

# Women Driving the Energy Transition and Climate Justice

Impact Assessment of Women's  
Economic Empowerment



Credit: Randa Osman - ENERGIA

# Welcome To Your 60dB Results

We enjoyed hearing from 1,166 entrepreneurs participating in the ENERGIA Phase 7 Women's Economic Empowerment program across Kenya, Nepal, Senegal, Nigeria, and Tanzania - they had a lot to say!

## Contents

### Headlines

- 04 / Energia Phase 7 Overview
- 05 / OECD Framework Mapping
- 06 / Project Overview
- 07 / Research Overview
- 08 / Executive Summary

### Deep Dive

- 12 / Respondent Profile
- 15 / Impact Findings - Economic Empowerment
- 27 / Impact Findings - Social Empowerment
- 40 / Quality of Support & Experience
- 52 / Appendix

02

# Introduction



Credit: Judith Quax - ENERGIA

# Energia Phase 7

## Program Overview

ENERGIA International Network on Gender and Sustainability is hosted by Hivos, an international development organization guided by humanist values and contributing towards just, inclusive and life sustaining societies where people have equal access to opportunities, rights and resources.

ENERGIA's Phase 7 strategy 'Women Driving the Energy Transition and Climate Justice' aims to advance universal energy access and promote climate justice, with a particular focus on gender equality. The strategy's core objective is to place women at the center of sustainable energy solutions, addressing their crucial role in energy transitions and climate action.

The Women's Economic Empowerment Program is part of ENERGIA's overall Phase 7 strategy, co-funded by the Swedish International Development Agency (Sida) and the Asian Development Bank (ADB). It is implemented across five countries - Kenya, Nepal, Nigeria, Senegal and Tanzania - by Practical Action, Centre for Rural Technology, Mercy Corps/Energy 4 Impact and Solar Sister.



## Purpose of the Impact Assessment

This Impact Assessment evaluates the economic empowerment of women entrepreneurs in the clean energy sector as a result of ENERGIA's support, delivered via its partner organizations. The assessment will focus on determining how ENERGIA's Phase 7 program has contributed to changes in the lives of women entrepreneurs, specifically in relation to decision-making, resilience, and business development.

This impact study will contribute to the overall external evaluation of the ENERGIA Phase 7 program.

**The study covers the program's impact on women entrepreneurs and specifically addresses the following key areas:**

- Economic Empowerment: How has ENERGIA's support enabled women entrepreneurs to grow their businesses, improve their economic status, and increase their resilience in the clean energy sector?
- Social Empowerment: How has the program contributed to improving women's roles in their communities and decision-making capacities, both personally and professionally?
- Quality of Support: How do women perceive the relevance, responsiveness, and quality of the support provided by ENERGIA's partner organizations?

# OECD Framework Mapping

## Overview

The Organisation for Economic Co-operation and Development (OECD) provides a globally recognized framework for evaluating development interventions. The OECD Evaluation Criteria are designed to promote consistency, transparency, and accountability in assessing the performance and results of programs.

These six criteria - Relevance, Coherence, Effectiveness, Efficacy, Impact, and Sustainability - guide evaluators in understanding not only what a program achieved, but also how and why those results occurred. For this study, four of the six criteria were deemed most relevant and were mapped against the data being collected.

## Definition and Mapping

OECD Criterion	Key Objectives	Data Sources / Indicators
<b>Relevance</b>	Is the intervention doing the right things? Alignment with needs, priorities, and context.	Type of support received, ranking of most important support, income generation
<b>Effectiveness</b>	Did the intervention achieve its objectives or intended outcomes? Includes satisfaction and perceived usefulness.	Income growth, confidence, decision-making control, NPS scores, challenges resolved
<b>Impact</b>	What difference did the intervention make?	Quality of life changes, community and household respect, income and spending decisions, independent purchases, and training content application
<b>Sustainability</b>	Will the benefits last over time? Are capacities and systems in place to maintain gains?	Program improvement suggestions, business formalization, and access to financial resources

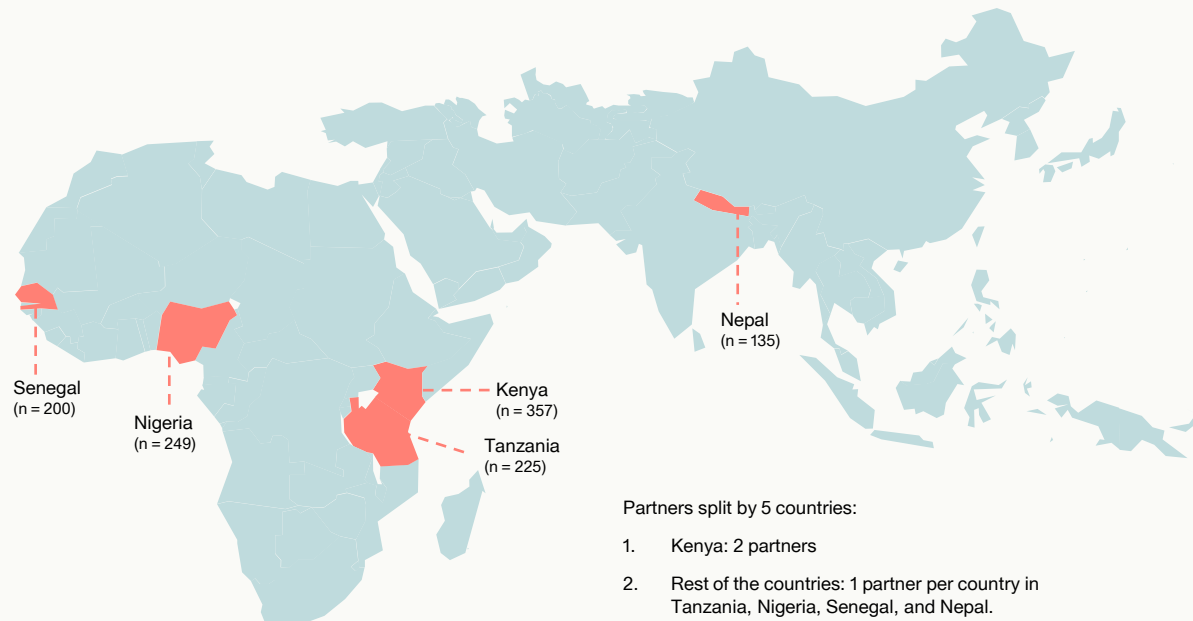
# Project Overview

The Lean Data studies captured insights from 1,166 female entrepreneurs across five countries. Two studies were conducted in April–May 2025, followed by three additional studies in September–October 2025.

## Snapshot of our methodology:

- > Method: Phone interviews
- > Total entrepreneur base across partner programs: 5,303
  - **Energy Enterprises:** women entrepreneurs engaged in selling or distributing energy products and services
  - **PUE Entrepreneurs:** entrepreneurs using energy-powered appliances for income-generating or productive activities
- > Response Rate: ~59% Kenya, 68% Nepal, 42% Nigeria, 77% Senegal, 31% Tanzania.
- > Average survey length: 20 minutes
- > Languages: Swahili, English, Wolof, Nepali, and Hausa.

## ENERGIA Projects – Location and Sample Size



# Research Overview

## Overview

The evaluation collected quantitative and qualitative data through phone interviews with 1,166 women entrepreneurs across Kenya, Nepal, Senegal, Nigeria, and Tanzania.

The evaluation utilized a dual-focus design to capture both current program impact and long-term resilience:

- **Active Entrepreneurs:** Data collection in Kenya, Nepal, and Senegal focused on women entrepreneurs who were currently engaged with the program. Some questions were specific to this segment, and results are presented using a three-country segmentation.
- **Alumni Entrepreneurs:** Data collection in Tanzania and Nigeria focused on alumni entrepreneurs who had not engaged with the program (purchases or training) in the last 12 months. Overlapping questions between the two groups are reported using a five-country segmentation.

## Data Collection and Quality Checks

The interviews were conducted by local Research Assistants from 60 Decibels using a standardized survey instrument.

We managed the sample quotas across partners and countries. The survey results achieved a high level of statistical significance, ensuring reliability across the board:

- **Aggregated (Overall Program) Results:** 95% confidence level with a 3% margin of error.
- **Individual Country Results:** 90% confidence level with a 5% margin of error.

Interviews were conducted with women entrepreneurs who are beneficiaries of ENERGIA partner programs in Kenya, Nepal, Senegal, Nigeria, and Tanzania.

- Phone interviews were conducted in local languages using 60 Decibels trained and managed Research Assistants.
- Rigorous checks were conducted at multiple points during data collection: piloting, weekly reviews, and final audit.

02

# Executive Summary



Credit: Sven Torfinn - ENERGIA

# Impact Snapshot

High satisfaction meets transformative impact: a good NPS of 47 complements 49% reporting 'very much improved' quality of life.

## First Access

50%

first time accessing an electrical appliance/equipment

## Impact

49%

report quality of life 'very much improved'

## What Impact

53% say increased household income

31% report business expansion

25% talk about ability to pay for children's education

## Income Change

33%

report money earned 'very much increased'

## Entrepreneur Voice

"I bought my family a solar lamp, a TV, a cow, and a chicken. This has increased respect towards me, and now I have a voice in making decisions. My husband can't do anything without asking for advice from me. Before [partner program] came, he did everything on his own."  
- Alumni, Tanzania, age 30

## Net Promoter Score®

47

on a -100 to 100 scale

## Challenges

23%

report challenges

## Change in Social Status

54%

report 'very much improved' standing within the community

## Change in Respect

55%

report 'very much increased' level of respect within your household

# Executive Summary

The ENERGIA Phase 7 program is transforming women's livelihoods by driving measurable gains in income, decision-making power, social recognition, and overall quality of life.

## 1 Quality of life has improved for nearly all entrepreneurs, with deeper gains in income and household well-being.

Across all five countries, 90% of women entrepreneurs report improvements in their quality of life, and half report their quality of life has very much improved' because of ENERGIA.

Key drivers include higher household income (53%), business expansion (31%), and the ability to pay for children's education (25%).

The depth of change varies across contexts: Nepal and Nigeria show the strongest improvement, while Senegal reports more modest improvements.

These results highlight ENERGIA's role in enhancing women's livelihoods and building economic resilience which is a core Phase 7 objective.

See pages [16](#) and [17](#).

## 2 The program drives broad, substantial economic growth.

91% of entrepreneurs report higher business or farm revenues, with a third reporting increases of more than 50%. 62% say their current income-earning activity began because of ENERGIA's support.

By enabling business creation, expansion, and diversification, the program is laying the foundation for sustainable, women-led income generation beyond the life of the intervention, directly addressing ENERGIA's long-term economic-empowerment goal for Phase 8.

See pages [18](#), [24](#), and [25](#).

## 4 The program is fostering transformative social empowerment within households and communities.

81% of entrepreneurs report increased respect and recognition, and 55% say this respect has 'very much improved'. Women link this change to their financial contributions, improved living conditions, and greater recognition of their efforts and skills.

These shifts point to tangible social transformation where women gain not only income but also status, voice, and respect, advancing ENERGIA's gender-equality objectives.

See pages [30](#) and [31](#).

## 3 ENERGIA is strengthening women's financial control and decision-making power.

58% of entrepreneurs decide independently how to use business income, while 83% report greater ability to make key business decisions.

Patterns vary across countries: Kenya and Senegal show higher individual financial autonomy, whereas Nepal reflects strong joint decision-making (84%), demonstrating empowerment through shared influence.

These findings indicate that ENERGIA's approach builds both economic autonomy and collaborative agency.

See pages [32](#) and [36](#).

## 5 Entrepreneurs are highly satisfied, underscoring the quality and relevance of the program's support.

The overall Net Promoter Score (NPS) of 47 indicates strong satisfaction, and only 23% report challenges, most often related to high product prices.

Participants most value business skills training, income-earning opportunities, and product quality. High satisfaction demonstrates ENERGIA's relevance and effectiveness.

See pages [41](#), [42](#) and [44](#).

# Entrepreneur Voices

We love hearing entrepreneur voices.

Here are some that stood out.

## Impact Stories

90% shared how the Partner Program had improved their quality of life

“The [partner program] gave me the knowledge of selling the portable jikos [stoves]. They gave me a business mindset that I never had before. I only used to do a bit of farming just to cater for my family's food and not as a business. Nowadays I sell portable jikos. I receive my profit; I pay for my kid's school fees, and I also use the money for farming.”

- Entrepreneur, Kenya, age 49

“I used the money I gained from selling [partner program] products to expand my business of cooking buns. Instead of buying 1 kilogram of flour as before, I bought a full sack of flour and a bucket of cooking oil.”

- Alumni, Tanzania, age 32

## Opinions On Partner Program Value Proposition

58% were Promoters and were highly likely to recommend

“I like the program because they train us properly. I now have business ideas aside from selling the solar products. If I want to sell, I know what to implement to get results.”

- Alumni, Nigeria, age 31

“I have gotten a platform to work and earn money. I've learnt how to interact and work with different people, stakeholders, and clients, and mastered great sales skills.”

- Entrepreneur, Kenya, age 59

## Opportunities For Improvement

93% had a specific suggestion for improvement

“In order for the program to have a greater impact, [partner program] must provide us with seeds and strengthen our capacity to process vegetables.”

- Entrepreneur, Senegal, age 55

“If more training is added, it will be much better, which will help us and help in generating more income than now.”

- Entrepreneur, Nepal, age 32

03

# Profile



Credit: Mahin Baral - ENERGINIA

# Demographics

Let's start with a snapshot of the entrepreneurs that ENERGIA's partners are serving.

The typical ENERGIA entrepreneur is a 42-year-old woman living in a household of 7.

Kenya reports the smallest households at 5 members, while Senegal stands out with households of 12 members, nearly double the overall average.

Most households include both children and adults: on average, entrepreneurs live with 4 children (under 18) and 3 adults (18+).

Data on paid employees was not collected in Tanzania and Nigeria; in the remaining countries, entrepreneurs report an average of 4 paid employees.

## Demographic Profile of Entrepreneurs We Spoke With

Data relating to entrepreneur characteristics

	Kenya	Tanzania	Nigeria	Senegal	Nepal	Overall/ Average
<b>Sample Size</b> (n)	357	225	249	200	135	<b>1,166</b>
<b>Average Age</b> (in years)	41	45	43	43	41	<b>42</b>
<b>Household Size</b> (members)	5	5	6	12	6	<b>7</b>
<b>Household Size &lt;18</b> (members below 18 years of age)	2	3	2	5	2	<b>4</b>
<b>Household Size &gt;18</b> (members above 18 years of age)	3	3	3	7	5	<b>3</b>
<b>Paid Employees</b> (current number of full-time and part-time)	3	-	-	4	4	<b>4</b>

# Business Ownership

The type of business ownership varies significantly by country.

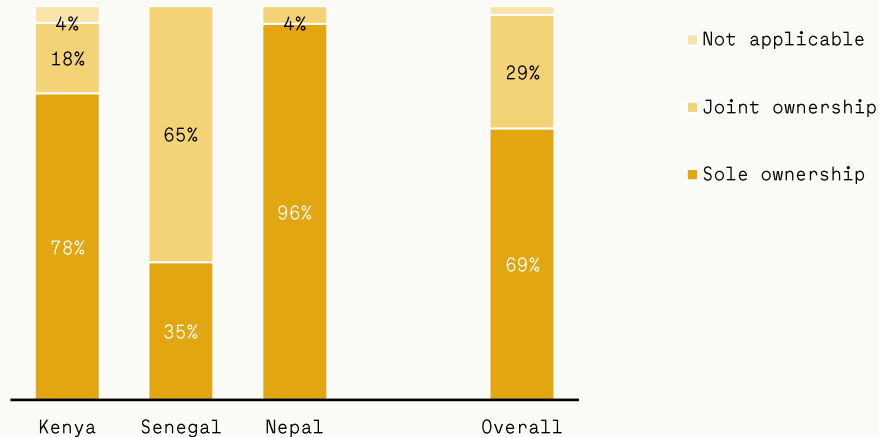
Entrepreneurs in Nepal (96%) and Kenya (78%) overwhelmingly operate as sole owners, showing a strong tendency toward individual ownership in both markets.

In contrast, Senegal exhibits a different pattern - 65% of businesses are run under joint ownership, highlighting the distinct business ownership structure in the Senegalese context.

Two-thirds of entrepreneurs' report being the sole owners of their business.

## Type of Business Ownership

Q: Are you the sole owner of this business or do you have partners who own or run the business with you?  
 (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



04

# Impact - Economic Empowerment



# Quality of Life

9 in 10 entrepreneurs report improved quality of life, and half say it has ‘very much improved.’

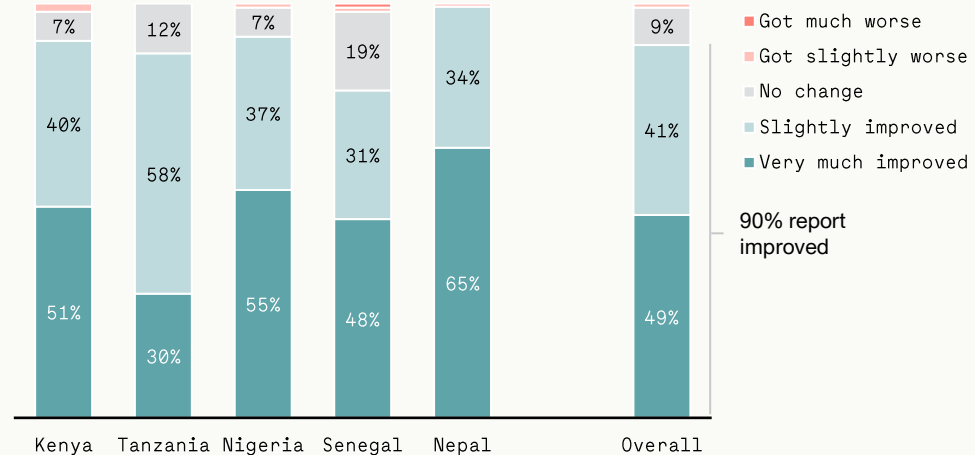
To gauge depth of impact, entrepreneurs were asked how their quality of life has changed because of the program.

Improvements are particularly pronounced in Nepal (65% ‘very much improved’) and Nigeria (55%), suggesting a higher depth of impact in these countries.

In contrast, 19% of entrepreneurs in Senegal report no change, a notably higher share than in the other countries.

## Perceived Quality of Life Change

Q: Has your quality of life changed because of the [partner program]? Has it:  
(n = 1,166 | Kenya = 357, Tanzania = 225, Nigeria = 249, Senegal = 200, Nepal = 135)



# Quality of Life: Top Outcomes

Higher income, business growth, and the ability to pay for children’s education are the biggest drivers of improved quality of life.

Entrepreneurs were asked to describe – in their own words – any changes they were experiencing because of the program. The top outcomes are shown on the right.

Other outcomes include:

- Increased access to clean energy products (12%)
- Reduced household expenses (12%)
- Increased social empowerment (11%)
- Increased savings (10%)
- Improved living standards (7%)

9% of entrepreneurs whose quality of life has not changed –mention insufficient profit, and reduced activeness in the program.

Key:

- #1 outcome
- #2 outcome
- #3 outcome

## Top Outcomes for 90% of Entrepreneurs Who Say Quality of Life Improved

Q: Please explain how your quality of life has improved. (n = 1,042). Open-ended, coded by 60 Decibels.

	Kenya (n = 325)	Tanzania (n = 198)	Nigeria (n = 228)	Senegal (n = 157)	Nepal (n = 134)	Overall (n = 1042)
<b>Increased household income</b>	44%	60%	52%	41%	81%	53%
<b>Business expansion</b>	35%	34%	29%	20%	31%	31%
<b>Ability to pay for children’s education</b>	36%	35%	11%	10%	28%	25%
<b>Entrepreneurial skills development</b>	25%	12%	22%	21%	43%	24%
<b>Financial independence</b>	22%	14%	26%	16%	25%	21%
<b>Asset acquisition</b>	27%	27%	2%	10%	6%	16%
<b>Increased food security</b>	<b>22%</b>	<b>18%</b>	<b>9%</b>	<b>12%</b>	<b>8%</b>	15%

# New Income Generation

3 in 5 entrepreneurs started a new income-generating activity because of the ENERGIA Phase 7 program.

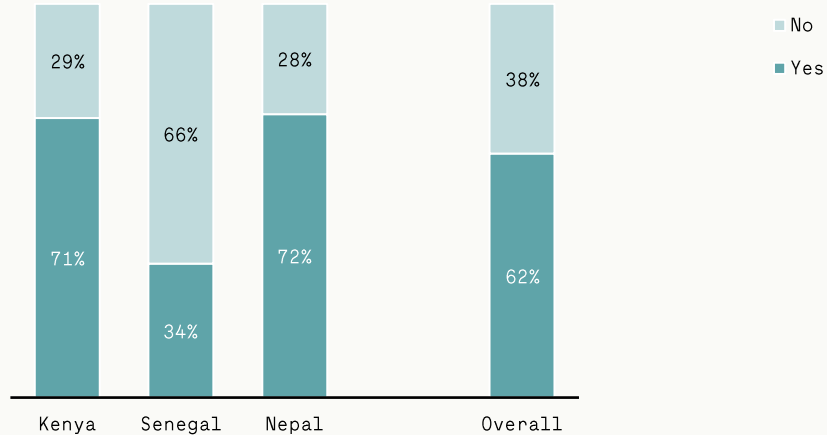
All entrepreneurs in Kenya, Senegal, and Nepal are currently engaged in income-earning activities, and 62% say their current activity/business is new because of the ENERGIA Phase 7 program.

The program has been particularly catalytic in Kenya and Nepal, where around 7 in 10 entrepreneurs report starting their income-earning activity/business directly because of the program's support.

In contrast, only one-third of entrepreneurs in Senegal say their income-earning activity/business is new, suggesting that in Senegal, the program is more often helping entrepreneurs strengthen, expand, or diversify existing ventures rather than launching new ones.

## New Income Earning Activity

Q: Is your current income-earning activity or business new or additional because of the [partner program]? (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135).



# Productive Use

7 in 10 entrepreneurs use an appliance or equipment accessed through the program for income-generating activities.

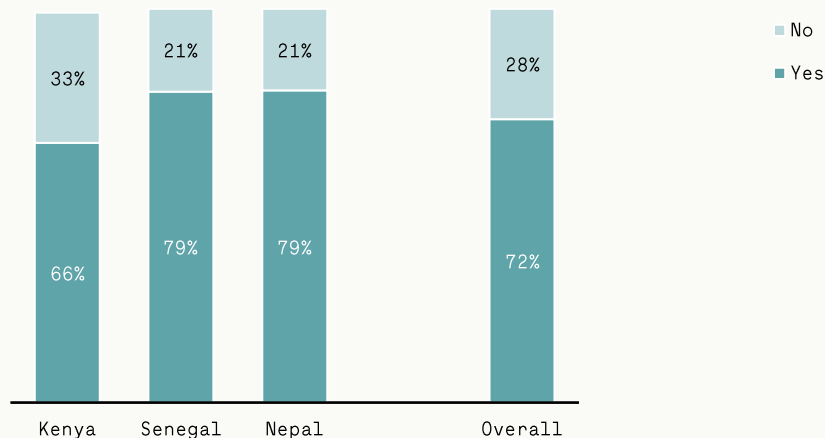
79% of entrepreneurs in Senegal and Nepal are currently utilizing the appliance or equipment accessed through the program for productive purposes.

In Kenya, 66% of entrepreneurs report using their appliances for income generation. However, the question was only asked to one program partner and not asked of the second program partner where all entrepreneurs are confirmed (non-self-reported) to be using their appliances for productive purposes.

Overall, the high rates of productive use underscore the program's effectiveness in driving economic empowerment through the successful transition of assets into productive use.

## Productive Use

Q: Are you currently using an appliance/equipment accessed through the [partner program] for income-earning activities? (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# First Access

Half of the entrepreneurs had no prior access to an electrical appliance for their business before the program.

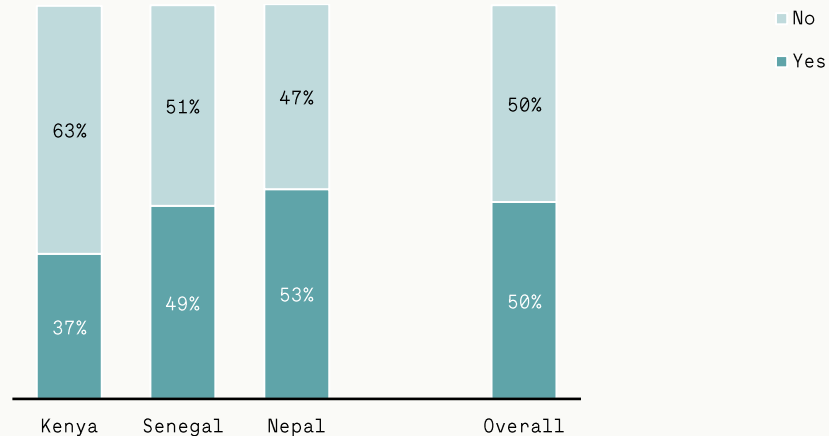
Entrepreneurs currently using the appliance accessed through the program for productive use were asked whether they had access to an electrical appliance for their business before joining the program. The First Access indicator provides us insight into the degree to which the program is reaching unserved populations.

Note: This follow-up question was asked to entrepreneurs who indicated they [use the renewable products for productive purposes](#). It was not administered to one partner in Kenya, as all their entrepreneurs use the products in this way.

## First Access

Q: Before the [partner program], did you have access to an electrical appliance/equipment for your business?

(n = 284 | Kenya = 19, Senegal = 158, Nepal = 107)



# Business Activities

Farming is the primary use of program appliances across countries.

Entrepreneurs currently using the program’s appliance for productive use were also asked about the types of business activities supported by these appliances.

Farming is most common in Senegal (82%), while agri-processing is most common in Nepal (40%).

Entrepreneurs also use appliances for food production, retail, and textiles, underscoring the program’s support for varied income-generating activities.

## Types of Business Activities

Q: What types of business activities do you use the appliance/equipment for?  
(n = 284)

	Kenya (n = 19)	Senegal (n = 158)	Nepal (n = 107)	Overall (n = 284)
<b>Farming</b>	42%	82%	41%	<b>64%</b>
<b>Agri-processing</b>	21%	16%	40%	<b>25%</b>
<b>Food production and storage</b>	42%	7%	8%	<b>10%</b>
<b>Retail or small enterprise</b>	21%	-	10%	<b>5%</b>
<b>Tailoring or textile work</b>	-	-	13%	<b>5%</b>
<b>Other use of energy appliances</b>	-	1%	5%	<b>2%</b>

# Business Formalization

Informal business structures remain dominant, with 51% reporting they did not take any steps to formalize or strengthen their business.

Entrepreneurs in Senegal and Nepal lead in legal registration, with 55% in each country formally registering their businesses.

Kenya stands out for digital adoption, with 31% of entrepreneurs having established an online presence or adopted tools, compared to 7% in Nepal and none in Senegal. Yet Kenya has the highest share of entrepreneurs who have not taken any formalization steps (58%).

These results highlight that while some entrepreneurs are taking steps toward legal/operational formalization, support to strengthen and formalize business operations remains a need for many participants.

Nearly 2 in 5 entrepreneurs have registered their business with the legal authorities, while half have taken no formalization steps at all.

## Steps Taken to Formalize or Strengthen Business Operations

Q: Has your business taken any of the following steps to formalize or strengthen its operations?  
(n = 691)

	Kenya (n = 357)	Senegal (n = 199)	Nepal (n = 135)	Overall (n = 691)
<b>Registered with government/legal authorities</b>	21%	55%	55%	<b>38%</b>
<b>Established an online presence or used digital tools</b>	31%	–	7%	<b>17%</b>
<b>Created legal/operational structures (e.g., contracts, policies)</b>	4%	2%	21%	<b>6%</b>
<b>None of the above</b>	58%	45%	43%	<b>51%</b>

# Access to Credit

Access to credit varies widely, with Nepal showing much higher access than Senegal and Kenya.

Overall, 27% of entrepreneurs have accessed a loan or credit through the program suggesting that for most, the program's primary support is non-financial.

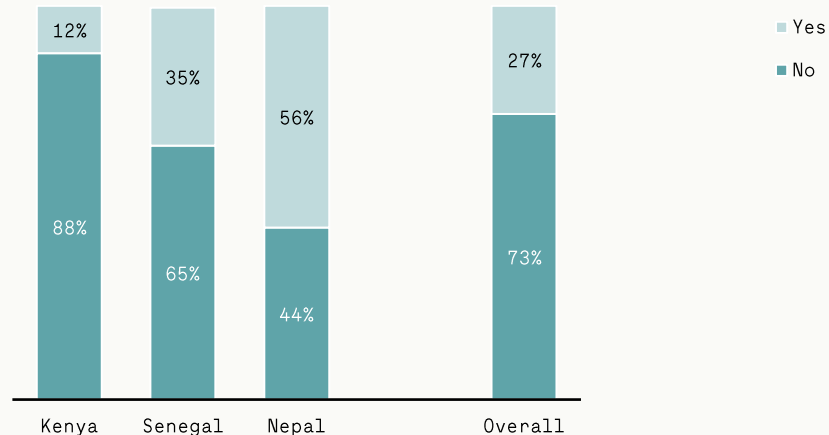
Entrepreneurs in Nepal report the highest access to credit, with 56% saying they received a loan through the program or its partners. Senegal shows moderate uptake, with 35% of entrepreneurs accessing credit. In contrast, Kenya has the lowest rate, with only 12% reporting access to loans or credit.

## Food for Thought

Is formal credit equally accessible across program partners and countries, or are structural barriers limiting access in certain markets?

### Access to Loan or Credit through the Project or Partners

Q: Have you accessed a loan or credit to support your business through the [partner program] or its partners? (n = 692 | Kenya = 357 Senegal = 200, Nepal = 135)



# Impact on Revenue

9 in 10 entrepreneurs report increased revenue, with one-third saying their revenue has 'very much increased'.

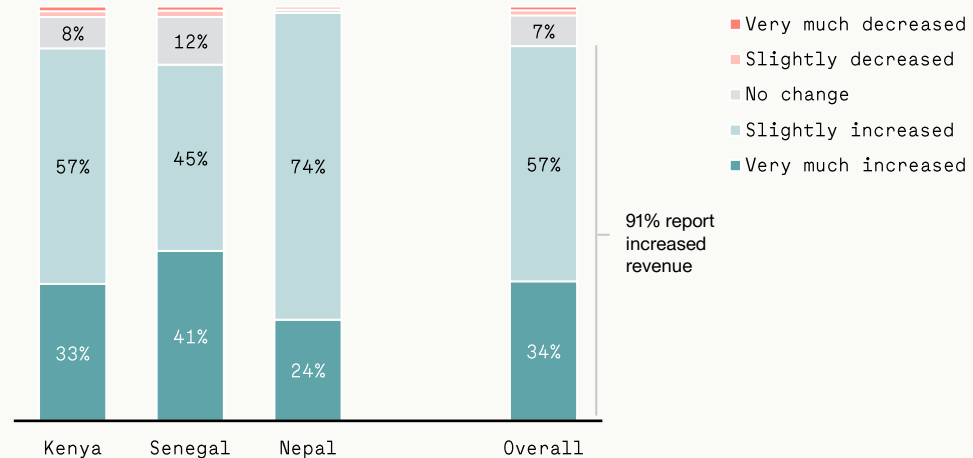
Entrepreneurs in Senegal are the most likely to report a 'very much increased' revenue (41%), suggesting a particularly strong depth of impact in this country.

These results highlight the program's broad effectiveness in strengthening business performance across all three countries.

Additionally, entrepreneurs who have taken steps to formalize their businesses are more likely to report increased revenue (45%) compared to those who have not taken any steps (23%). This may be because formalized businesses typically have greater credibility, better access to markets and financing, and clearer business structures which can support revenue growth.

## Change in Revenue

Q: Because of working with the [partner program] has the revenue from your business / farm...  
(n = 692 | Kenya = 357 Senegal = 200, Nepal = 135)



# Impact on Revenue: Increase

Across all countries, 32% of entrepreneurs report that their business revenue increased by more than half (51% or more) due to the program. This reflects a strong share of entrepreneurs experiencing high-value growth.

Senegal and Kenya show similar proportions of entrepreneurs whose revenue increased by more than half (19% and 24% respectively), while Nepal shows a smaller share (13%). However, Nepal stands out for having the highest proportion of entrepreneurs reporting moderate increases of 26–50% (54%), meaning that while fewer report very large jumps, most still experienced meaningful revenue growth.

Most entrepreneurs report revenue increases of up to half, with one-third seeing larger gains.

## Increase in Revenue

Q: Can you give a rough estimate of how much your business revenue increased because of the [partner program]? (n = 626)\*

	Kenya (n = 321)	Senegal (n = 172)	Nepal (n = 133)	Overall (n = 626)	
<b>More than doubled</b>	1%	-	5%	<b>1%</b>	32% report a revenue increase of more than half
<b>Roughly doubled</b> (76 - 99%)	13%	13%	5%	<b>11%</b>	
<b>Increased by more than half</b> (51 - 75%)	24%	19%	13%	<b>20%</b>	67% report a revenue increase of less than half
<b>Increased by less than half</b> (26 - 50%)	35%	24%	54%	<b>36%</b>	
<b>Increased a little</b> (0 - 25%)	27%	45%	23%	<b>31%</b>	

\*Question only asked to entrepreneurs who reported increased revenue.

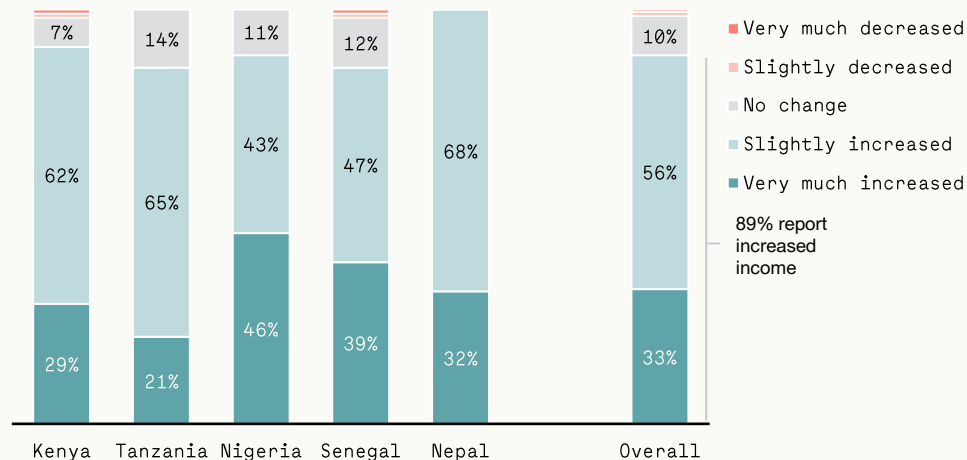
# Impact on Personal Income

Entrepreneurs in Nigeria are the most likely to report a 'very much increased' personal income, with 46% saying their earnings have 'very much increased'. Senegal and Nepal also show strong gains, with 39% and 32% respectively, reporting a major increase in their income.

Most entrepreneurs report higher personal income, with one-third experiencing a 'very much increased' income.

## Change in Income

Q: Has the money you earn (your income) changed because of the [partner program]? Has it:  
(n = 1,144 | Kenya = 357, Tanzania = 206\*, Nigeria = 227\*, Senegal = 200, Nepal = 135)



\*For Tanzania and Nigeria, question only asked to those currently engaged in income-earning activities.

05

# Impact - Social Empowerment



Credit: Ftd Thompson - Solar Sister, ENERGIA

# Community View

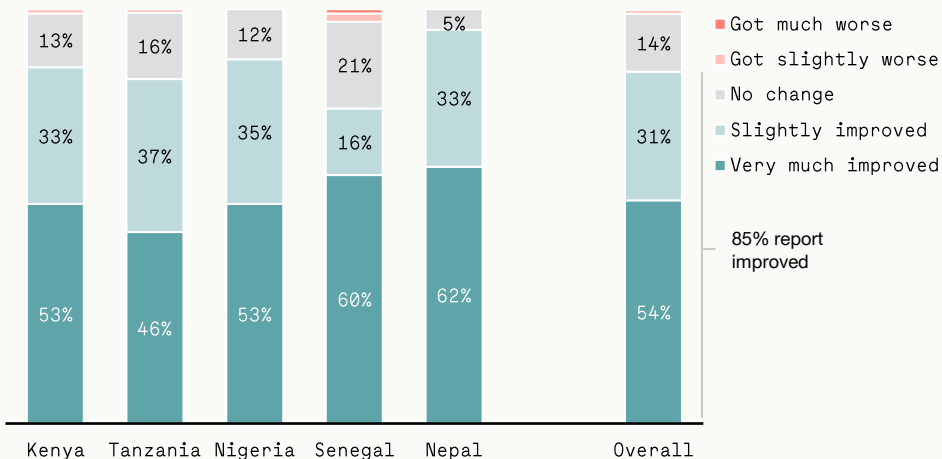
Most entrepreneurs report improved community status, including half who say it has 'very much improved'.

Entrepreneurs in Nepal report the strongest improvements in how they are viewed within their communities, with 62% saying their status has 'very much improved.' Senegal follows closely at 60%, while Kenya and Nigeria both report 53% experiencing a major positive shift.

Across countries, the vast majority of entrepreneurs report at least some improvement in community perception. This indicates that the program is not only supporting economic gains but also strengthening women's visibility, confidence, and recognition within their communities.

## Social Status - Change in Community View

Q: Has the way you are viewed within your community changed because of the [partner program]? Has it: (n = 1,166 | Kenya = 357, Tanzania = 225, Nigeria = 249, Senegal = 200, Nepal = 135).



# Community View: Top Reasons

Patterns for improved community status differ by country: in Nepal, entrepreneurs highlight respect and being seen as trusted advisors, while in Nigeria, gains are more tied to providing the community with access to energy products and a reputation for good product quality. Overall, the program appears to strengthen women's visibility, credibility, and standing within their communities.

Other reasons for improvements in social status include:

- Training the community members to start businesses (15%)
- Enhanced self-confidence (13%)
- Role model status (12%)
- Other reasons (38%)

Key:

- #1 outcome
- #2 outcome
- #3 outcome

Communities value entrepreneurs' work, with respect and recognition driving most improvements in social status.

## Reasons for Improvements in Social Status

Q: Please explain how the community view has improved. (n = 990). Open-ended, coded by 60 Decibels.

	Kenya (n = 305)	Tanzania (n = 187)	Nigeria (n = 219)	Senegal (n = 150)	Nepal (n = 129)	Overall (n = 990)
<b>Increased respect for their business success</b>	38%	46%	18%	21%	43%	<b>33%</b>
<b>Community recognition because of expertise</b>	34%	39%	30%	35%	24%	<b>33%</b>
<b>Positive feedback and appreciation received</b>	29%	19%	31%	39%	26%	<b>29%</b>
<b>Being seen as a trusted advisor</b>	20%	18%	26%	9%	54%	<b>24%</b>
<b>Reputation for good product quality</b>	19%	32%	33%	7%	3%	<b>21%</b>
<b>Providing community with access to energy products</b>	13%	21%	39%	9%	3%	<b>19%</b>
<b>Referral and repeat business</b>	14%	17%	29%	5%	6%	<b>15%</b>

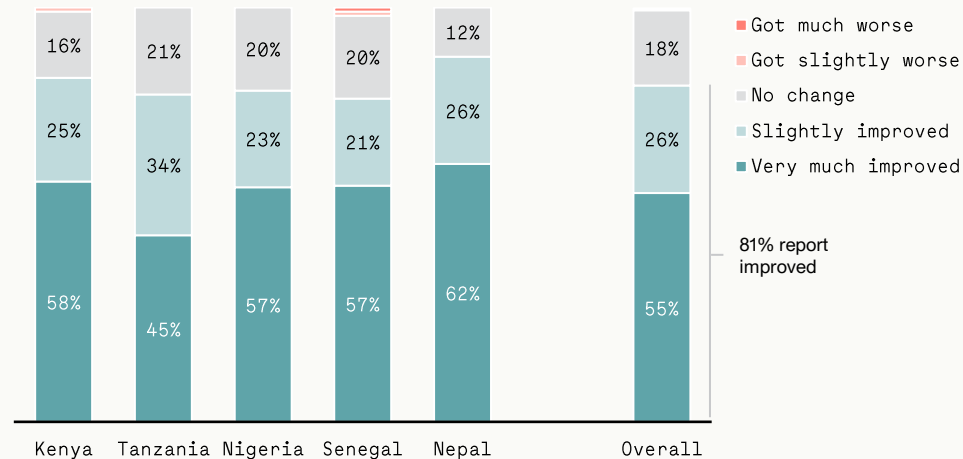
# Household Respect

Across all countries, most entrepreneurs report a major increase in household respect. Nepal shows the highest share (62%) of women saying respect has 'very much improved', followed by Kenya (58%), Nigeria (57%), and Senegal (57%). Tanzania reports a slightly lower level (45%), though the majority still experience positive change. Overall, the program appears to meaningfully strengthen women's standing within their households.

Most entrepreneurs report greater household respect due to the program, with over half reporting it has 'very much improved'.

## Social Status - Change in Household Respect

Q: Has the level of respect you receive within your household changed because of the [partner program]?  
 Has it: (n = 1,166 | Kenya = 357, Tanzania = 225, Nigeria = 249, Senegal = 200, Nepal = 135)



# Household Respect: Top Reasons

Across countries, entrepreneurs link increased household respect to their financial contributions and improved living conditions. In Nepal, greater involvement in household decisions drives this shift, while in Senegal, recognition of hard work, knowledge, and skills plays a key role. These differences highlight how the program strengthens women’s standing at home - through income, influence, and recognition.

Additional reasons for improvements in household respect include:

- Provision of energy products (12%)
- Respect because of business ownership (12%)
- Role model status (12%)

Key:

- #1 outcome
- #2 outcome
- #3 outcome

Women report greater respect within their households because they contribute more financially and provide better living conditions.

## Reasons for Improvements in Household Respect

Q: Can you describe how the level of respect has increased? (n = 947).  
Open-ended, coded by 60 Decibels.

	Kenya (n = 295)	Tanzania (n = 178)	Nigeria (n = 199)	Senegal (n = 156)	Nepal (n = 119)	Overall (n = 947)
<b>Ability to contribute financially</b>	60%	73%	54%	18%	27%	<b>50%</b>
<b>Better living conditions at home</b>	30%	41%	32%	10%	2%	<b>26%</b>
<b>Appreciation of hard work</b>	27%	25%	18%	28%	13%	<b>23%</b>
<b>Better partnership with spouse</b>	24%	9%	13%	14%	35%	<b>18%</b>
<b>Increased financial independence</b>	29%	15%	11%	10%	10%	<b>17%</b>
<b>Recognition of knowledge and skills</b>	14%	5%	11%	28%	29%	<b>16%</b>
<b>Greater role in household decisions</b>	11%	6%	8%	11%	43%	<b>13%</b>

# Business Decision Making

58% of entrepreneurs are sole decision-makers on how business income is spent, while 36% share this responsibility jointly with their spouse.

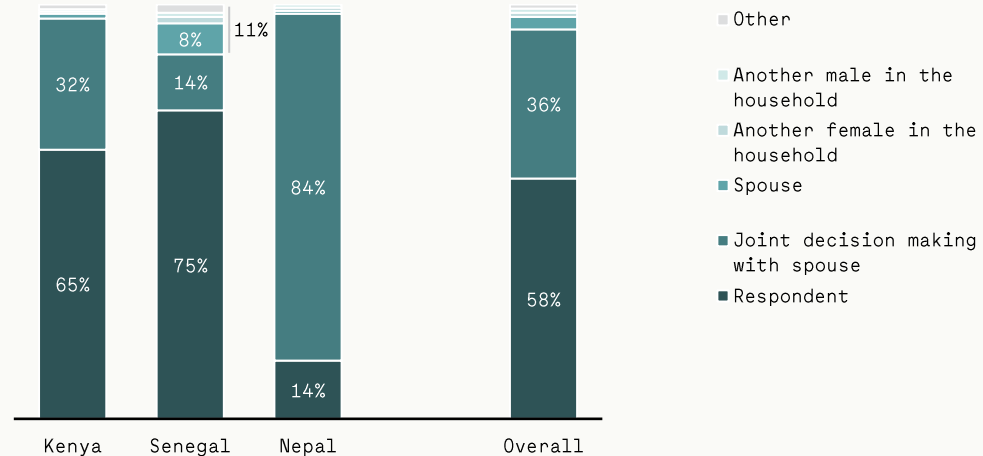
Senegal (75%) and Kenya (65%) show the highest levels of individual control, reflecting greater financial independence. In Senegal, 11% of entrepreneurs report that another household member is the main decision-maker for their business.

Nepal (84%) relies heavily on joint decision-making with spouses, suggesting a more collaborative household approach to managing business income.

Nearly 3 in 5 entrepreneurs report being the sole decision-makers on how business income is spent.

## Main Business Decision-Maker

Q: Who is the main decision-maker on how the income from your business is spent? It is:  
(n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# Business Income Control

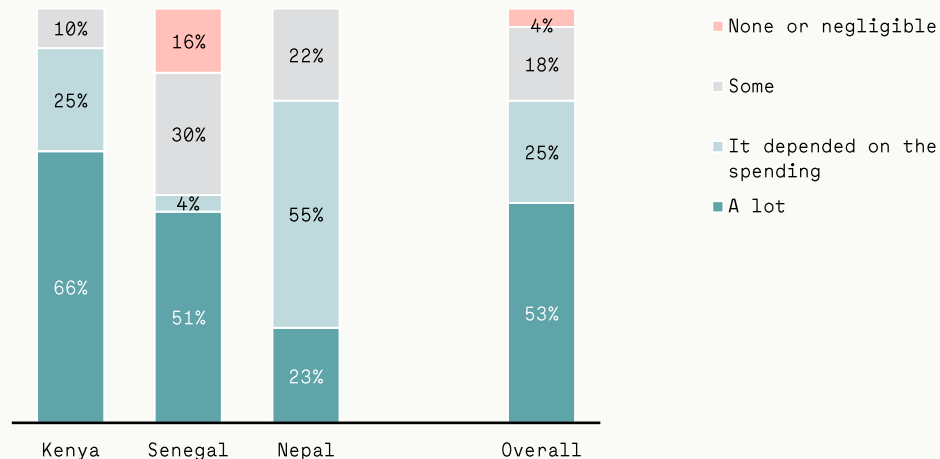
Entrepreneurs report varying levels of control over how their business income is spent, with about half saying they have ‘a lot’ of control.

Entrepreneurs from Kenya are more likely to report having ‘a lot’ of control (66%), compared to Senegal (51%) and Nepal (23%). This could be tied back to [previous slide](#) where decision-making is shared with a spouse or family member, especially in Nepal.

Entrepreneurs from Senegal are more likely to report ‘none or negligible’ control over business income spending (16%), compared to other countries (0%). This may be explained by the [11% of entrepreneurs in Senegal](#) who report that a household member, other than themselves, is the main business decision-maker, thereby limiting the personal control over financial decisions.

## Control on Business Income

Q: How much control do you have in deciding how the income from your business is spent? Would you say: (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# Desired Income Control

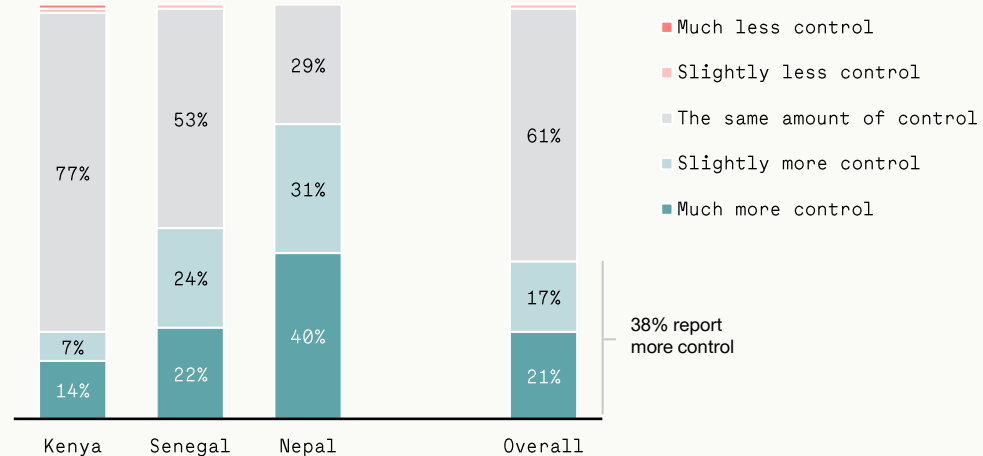
2 in 5 entrepreneurs would like to have more control in deciding how income is spent.

Overall, 38% of entrepreneurs would like more control over how their business income is spent, including 21% who want 'much more control'.

Those who currently have less control are the most likely to desire more influence (42%) compared to those having a lot of control (19%), indicating a clear link between existing decision-making power and aspirations for greater autonomy. The desire for increased control shows that while financial empowerment is progressing, many entrepreneurs still seek a stronger voice in household and business financial decisions.

## Desired Income Control

Q: Compared to how much control you currently have in deciding how the income is spent, would you like to have: (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# Spouse Support

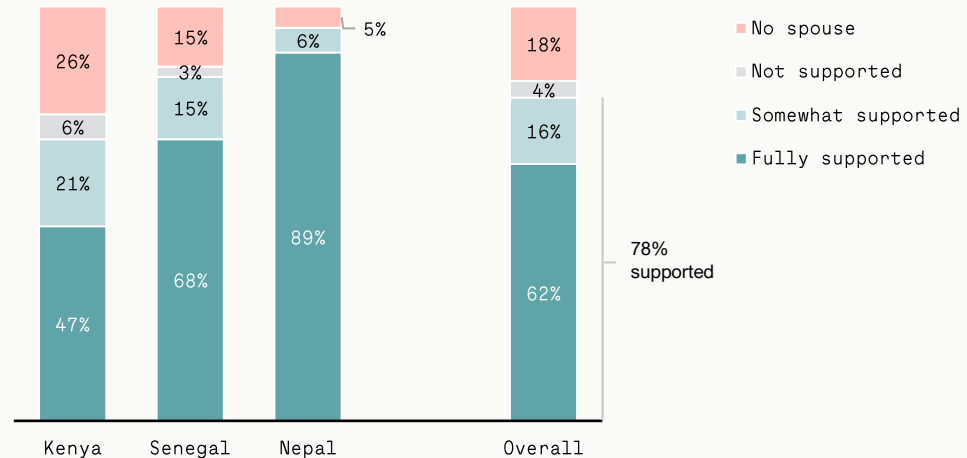
4 in 5 entrepreneurs feel supported by their spouse in their business.

Overall, 78% of entrepreneurs feel supported by their spouse in their business, including 62% who feel ‘fully supported.’ However, levels of support differ notably across contexts.

Entrepreneurs in Nepal report the highest levels of full support (89%), followed by Senegal (68%) and Kenya (47%). These differences may be linked to household structure: 26% of entrepreneurs in Kenya report not having a spouse, compared with 15% in Senegal and just 5% in Nepal. This larger share without a spouse may partly explain the lower levels of reported support in Kenya.

## Spouse Support in Business

Q: Do you feel supported by your spouse in your business? Do you feel:  
(n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# Ability to Make Decisions

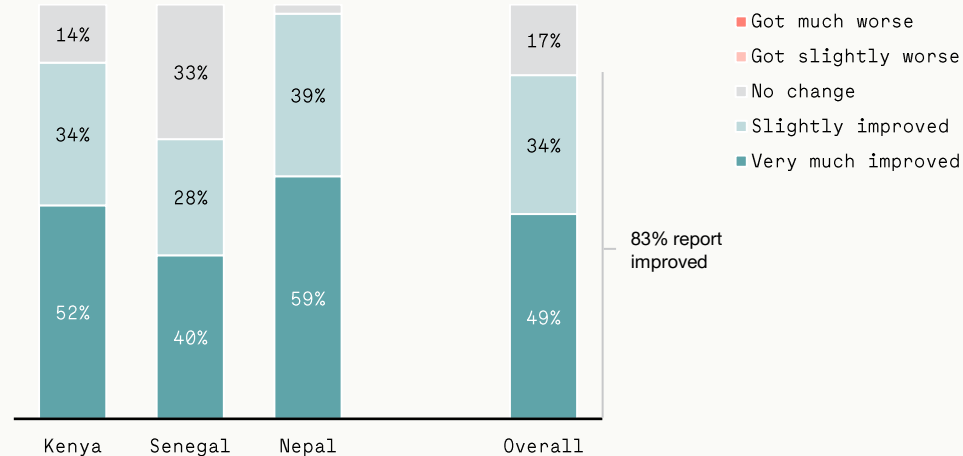
83% of entrepreneurs report an increased ability to make business decisions, with nearly half saying this has 'very much improved' because of the program.

Entrepreneurs in Nepal report the highest improvement in decision-making, with 59% stating it has 'very much improved'. This is higher than 52% in Kenya and 40% in Senegal. This suggests that the program may have had a more substantial impact on Nepalese entrepreneurs, potentially due to local business needs or the nature of program engagement.

4 in 5 entrepreneurs say their ability to make business decisions has improved as a result of the program.

## Ability to Make Business Decisions

Q: Has your ability to make decisions on how to run your business changed because of the [partner program]? Has it: (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# Ability to Negotiate

Entrepreneurs who report a ‘very much increased’ ability to negotiate with stakeholders are more likely to report a ‘very much improved’ quality of life (67%), compared to 25% among those whose skills did not change.

Strengthened negotiation skills appear linked to stronger business outcomes: 43% of entrepreneurs who improved their negotiation ability report a ‘very much increased’ revenue, compared to 17% among those whose skills remained unchanged.

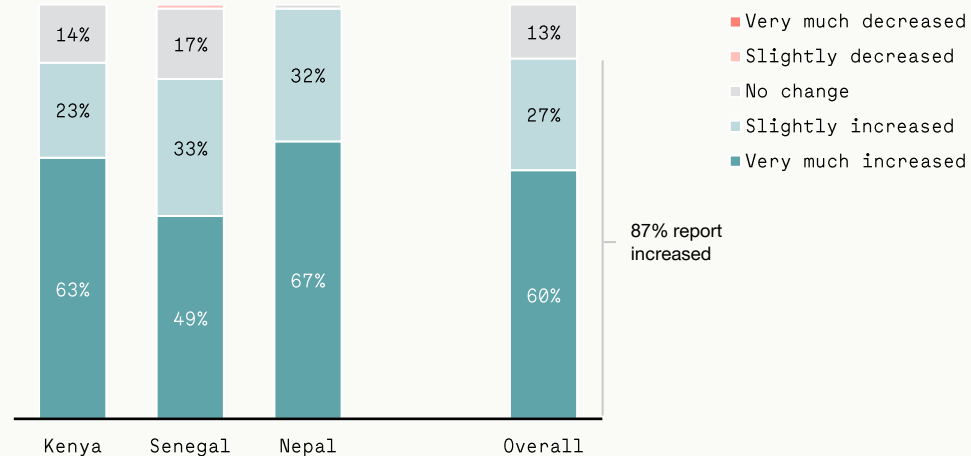
Entrepreneurs who enhanced their negotiation ability are more likely to experience ‘very much increased’ income, with 42% reporting this level of increase versus 15% among those with no change.

The finding reinforces the connection between empowerment and improved financial outcomes and broader wellbeing gains.

Most entrepreneurs report a stronger ability to negotiate in their business because of the program.

## Ability to Negotiate

Q: Has your confidence in yourself and your ability to negotiate with different stakeholders for your business changed because of the [partner program]? Has it: (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# Personal Income Decision Making

3 in 4 entrepreneurs report an improved ability to make decisions on personal income without consulting others.

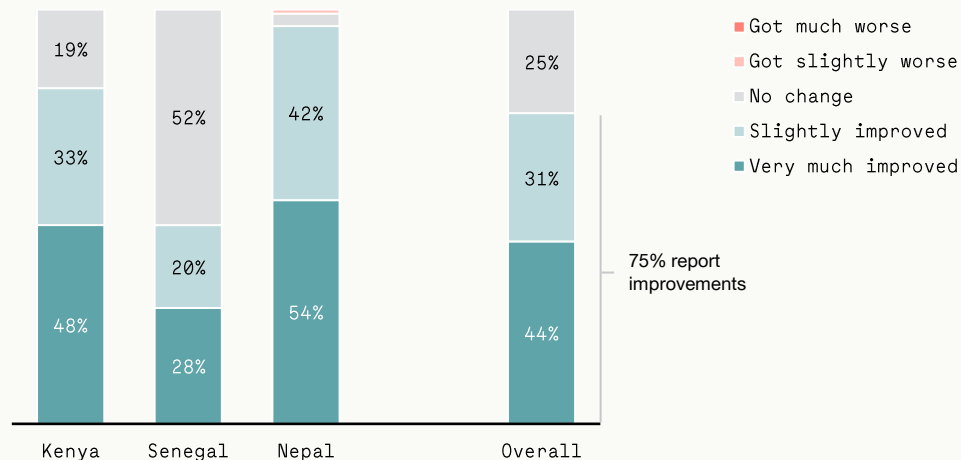
Ability to make personal income decisions is a key indicator of economic empowerment as it reflects long-term financial resilience.

Entrepreneurs in Nepal report the highest improvement at 96%, compared to 81% in Kenya and 48% in Senegal.

Entrepreneurs who report a 'very much improved' ability to make business decisions (73%) are also more likely to report a 'very much improved' ability to make personal income decisions (63%). This shows as women become more confident in managing their businesses, their confidence and control over personal financial decisions also improve.

## Ability to Make Decision on Personal Income

Q: Has your ability to make decisions on what you do with your money (i.e. spend or save) without consulting your spouse/another adult changed because of the [partner program]? Has it: (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# Independent Purchase

57% of entrepreneurs report independently making a major purchase for their household or business since engaging with the program. This includes purchases such as appliances, furniture, equipment, or large quantities of supplies.

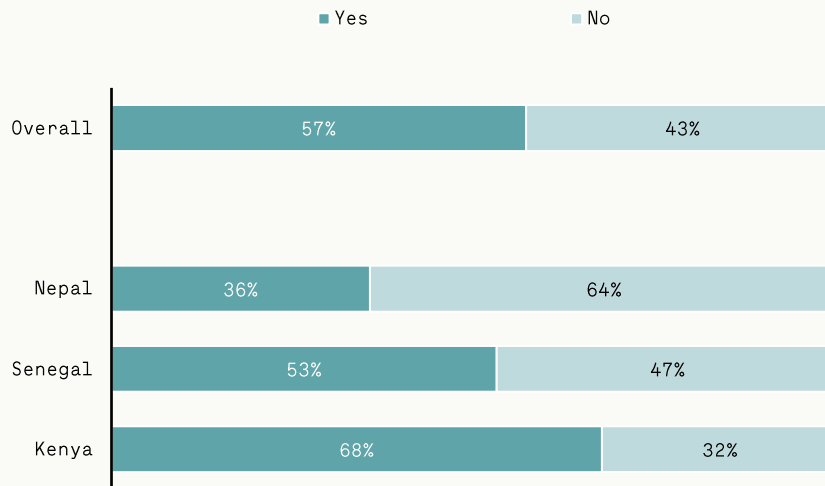
Entrepreneurs in Kenya are most likely to have made such purchases (68%), followed by Senegal (53%) and Nepal (36%).

Entrepreneurs who report a strong improvement in their ability to negotiate with stakeholders are also more likely to make independent purchases (68%). This suggests that as women gain confidence and skill in negotiating, they also build the financial independence and decision-making autonomy needed to undertake.

More than half of entrepreneurs have made a major purchase independently since joining the program.

## Independent Major Purchase

Q: Have you independently made any major purchases for your household or business since you started engaging with the [partner program]? A major purchase could include items such as appliances, furniture, equipment, or large quantities of supplies:(n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



06

# Quality of Support & Experience



Credit: Jost Gastmejer - ENERGIA

# NPS by Country

The average NPS for ENERZIA programs is 47, with a range of 37 to 69. Nepal reports the highest NPS of 69.

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

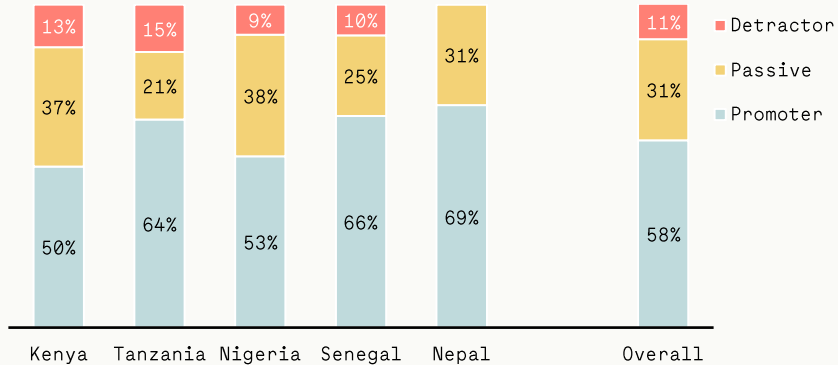
Asking respondents to explain their rating provides insight into what they value and what creates dissatisfaction. These details are on the next page.

## Recommendation

NPS is a helpful metric to track over time to detect subtle changes in customer satisfaction. Organisations looking to improve their NPS set a target of increasing NPS by 7 points over 12 months, on average.

## Net Promoter Score by Segment

Q: On a scale of 0 to 10, how likely are you to recommend the [partner program] to a friend or family member, where 0 is least likely and 10 is most likely? (n = 1,166)



	Kenya	Tanzania	Nigeria	Senegal	Nepal	Overall
n	357	225	249	200	135	1,166
NPS	37	49	44	56	69	47

# NPS Drivers

When reflecting on the drivers of satisfaction, Promoters and Passives value business skills training, while Detractors want to see affordable product prices.

## 58% are Promoters

### They love:

1. Business skills training  
(50% of Promoters / 29% of all respondents)
2. Income generation opportunity  
(35% of Promoters / 20% of all respondents)
3. Good product quality  
(31% of Promoters / 18% of all respondents)

“The people who conducted the training were very friendly, and the skills I gained during the training helped me perform better as a salesperson.” - Entrepreneur, Kenya, age 20

### Tip:

Highlight the above value drivers in marketing Promoters are powerful brand ambassadors — can you reward them?

## 31% are Passives

### They like:

1. Business skills training  
(45% of Passives / 14% of all respondents)
2. Good product quality  
(42% of Passives / 13% of all respondents)

### They want to see:

1. Better product price  
(15% of Passives / 5% of all respondents)

“The training helps us navigate the business with knowledge rather than blindly, and using the stoves ourselves helps us save on charcoal.” - Entrepreneur, Kenya, age 64

### Tip:

Passives won't actively refer you in the same way that Promoters will. What would it take to convert them?

## 11% are Detractors

### They want to see:

1. Affordable product price  
(29% of Detractors / 3% of all respondents)
2. Effective communication and follow-up  
(25% of Detractors / 3% of all respondents)
3. Frequent and consistent training  
(21% of Detractors / 2% of all respondents)

“The price of the solar pump should be reduced and the loan repayment period increased.” - Entrepreneur, Senegal, age 46

### Tip:

Negative word-of-mouth is costly. What's fixable here?

# Net Promoter Score: Drivers

Other drivers include:

- Women’s empowerment (12%)
- Supportive mentorship and networking (12%)
- Access to affordable products (10%)
- Practical and inclusive training (9%)

Make sure to highlight these value drivers in marketing materials. Promoters are powerful brand ambassadors – can they be rewarded for positive word of mouth?

Key:

- #1 Driver
- #2 Driver
- #3 Driver

The most common drivers of satisfaction among Promoters are business skills training, income generation, and product quality.

## Most Common Drivers for 58% of Entrepreneurs Who are Promoters

Q: What specifically about the [partner program] would cause you to recommend it?  
(n = 679) Open-ended, coded by 60 Decibels.

	Kenya (n = 178)	Tanzania (n = 145)	Nigeria (n = 132)	Senegal (n = 131)	Nepal (n = 93)	Overall (n = 679)
<b>Business skills training</b>	59%	41%	30%	47%	79%	<b>50%</b>
<b>Income generation opportunity</b>	33%	52%	34%	15%	43%	<b>35%</b>
<b>Good product quality</b>	25%	47%	60%	11%	2%	<b>31%</b>
<b>Personal development</b>	29%	8%	12%	17%	56%	<b>23%</b>
<b>Clean energy products</b>	16%	3%	14%	27%	1%	<b>13%</b>
<b>Time and cost savings</b>	13%	3%	14%	28%	3%	<b>13%</b>

# Challenges

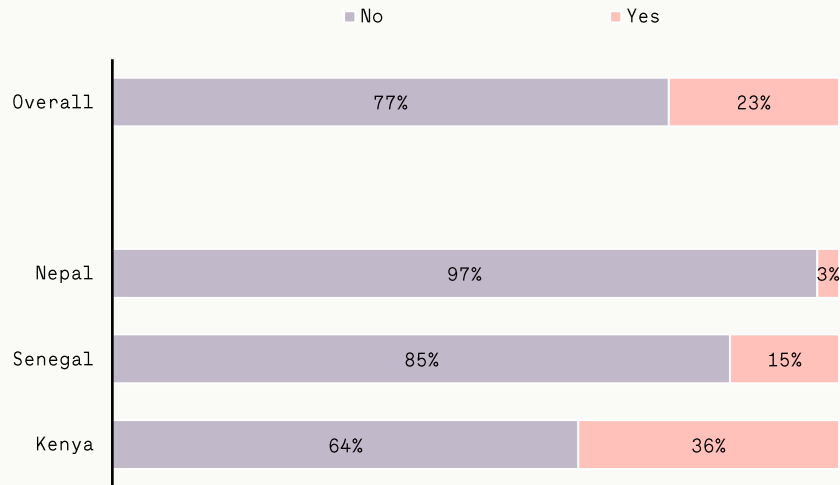
Entrepreneurs from Kenya are more likely to report challenges (36%), compared to Senegal (15%), and Nepal (3%). The next [page](#) shows the most common issues experienced.

Entrepreneur satisfaction is often driven by the challenge rate experienced. Entrepreneurs who have not experienced a challenge report the highest NPS of 59, compared to 12 for those who have experienced a challenge.

Overall, a quarter of entrepreneurs' report experiencing a challenge with the program.

## Entrepreneurs Reporting Challenges

Q: Have you experienced any challenges with the [partner program]?  
 (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# Entrepreneur Challenges: Top Issues

Entrepreneurs were asked to describe the challenges they have faced while engaging with the program.

The top challenges are highlighted on the right.

Other challenges experienced are:

- Poor communication channels (10%)
- Delayed deliveries (9%)
- Unfair program practices (9%)
- Inconsistent pricing (8%)

Key:

- #1 Challenge
- #2 Challenge
- #3 Challenge

The top issues were high product prices, poor product quality, and stock shortage.

## Most Common Issues for 23% of Entrepreneurs Who Say They've Experienced a Challenge

Q: Please briefly explain the challenge you have faced. Open-ended, coded by 60 Decibels.

	Kenya (n = 128)	Senegal (n = 30)	Nepal (n = 4)	Overall (n = 162)
High product prices	28%	3%	-	23%
Poor product quality	9%	60%	-	18%
Stock shortage	21%	-	25%	17%
High transportation cost	22%	-	-	17%
Insufficient training and follow-up	14%	7%	50%	14%
Payment and commission delay	12%	3%	-	10%

# Entrepreneur Service

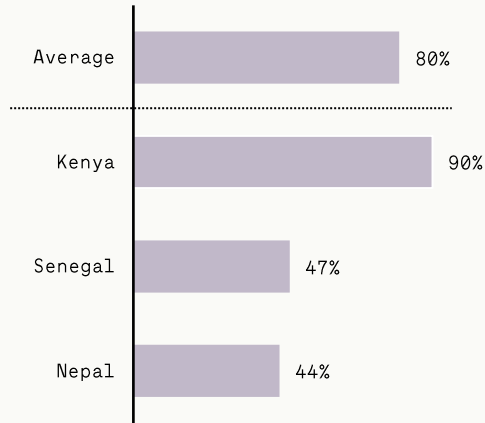
4 in 5 entrepreneurs who have experienced a challenge have not had their issue resolved.

Of the 23% who experienced challenges, 80% said that their challenge had not yet been resolved (11% of total entrepreneurs). Unresolved challenges can encourage negative word-of-mouth and detract from positive impact.

Kenyan entrepreneurs reported the highest overall challenge rate (36%) and they are significantly more likely to report unresolved challenges at 90%, compared to Senegal (47%) and Nepal (44%). This shows there are gaps in challenge resolution that can be sealed in order to deepen entrepreneurs' impact and relationship with the partners.

## Unresolved Challenges

Q: Has the challenge been resolved? (% 'no', n = 133)



# Program Support Received

The top support received includes business skills development, personal development training, and training in energy technologies or productive energy use.

Business skills development and personal development training are the top support received. This reflects ENERGIA's strong focus on equipping entrepreneurs with both technical and soft skills critical for entrepreneurship success.

Key:

- #1 Support
- #2 Support
- #3 Support

## Program Support Received

Q: Which types of support have you received from [partner program] in the past 12 months?

	Kenya (n = 357)	Senegal (n = 200)	Nepal (n = 135)	Overall (n = 692)
<b>Business skills development</b>	71%	90%	90%	<b>80%</b>
<b>Personal development training</b>	66%	84%	51%	<b>69%</b>
<b>Training in energy technologies or productive energy use</b>	66%	51%	94%	<b>67%</b>
<b>Access to renewable energy products for sale</b>	90%	42%	-	<b>59%</b>
<b>Linkages to Financial Institutions</b>	33%	27%	63%	<b>37%</b>
<b>Training on business management and entrepreneurship development</b>	-	-	89%	18%

# Program Support Received: Ranking

When asked to rank the most valuable types of support, entrepreneurs most often prioritized access to renewable energy products for sale. Business skills development consistently ranks second and third, highlighting entrepreneurs' strong interest in building the capabilities needed to grow and manage their businesses.













This ranking reinforces ENERGIA's dual-focus model of market access and capacity building. By enabling women to sell clean energy products, the program not only creates income opportunities but also strengthens their economic participation within local energy value chains.

Access to products ranks highest in Senegal and Kenya, while training in energy technologies and productive energy use dominates in Nepal.

Entrepreneurs rank access to renewable energy products highest, followed by business skills.

## Program Support Ranked by Importance

Q: Thinking about the different types of support you received from [partner program], which 3 were the most valuable to you?

	Kenya (n = 357)	Senegal (n = 200)	Nepal (n = 135)	Overall (n = 692)
<b>Rank #1</b>	 48% (n = 171)	 32% (n = 64)	 84% (n = 113)	 34% (n = 235)
<b>Rank #2</b>	 20% (n = 72)	 30% (n = 59)	 36% (n = 49)	 23% (n = 159)
<b>Rank #3</b>	 16% (n = 57)	 29% (n = 58)	 35% (n = 47)	 23% (n = 162)

**Key:**

-  Access to renewable energy products for sale
-  Training in energy technologies or productive energy use
-  Business skills development
-  Training on business management and entrepreneurship development

# Training

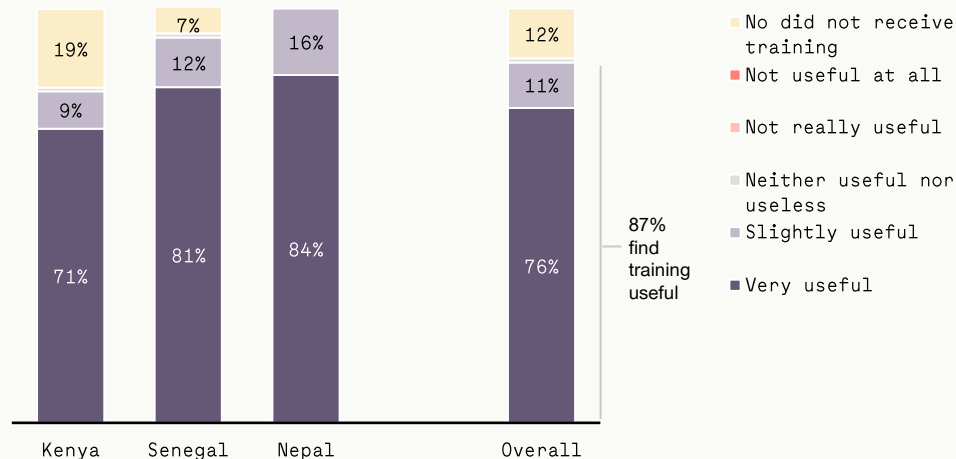
Almost 9 in 10 entrepreneurs report that the training content is useful for their income-earning activities.

Overall, 87% of all entrepreneurs report the training is useful, with 76% reporting it is 'very useful'.

These findings show that ENERGIA's partners training programs are well-received and effectively translated into practice, helping women entrepreneurs improve their income generating activities.

## Training Usefulness

Q: Was the [partner program] training content useful or not useful to your income-earning activities?  
 (n = 692 | Kenya = 357, Senegal = 200, Nepal = 135)



# Training: Understanding & Application

89% of entrepreneurs find the training easy to understand, with 53% finding it 'very easy'.

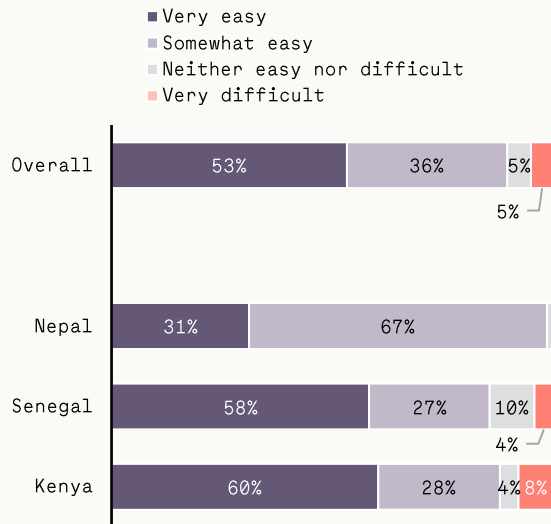
Ease of understanding is high across countries, with Nepal showing the strongest results (98%), followed by Kenya (88%) and Senegal (85%).

Training application, however, varies more widely. Entrepreneurs in Nepal (96%) and Senegal (95%) report applying most or all of the training at much higher rates than those in Kenya (62%). This suggests that the training content may be better aligned with local needs in Nepal and Senegal, while entrepreneurs in Kenya may face more challenges translating the training into practice — possibly due to differences in business context, market conditions, or resources needed to implement what they learned.

Most entrepreneurs find the training easy to understand, though application varies across countries.

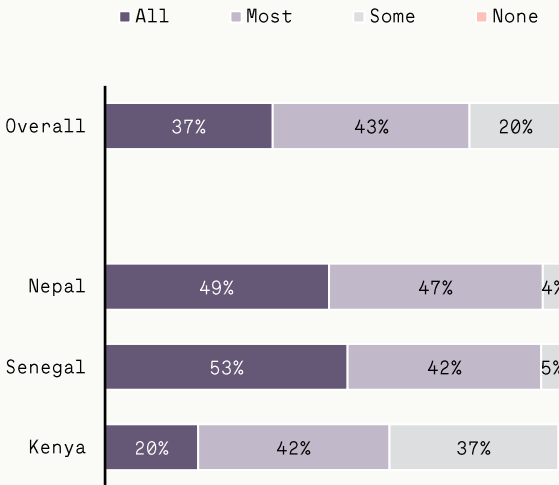
## Ease of Understanding

Q: How easy or difficult was it to understand the training content? (n = 612 | Kenya = 290, Senegal = 187, Nepal = 135)\*



## Training Application

Q: How much of the [partner program] training content did you apply to your income-earning activities? Would you say: (n = 612 | Kenya = 290, Senegal = 187, Nepal = 135)\*



\*Question only asked to respondents who received training  
Lean Data Insights For ENERGIA

# Suggestions for Improvement

While roughly 7% of entrepreneurs could not think of a specific improvement, the remaining 93% offered clear suggestions for improvement, as shown in the table.

Product diversification emerges as a strong theme, especially in Senegal which indicates demand for a wider product range to meet entrepreneur needs and stay competitive. Overall, suggestions point to entrepreneurs wanting more support that helps them grow, differentiate, and operate more effectively.

Key:

- #1 Suggestion
- #2 Suggestion
- #3 Suggestion

Entrepreneurs most commonly suggest more frequent training and broader product options.

## Suggested Improvements

Q: What could [partner program] do to improve the impact of its program on your business or daily life? (n = 692). Open-ended, coded by 60 Decibels

	Kenya (n = 357)	Senegal (n = 200)	Nepal (n = 135)	Overall (n = 692)
<b>More training and better content</b>	25%	12%	50%	<b>26%</b>
<b>Product diversification</b>	14%	42%	25%	<b>24%</b>
<b>Access to stock on credit</b>	25%	24%	8%	<b>21%</b>
<b>Product price reduction</b>	19%	10%	2%	<b>13%</b>
<b>Marketing and customer acquisition support</b>	13%	10%	7%	<b>11%</b>
<b>Reliable stock availability</b>	14%	7%	2%	<b>10%</b>

08

# Appendix



Credit: Nabhin Baral - ENERGIA

# Calculations & Definitions

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

Metric	Calculation
<b>Net Promoter Score®</b>	The Net Promoter Score is a common gauge of entrepreneur loyalty. It is measured through asking entrepreneurs to rate their likelihood to recommend your service to a friend on a scale of 0 to 10, where 0 is least likely and 10 is most likely. The NPS is the % of entrepreneurs rating 9 or 10 out of 10 ('Promoters') minus the % of entrepreneurs rating 0 to 6 out of 10 ('Detractors'). Those rating 7 or 8 are considered 'Passives'.

# Thank you for working with us!

Let's do it again sometime.

## 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 customers, suppliers, and beneficiaries. Its proprietary approach, Lean Data, brings customer-centricity, speed and responsiveness to impact measurement.

60 Decibels has a network of 2500+ trained Lean Data researchers in 120+ countries who speak directly to customers to understand their lived experience. By combining voice, SMS, and other technologies to collect data remotely with proprietary survey tools, 60 Decibels helps customers listen more effectively and benchmark their social performance against their peers.

60 Decibels has offices in London, Nairobi, New York, and Bengaluru.

To learn more, visit [60decibels.com](https://60decibels.com).

We are proud to be a Climate Positive company.



## Your Feedback

We'd love to hear your feedback on the 60dB process; take 5 minutes to fill out our feedback survey [unique link!](#)

## Acknowledgements

Thank you to Sheila Oparaocha and Caroline Brants for their support throughout the project.

We also want to thank the ENERGIA Program Partners for their support:

- CRT/N
- Mercy Corps
- Practical Action
- Solar Sister

This work was generously sponsored by ENERGIA, Hivos, Sida, ADB, and ANDE.

I pay school fess without a problem.

I earn more from my farm.

I have improved my confidence.

I am now able to  
track my

>income

>and

>expenses

easily.

Tripti Singh

John Waitathu

Lucy Gathii

Anshika Jhamb

Wanjiku Mwangi

Kouame Djah

For queries, please email:

[tripti@60decibels.com](mailto:tripti@60decibels.com);

[John.waitathu@60decibels.com](mailto:John.waitathu@60decibels.com)