. We surveyed roughly 275 farmers for all Ugandan and Rwandan cooperatives and this sample size gives us a confidence level of 90% and a margin of error of 4% in results for the farmer base we had phone numbers of. We also 48 surveyed farmers of one cooperative in the Democratic Republic of the Congo (DRC). We have refrained from sharing results of this survey here to preserve anonymity. We are unable to account for the impact of response rate or mobile phone ownership in our confidence level calculation.

Uganda National Panel: Distribution by Sub-Regions



Metric Calculation

Reduced Coping Strategies Index The Reduced Coping Strategies Index (RCSI) is a proxy indicator of household food insecurity. It considers both the frequency and severity of five pre-selected coping strategies that the household used in the seven days prior to the survey. It is a simplified version of the full Coping Strategies Index indicator. See <u>link</u> for more details.

<u>Interpreting RCSI</u>: Each household is assigned a score based on the count and type of strategies adopted to combat food insecurity. Based on the score, the Integrated Food Security Phase Classification (IPC) categorizes them into 5 key phases of food insecurity. More on the classifications <u>here</u>.

Living Income

We asked 11-12 survey questions, depending on the country, to arrive at a probability of poverty index (PPI) score. These questions were around consumption patterns of households within the past 7 days. The PPI score was then transformed into poverty likelihoods using a model based on data from Uganda's 2020 National Panel Survey conducted by the National Bureau of Statistics or Rwanda's 2016/17 Integrated Household Living Conditions Survey (EICV5) produced by the National Institute of Statistics Rwanda (NISR) and the Ministry of Finance and Economic Planning. The poverty livelihood benchmarks were calculated as per the Living Income Benchmark values in Uganda (\$311 for Uganda and \$183 for Rwanda, per household per month, established by the Global Living Wage Coalition using the Anker Methodology.)

Interpreting Uganda: During analysis, the cooperative data revealed a consistent pattern of high living income likelihoods. This was driven by differences in the household size, wherein the sample data contained significantly larger household sizes (and thereby, higher consumption) compared to the Ugandan average. We have since refined our methodology by adjusting the consumption per capita to account for this difference.

StudyUganda National SurveyUganda CooperativesRwanda CooperativesDRC CooperativeInterviews Completed1,0261,0171,07148Response Rate73%53-74%41-80%32%LanguagesAcholi, Luganda, Lubara, Lugisu, Lusoga, Runyankole, RutooraLuganda, Ruyankole, Alur, EnglishKinyarwandaKiswahiliAverage Survey Length23 mins20 mins25 mins17 minsConfidence Level95%90%90%90%Margin of Error3%4%4%10%					
Completed1,0261,0171,07148Response Rate73%53-74%41-80%32%LanguagesAcholi, Luganda, Lubara, Lugisu, Lusoga, Runyankole, RutooraLuganda, Ruyankole, Alur, EnglishKinyarwandaKiswahiliAverage Survey Length23 mins20 mins25 mins17 minsConfidence Level95%90%90%90%	Study	•			
LanguagesAcholi, Luganda, Lubara, Lugisu, Lusoga, Runyankole, RutooraLuganda, Ruyankole, Alur, EnglishKinyarwandaKiswahiliAverage Survey Length23 mins20 mins25 mins17 minsConfidence Level95%90%90%90%		1,026	1,017	1,071	48
LanguagesLubara, Lugisu, Lusoga, Ruyankole, Alur, Runyankole, RutooraLuganda, Ruyankole, Alur, EnglishKinyarwandaKiswahiliAverage Survey Length23 mins20 mins25 mins17 minsConfidence Level95%90%90%90%	Response Rate	73%	53-74%	41-80%	32%
Length 23 mins 20 mins 25 mins 17 mins Confidence Level 95% 90% 90% 90%	Languages	Lubara, Lugisu, Lusoga, Runyankole,	Ruyankole, Alur,	Kinyarwanda	Kiswahili
		23 mins	20 mins	25 mins	17 mins
Margin of Error 3% 4% 4% 10%	Confidence Level	95%	90%	90%	90%
	Margin of Error	3%	4%	4%	10%

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 1,200+ researchers in 80+ countries, and have worked with more than 1,000 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.

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T	will	buy	more	fertilizers.
Ι	will	practice	pruning	
		and	remove	diseased pods
		to	increase	coffee yields.







[The cooperative] provides

- > ongoing trainings
- > incentive bonuses

for farmers.