

2024 Khmer  
Agriculture for the  
Future Accelerator

# ENDLINE EVALUATION REPORT

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## TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b>	<b>1</b>
<b>LIST OF ABBREVIATIONS</b>	<b>3</b>
<b>EXECUTIVE SUMMARY</b>	<b>4</b>
<b>PROJECT SUMMARY</b>	<b>6</b>
Background and Objectives	6
Project Summary	6
Table 1. KAF Accelerator project summary.	6
Theory of Change	6
Figure 1. KAF Accelerator’s Theory of Change.	7
<b>METHODOLOGY</b>	<b>8</b>
Evaluation Purpose	8
Evaluation Design	8
Table 2. KAF Accelerator impact and outcome indicator list.	9
Sampling Strategy	9
Table 3. Evaluation sample size.	10
Tools	10
Evaluation Timeline	10
Table 4. KAF Accelerator endline evaluation timeline.	10
Evaluation Team	11
Table 5. KAF Accelerator endline evaluation team.	11
Limitations	11
Ethical Considerations	11
<b>EVALUATION RESULTS</b>	<b>12</b>
1. Ventures	12
1.1. Demographics	12
Locations	12
Figure 2. Breakdown of ventures by headquarters location (N=8)	12
Gender Distribution	12
1.2. Business Capacity and Performance	12
Table 6. Endline ventures’ business performance results (N=8)	14
1.3 Participants’ Leadership Growth	14
Figure 3. Participants’ growth (N=8)	14
3. Farmers	16
3.1. Demographics	16
Sample Size	16
Geographic Distribution	16
Figure 4. Geographical distribution of the endline sample (N=100)	16
Gender and LNOB Category Distribution	16
Figure 5. Gender distribution of the endline sample by province (N=100)	17
Figure 6. Leave-No-One-Behind distribution of the endline sample (N=100)	17
Age	17
Figure 7. Age distribution of the endline sample by gender (N=100)	18
Value Chain Role	18

Figure 8. Distribution of farmers by relationships with ventures	18
3.2. Agricultural Yield & Income Outcomes	19
Land use characteristics	19
Table 7. Amount of land used, owned, and rented by gender, province, and district priority (N=100)	20
Overall Yield and Net Income Changes	21
Table 8. Median agricultural yield and income per farmer between baseline (N=119) and endline (N=100) by crop	21
Figure 9. Farmers' net income range between baseline (N=119) and endline (N=100)	22
Results by Crop	22
Table 9. Vegetables operational & unit economics in baseline (N=199) and endline(N=100)	23
Table 10. Rice operational & unit economics in baseline (N=199) and endline(N=100)	23
Table 11. Cassava operational & unit economics in baseline (N=199) and endline(N=100)	24
Discussion and Implications	24
3.3. Experiences with CRA Ventures and CRA Products	25
Awareness of CRA concepts	25
Experiences with ventures' products and services	25
<b>DISCUSSION AND IMPLICATIONS</b>	<b>26</b>
Endline Outcome Results across Indicators	26
Table 12. Results of impact and outcome indicators.	27
Discussions and Lessons Learned	28
<b>ANNEXES</b>	<b>29</b>
Annex 1. Detailed Yield and Income Results by Agricultural Products, Gender, and Locations	29
Table 13. Median agricultural yield per farmer between baseline (N=119) and endline (N=100) by geography and gender	29
Table 14. Median agricultural net income per farmer between baseline (N=119) and endline (N=100) by geography and gender	30
Table 15. Vegetable yield and income by geography and gender	31
Table 16. Rice yield and income by geography and gender	32
Table 17. Cassava yield and income by geography and gender	33
Table 18. Poultry yield and income by geography and gender	34
Annex 2. Baseline & Endline Business Screening Protocol	35
Table 19. Baseline & endline business screening questions	35
Annex 3. Endline Farmer Interview Protocol	36

## **LIST OF ABBREVIATIONS**

AC	Agricultural Cooperative
CRA	Climate Resilient Agriculture
IHPP	Impact Hub Phnom Penh
KAF	Khmer Agriculture for the Future
LNOB	Leave No One Behind

## EXECUTIVE SUMMARY

The 2024 Khmer Agriculture for the Future (KAF) Accelerator, implemented by Impact Hub Phnom Penh under the umbrella of the Nurture Programme, aimed to enhance the climate resilience of smallholder farmers in Cambodia by supporting eight ventures focused on climate-resilient agriculture (CRA) and agroecological practices. This endline evaluation assessed the program's impact on both participating ventures and farmers in their value chains across four Cambodian provinces: Battambang, Banteay Meanchey, Oddar Meanchey, and Preah Vihear. The evaluation used a mixed-method approach to measure changes in venture performance and farmer outcomes a year after the support program started.

Key findings from the evaluation show that the KAF Accelerator program successfully contributed to the growth of the participating ventures, particularly in revenue and business expansion. The average monthly revenue of the ventures increased by 87%, with six out of eight ventures experiencing significant growth, ranging from 31% to 262%. This revealed that intensive and tailored support has been effective in driving growth, particularly in revenue and business expansion. The program's focus on strategic visibility, networking, and leadership strengthening significantly enhanced these ventures' capacity to scale. Notable success stories include one venture which saw a major sales increase following a social media spotlight reinforcing the importance of showcasing ventures through targeted promotional content and leveraging digital platforms to increase sales. In addition, market access emerged as a key factor for long-term sustainability. One venture's shift to another market demonstrated how diversifying market access can help maintain revenue growth even as customer numbers decrease. For future programming, further emphasis on distribution channels and market linkages is crucial to help ventures secure stable, higher-value sales.

Despite these successes for ventures, the results for farmers were mixed. Farmers' median net incomes declined by 54%, driven by price volatility for vegetables and rice and a significant drop in cassava yields. Although farmers expressed positive feedback about improved inputs, technical support, and market access, the benefits of venture growth have not consistently reached farmers, particularly in terms of income. This underscores a gap in the current program's support structure, particularly in impact measurement and farmer engagement. In addition, border conflicts may have exacerbated challenges for farmers, with reports of spoiled harvests due to unattended fields, delayed crop cycles, and declining prices for rice and vegetables. This highlights the need for a more comprehensive investigation into the short- and long-term effects of the border conflict on agricultural production, as ongoing instability could further disrupt farmers' livelihoods.

Based on these findings, the evaluation presents a few key recommendations for future venture support programs:

### **1. Enhance Market Access and Distribution Channels**

To ensure the long-term sustainability of ventures, it is crucial to invest in strengthening market access by improving distribution channels and fostering buyer linkages. In addition, future programs should focus on increasing strategic visibility for ventures, utilizing targeted promotional content and digital platforms to boost sales. This should also include sales skills training for venture leaders to improve their ability to present products and close deals effectively.

### **2. Improve Support for Impact Measurement and Farmer Engagement**

A key lesson from the evaluation is the need for a more structured support around businesses' ability to track impacts and engage with farmers. Future programs should

ensure that ventures better track, manage, and report their impact on farmers by improving impact measurement capacity. This would help ensure that the benefits of venture growth, including better products, services, and market access, are consistently passed on to farmers, particularly in terms of income growth.

### **3. Investigate the Impact of Border Conflicts on Agricultural Production**

The evaluation highlights that border conflicts may be impacting agricultural production, particularly through price volatility and disrupted farming cycles. It is essential to conduct a comprehensive investigation into the short- and long-term effects of these conflicts on farmers and agricultural production. The findings will provide valuable insights to inform future program strategies, ensuring that not only are ventures better equipped to support farmers in conflict-affected regions, but also that the broader Nurture program components are aligned and coordinated to provide timely, holistic support to farmers across all stages.

## PROJECT SUMMARY

### Background and Objectives

Cambodia is ranked 149th out of 180 countries for vulnerability and readiness to adapt to climate change. Floods, droughts, and heat waves are increasing year by year. Poverty is still prominent, with an average per capita income of \$321 in rural areas. With 24% of Cambodia's GDP still coming from agriculture and 76% of Cambodia's 16.5 million people living in rural areas, primarily relying on climate-sensitive sectors, climate-resilient farming is crucial.

The Nurture Programme addresses the climate resilience of small-holder farmers using a systemic approach addressing a range of problems associated with financial, technical, institutional, and informational gaps, preventing farmers from transitioning to greater levels of resilience. The overall objective is to strengthen the climate resilience of small-holder farmers by enabling farmers' access to CRA and agroecological services and products.

The 2024 KAF Accelerator under the Nurture Programme is implemented by Impact Hub Phnom Penh to leverage the roles of mature ventures and agriculture cooperatives in four provinces (Battambang, Banteay Meanchey, Oddar Meanchey, Preah Vihear) to support small-holder farmers. The program provides capacity building for eight businesses and ACs (referred to as "ventures" from here on) through a bootcamp, masterclasses, 1-on-1 mentorship, monetary grants, and technical assistance.

### Project Summary

<b>Title</b>	Khmer Agriculture for the Future Accelerator 2024
<b>Starting Date</b>	September 2024
<b>Duration</b>	Six months
<b>Partners</b>	Nurture Programme, Khmer Enterprise
<b>Target Area</b>	Battambang, Banteay Meanchey, Oddar Meanchey, Preah Vihear
<b>Direct beneficiaries</b>	Climate-resilient agriculture ventures and agricultural cooperatives ("CRA venture")
<b>Indirect beneficiaries</b>	Small-holder farmers (owning 0.5-5 ha of land)
<b>Goal</b>	<ul style="list-style-type: none"><li>• Strengthen CRA ventures in the value chain of smallholder farmers, thereby</li><li>• Indirectly support vulnerable smallholder farming households and their communities to be more resilient to climate change and have increased incomes through the climate-proofing of agroecological farming systems</li></ul>

**Table 1. KAF Accelerator project summary.**

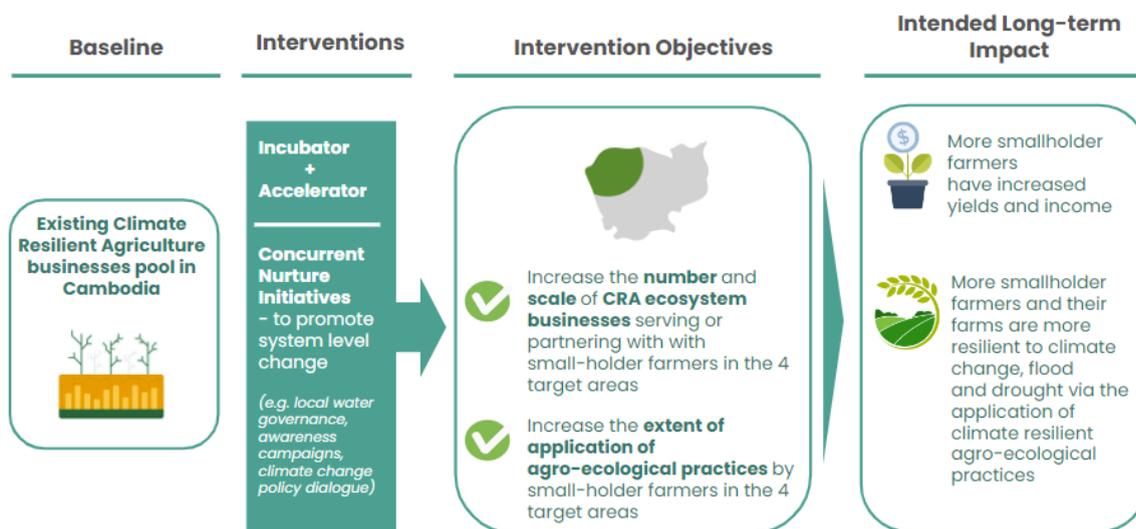
### Theory of Change

The Nurture Programme addresses the climate resilience of smallholder farmers using a systemic approach that addresses a range of problems associated with financial, technical, institutional, and informational gaps, thereby preventing farmers from

transitioning to greater levels of resilience. The overall objective is to strengthen the climate resilience of smallholder farmers by enabling them to access CRA and agroecological services and products. Specific sub-objectives include:

1. Smallholder farmers increase their income and reduce costs by directly utilizing technologies, products, and services from target startups, which also contributes to building their climate resilience.
2. Other value chain actors (e.g., rice millers) benefit (increase business profitability) from innovative products, services, and technologies contributing to reducing costs for smallholder farmers.
- 3. Early-operational and operational ventures are able to increase their customer base in Nurture’s target areas.**
4. The economic and financial stability of early-operational and operational startups is strengthened due to the incubator and accelerator programs and the additional technical assistance provided to the startups upon completion of the program.
5. The agriculture sector benefits from greater modernization in the frame of climate resilience.

To sub-objective 3, the KAF Accelerator program created the theory of change to guide its strategic vision, program design, and evaluation.



**Figure 1. KAF Accelerator’s Theory of Change.**

## METHODOLOGY

### Evaluation Purpose

This endline evaluation aims to assess the current state of the strategic objective and outcome-level indicators for participating ventures and farmers in their value chains at the end of the accelerator phase. Specifically, the endline evaluation intends to examine:

- The progress of CRA ventures and entrepreneurs in scaling their businesses and agroecological practices.
- Changes in small-holder farmers’ agricultural results in the face of climate change and the contribution of venture-provided CRA products and services.

Data collected during the baseline and endline will help inform an assessment of the project impact and recommendations for future project strategy and design.

### Evaluation Design

The evaluation used a mixed-method approach with a non-experimental, pre-post design, conducted with two primary stakeholders: participating ventures and small-holder farmers in their value chain.<sup>1</sup> Detected changes are **not causally attributed** to the project due to the absence of a comparison group. However, the pre-post design will reveal any significant change at the outcome level through a baseline and endline value comparison of outcome and impact indicators.

Assessment is conducted at three points:

- Baseline evaluation of ventures and farmers at the start of the program in November 2024;
- Midline evaluation of ventures, 6 months after the start of the program and at the end of venture support in March 2025;
- Endline evaluation of ventures and farmers, 12 months after the start of the program and in October 2025.

The following impact and outcome indicators were selected to guide the evaluation:

Type of Indicator	Indicator Description	Indicator Definition	Data Tool	Collection	Target
Impact	Farmer’s livelihood	# of smallholder farmers that increased net agriculture income by at least 25%	Farmer Survey	Phone	30 <sup>2</sup>
		# of farmers that experienced a 25% increase in yields	Farmer Survey	Phone	30
	Farmer’s application of CRA practices	Farmers’ feedback about CRA products and how they supported farmers	Farmer Survey	Phone	Stories
Outcome	CRA ventures’ reach to farmers	Number of smallholder <b>farmers</b> (as customers or suppliers/partners) who accessed the promoted CRA-oriented products of ventures	Venture Business Diagnostics		50

<sup>1</sup> Small-holder farmers in the value chains of participating ventures are not directly engaged in KAF Accelerator activities but will be considered direct beneficiaries of the Nurture project.

<sup>2</sup> The original impact targets, 25%, has been changed to 30 farmers upon Nurture Programme’s feedback.

CRA ventures' scale	Number of new economic beneficiaries/ <b>customers</b> that ventures work with	Venture Business Diagnostics	25
	Average increase in ventures' monthly <b>revenue</b>	Venture Business Diagnostics	30%
	Number of additional paid <b>staff</b> hired by participating ventures	Venture Business Diagnostics	10
	Number of CRA <b>products</b> /services that have a potentially viable business model	Venture Business Diagnostics	14
	The most significant changes the ventures experienced since joining the program	Participants' Reflection Mentor's Observation	Stories
Participants' growth	The most significant changes the participants experienced since joining the program regarding personal growth, technical knowledge, soft skills, network, etc.	Participants' Reflection	Stories
Participants' satisfaction	NPS Score	Participant Endline Survey	60
	Participants' feedback about the program	Participant Endline Survey & Reflection	Stories

**Table 2. KAF Accelerator impact and outcome indicator list.**

## Sampling Strategy

For the evaluation of participating ventures, **all ventures** selected for the 2024 KAF Accelerator program participated in evaluating business performance.

For the evaluation of farmers, the endline evaluation was conducted with all small-holder farmers who participated in the baseline evaluation. **100 out of 119 farmers** in the baseline evaluation participated in the endline study. These farmers are from the value chain of **eight** ventures in the Accelerator and in the four targeted provinces (Battambang, Banteay Meanchey, Oddar Meanchey, Preah Vihear). The original sample size was constructed using convenience sampling. The minimum sample size is 119, calculated according to the formula:  $n = [z^2 * p * (1 - p) / e^2] / [1 + (z^2 * p * (1 - p) / (e^2 * N))]$  where:

- $z = 1.96$  for a confidence level ( $\alpha$ ) of 95%
- $p =$  proportion (expressed as a decimal) = number of agricultural holdings between 1-5 ha in 4 provinces (189,000) / total number of agricultural holdings (2,226,000) = 8.49%<sup>3</sup>
- $N =$  population size = 12,066 farmers in the value chain of participants
- $e =$  margin of error = 0.05

Priority of selection was given to farmers in Nurture's targeted districts in the above provinces. Farmers' phone contacts were provided by participating ventures.

<sup>3</sup> Calculated based on data retrieved from [The Cambodia Agriculture Survey \(CAS\) 2021 Final Report \(p. 53\), Table I: Total agricultural area, by size classifications, holdings reporting, Zone level, 2021.](#)

Sample Size	Baseline	Midline/Endline
Venture	8 ventures	8 ventures
Farmers	119 farmers	100 farmers

**Table 3. Evaluation sample size.**

## Tools

Quantitative and qualitative data were collected using **two** main tools below. These tools were developed in English and translated into Khmer by the responsible data collectors before implementation.

- **A business screening** with venture participants to evaluate participating ventures' state of business, including revenue, customer size, employment size, CRA products and services, and reach to small-holder farmers.
- **A farmer interview form** to evaluate farmers' CRA/agroecological practices, agricultural productions, and income.

## Evaluation Timeline

The following table presents the schedule and personnel of midline and endline evaluations in real time.

Activity	Baseline	Midline	Endline	Person in Charge
<b>Evaluation Design and Launch</b>				
Finalize M&E Plan / M&E ToR	Sept 2024			M&E Lead
Orientation for M&E team	Sept 2024			M&E Lead
<b>Data Collection and Analysis</b>				
Design Data Collection Tools	Sept 2024	Feb 2025		M&E Lead
Create Sample Size	Oct 2024	Feb 2025	Aug 2025	M&E Lead, Project Manager
Training for Enumerators / Data Collectors	Oct 2024	Feb 2025	Aug 2025	M&E Lead
Data Collection	Oct–Nov 2024	Mar 2025	Sept–Oct 2025	Project Manager (CRA Ventures) Field Officers (Farmers)
Data Entry & Initial Analysis	Dec 2024	Apr 2025	Nov 2025	M&E Lead
Report Development & Submission	Dec 2024	-	Nov 2025	M&E Lead

**Table 4. KAF Accelerator endline evaluation timeline.**

The M&E Lead supervised the quality control of the data collection process, provided technical support to the enumerators (field officers and project manager), performed data cleaning, and conducted the analysis. Enumerators were responsible for logistical arrangements related to data collection and data entry, as well as assisting in data cleaning. All data collected is compiled and stored in a centralized, protected Google Sheet.

## Evaluation Team

Position	Name	Responsibilities
M&E Lead	Anh Nguyen	The M&E Lead oversees the overall design, planning, coordination, and development of evaluation methods and tools. They provide training to field officers for the fieldwork. They are responsible for developing the M&E framework, analyzing evaluation results, and developing the baseline evaluation report.
Field Officers	Phum Impact Battambang	The Field Officers are responsible for conducting surveys with farmers and cleaning quantitative farmer data for the baseline evaluation report.
Project Manager	Chermeng Thang	The Project Manager oversees project activities and coordinates with venture participants to collect farmers' contacts for the baseline evaluation. He also collects quantitative data about the baseline performance of participating ventures.

**Table 5. KAF Accelerator endline evaluation team.**

## Limitations

**Lack of attribution.** The study is not experimental in design due to logistical difficulties in randomizing and contacting farmers in the control and experimental groups, thus limiting the causal attribution of observed changes to project activities.

**Recalling bias.** This evaluation relies on self-reporting, which may lead to inaccurate estimations due to the difficulty of recalling data from a past period, particularly for questions that require detailed recollection. To minimize these risks, the enumerators were trained to better understand the intention behind each question and to employ various surveying techniques to help farmers recall information.

**Gender and geographical representation.** Despite attempts to ensure gender representativeness in the farmer sample, the final sample did not achieve the targeted 51% female ratio, as per Nurture's gender-mainstreaming commitment, nor achieve equal provincial representation due to disproportionate samples and difficulties in reaching farmers.

**Imperfect estimation of land usage and ownership:** Although the Nurture program defines farmers as those owning between 0.5 and 5 hectares of land, several interviewed farmers also rent land. As a result, the data in this evaluation represents the amount of land used for cultivation rather than the amount of land owned.

## Ethical Considerations

The following measures and principles of ethical considerations were carried out:

- The informed consent form was read to the surveyed farmers before starting the survey to ensure they understood that their participation in the process was voluntary and how to contact the project. Consent was obtained through verbal agreement and a screenshot of the phone call.
- All the data was kept confidential, and all the personal indicators would be eliminated after the project evaluation analysis.

# EVALUATION RESULTS

## 1. Ventures

### 1.1. Demographics

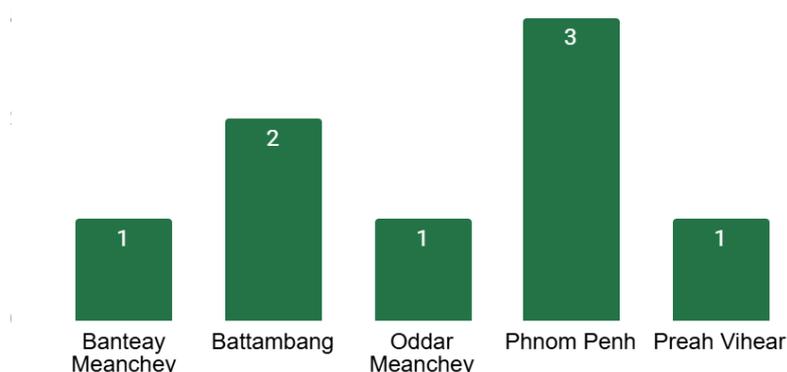
**Eight** ventures that participated in the KAF Accelerator program were included in the midline and endline assessment, including:

1. Tasey Samaki Agricultural Cooperative (Tasey Samaki)
2. Battambang Union of Agricultural Cooperatives (BUAC)
3. Phum Khtum Agricultural Cooperative (Phum Khtum)
4. Preah Vihear Meanchey Union of Agricultural Cooperative (PMUAC)
5. Borey Akpiwat Agricultural Cooperative (Borey Akpiwat)
6. Cambodian Standard Development & Supply Co., Ltd (CSDS)
7. Larano
8. Lala Garden

### Locations

Of the eight ventures, three are based in Phnom Penh, two in Battambang, one in Banteay Meanchey, one in Oddar Meanchey, and one in Preah Vihear.

Ventures' Head Quarter Locations



**Figure 2. Breakdown of ventures by headquarters location (N=8)**

### Gender Distribution

Five out of eight ventures are owned or run by women. In addition, female farmers on average represent 53%<sup>4</sup> of the value chains of all ventures combined, suggesting that these ventures are engaging with a predominantly female agricultural workforce.

The equal representation in leadership and in the value chains suggests that the program is contributing to women's empowerment in agriculture. Women-led ventures may also have a greater focus on or success in engaging with female farmers, creating opportunities for inclusive growth.

### 1.2. Business Capacity and Performance

The KAF Accelerator program follows a small-cohort, tailored support model. Therefore, it is expected that there is wide variation in business performance across ventures. Each

<sup>4</sup> Data from one venture's farmer is excluded from this calculation due to lack of information.

venture’s different growth strategy and pathway are well reflected on their business revenue, sales, and team indicators.

First, in terms of **revenue**, 12 months after the start of the program, the average growth in monthly revenue is **87%** across all ventures.<sup>5</sup> **Six out of eight** ventures experienced substantial growth in average monthly revenue between the baseline and endline, with increases ranging from **31% to 262%**. One venture maintained a roughly consistent level of revenue with 4% growth. One venture saw a 71% decline in revenue, which is due to delays in the processing and selling of products from July to November 2025, making this expected stream of revenue falling out of the data collection period. However, the venture has confirmed that crop harvests remain healthy and its financial situation is stable.

Second, the number of new customers across all ventures **increased by 153**, while the total **number of customers** across all ventures decreased by 37 between the baseline and endline, with the largest drops seen in three ventures. According to one venture, this reduction was part of a strategic shift to a new market segment. This change helped sustain operations while maintaining sales, as evidenced by a 50% increase in their monthly revenue. Similarly, two other ventures experience substantial revenue growth despite a decrease in customers.

Third, one year into the program, the eight ventures collectively hired **19 additional paid staff**. The ventures collectively also worked with mentors to strengthen **17 products and services**, which included agricultural inputs (e.g., nethouses, cover crops, irrigation systems, storage, and machinery), agricultural products (e.g., organic cassava, biochar vinegar), and training on sustainable agricultural techniques.

Finally, the combined reach to farmers across all ventures grew significantly, with **1,774 new farmers** joining as customers, suppliers, training participants, or AC members by the endline.

<b>Business Performance Outcome Indicators</b>	<b>Target</b>	<b>Baseline</b>	<b>Endline</b>	<b>Changes</b>	<b>Target Achievement</b>
OCBI. Average increase in ventures' monthly revenue	30%			87%	✓
OCB 2. Number of new economic beneficiaries/customers that ventures work with	25	0	153	153	✓
OCB 3. Number of additional paid staff hired by participating ventures	10	159	178	19	✓
OCB 4. # of additional/strengthened CRA products and/or services that have a potentially viable business model CRA products	14	0	17	17	✓

<sup>5</sup> It is worth noting that the growth in revenue for the ventures in the KAF Accelerator (87% average growth) is significantly lower than that seen in ventures from the incubator stage, which recorded a 443% increase in average monthly revenue. This difference is expected, as incubation-level ventures are often in the early stages of development and are more likely to experience rapid growth as they establish their market presence. In contrast, ventures at the acceleration stage tend to focus more on stabilizing their internal operations and building the strategic connections necessary for scaling. These ventures are in a phase where sustainable growth, rather than fast expansion, becomes the key priority, which is reflected in the more measured revenue increases observed in the accelerator.

and services developed or strengthened during this program)					
OCF 1. Number of farmers (as customers or suppliers / partners) who accessed the promoted CRA-oriented products of ventures	50	15266	17040	1,774	✓

**Table 6. Endline ventures’ business performance results (N=8)**

The results of the KAF Accelerator highlight its meaningful contribution to the growth and sustainability of the participating ventures to both local economies and broader agricultural development goals. The substantial revenue increases and the expansion in customer and farmer engagement underscore the program’s success in enhancing business operations and extending market reach. These outcomes demonstrate the ventures’ ability to adapt and thrive, even amidst challenges, with a strengthened capacity to engage key stakeholders in the value chain. The hiring of additional staff reflects the ventures’ growing operational needs, and the improvement of diverse products and services also signal the program’s positive influence in building resilience and innovation within Cambodia’s agricultural sector.

### 1.3 Participants’ Leadership Growth

The KAF Accelerator program welcomed 16 core participants, each being in a senior management or leadership position of a participating venture. To assess the overall impact and outcomes of the KAF Accelerator, an midline survey was conducted with 8 representative participants across the eight ventures at the end of the program. This survey aimed to capture the experiences, perspectives, and key learnings of the participants, providing valuable insights into the effectiveness of the program and its contribution to their business development. The following section presents the key findings from the survey, offering a detailed view of how the program has influenced the ventures and their operations, as well as the participants’ perceptions of the support provided.

#### Percentage of participants that agree-strongly agree:

As a result of participating in this program



**Figure 3. Participants’ growth (N=8)**

According to the survey, **100% of participants** found the program either **useful or very useful** in addressing the challenges facing their businesses. All participants reported gaining greater clarity on the next steps for their ventures and the actions required to

move forward. The majority (**88%**) also noted an increase in **confidence, optimism, and leadership skills**, including public speaking, team management, and negotiation and partnership building. *“As the up-and-coming generation, I found value in the group gatherings and public events that the program organized, which gave us opportunities to build confidence in presenting ourselves to others,”* shared an AC representative.

In addition, most participants agreed that the program had **expanded their networks**, connecting them with valuable contacts (**88%**) and providing a clearer sense of who to approach for further support (**75%**). Besides connecting with additional agricultural communities and industry experts, participants particularly valued the stronger relationships built with their peers. The diverse mix of agricultural cooperatives, vendors, and agri-input providers within the program cohort allowed participants to foster new strategic partnerships and broaden their business opportunities.

Finally, the program received a **Net Promoter Score (NPS) of 88**, with seven participants giving promoter scores of 9 and 10, and one participant giving a neutral score of 7. This was likely due to their venture’s lower engagement with integrating CRA and less alignment in their objectives and lower motivation since the application phase, according to program observations, resulting in less value gained from the program.

In short, the KAF Accelerator has proven to be a valuable resource for the participating ventures, offering clear guidance and essential support to upskill key staff and help them address key business challenges. The program’s impact on boosting participants’ confidence, leadership skills, and networking opportunities, while fostering lasting partnerships and enhancing business prospects through connections among diverse stakeholders, reflects its success in empowering entrepreneurs and ventures, thereby driving growth, fostering innovation, and strengthening Cambodia’s agricultural sector.

### 3. Farmers

#### 3.1. Demographics

##### Sample Size

Based on the ventures' provided contacts, 119 small-holder farmers in the value chain of eight ventures in the four target provinces participated in the baseline evaluation. These farmers were screened based on two criteria:

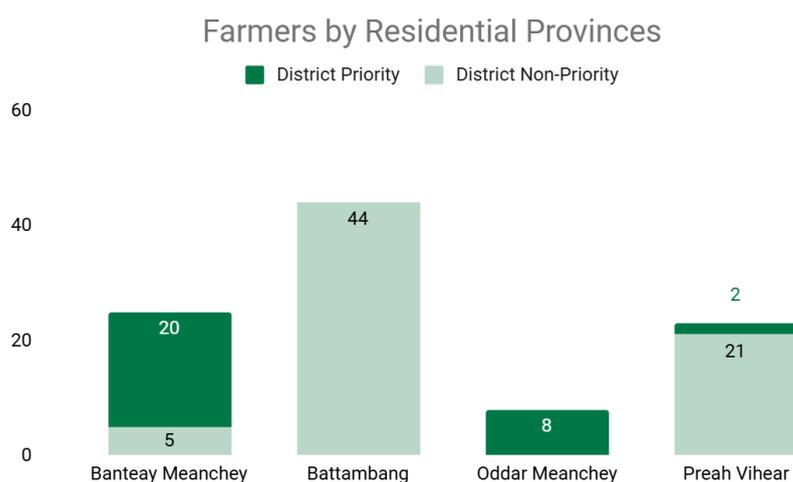
- Whether farmers currently own 0.5–5 ha of land for planting (rented land does not count);
- Whether farmers are producing vegetables, rice, cassava, or poultry, which are the priorities of the KAF Accelerator program.

Of the 119 farmers, **100** responded and participated in the endline evaluation, indicating 84% in response rate. Of the 19 non-respondents, 11 no longer used the same phone numbers, and 8 others did not answer after 10 attempts to connect. Finally, two interviewed farmers reported stopping farming, one for retirement and another to switch to factory work.

##### Geographic Distribution

Although the study aimed for geographical distribution parity, due to stringent screening criteria and disproportionate focus of participating ventures, the geographical distribution of farmers is imbalanced.

Given the high response rate at the endline, the geographical distribution of farmers in the sample did not change substantially compared to the baseline. Similar to in the baseline, endline interviewed small-holder farmers are concentrated in Battambang, followed by Preah Vihear, and Banteay Meanchey. A small number of interviewed farmers are from Oddar Meanchey. Slightly less than a third is from districts prioritized by Nurture Programme.

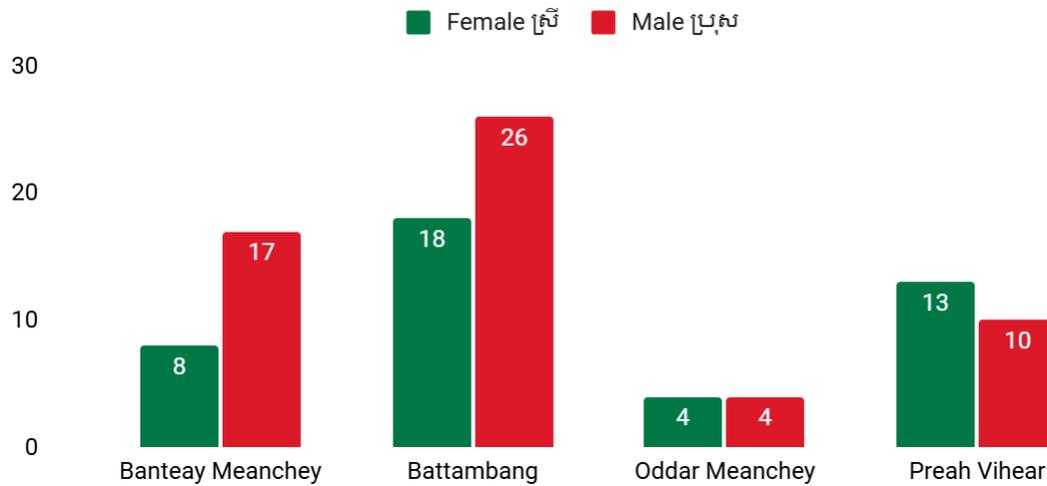


**Figure 4. Geographical distribution of the endline sample (N=100)**

##### Gender and LNOB Category Distribution

In terms of gender distribution, female representation increased from 38% in the baseline to 43% in the endline, concentrating in Battambang and Banteay Meanchey. Female representation in prioritized districts are also slightly higher by 8%.

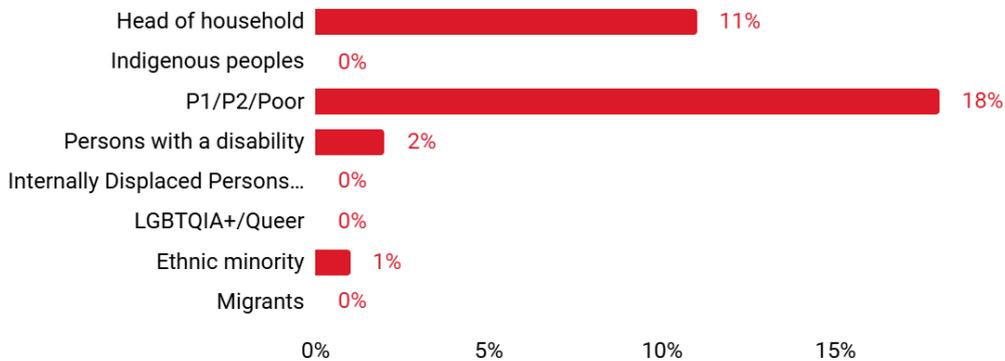
## Farmers by Gender and Residential Provinces



**Figure 5. Gender distribution of the endline sample by province (N=100)**

However, only 19% of the interviewed farmers at endline are heads of their households, compared to 53% at baseline, as many interviews were conducted with spouses while the farmers were working in the field. The endline survey also corrected baseline data, revealing that no farmers identify as part of an Indigenous group, contrary to the initial report. The percentage of households categorized as 'Poor' and those identifying as persons living with a disability remained roughly the same as in the baseline.

## Farmers by No-one Left Behind Categories

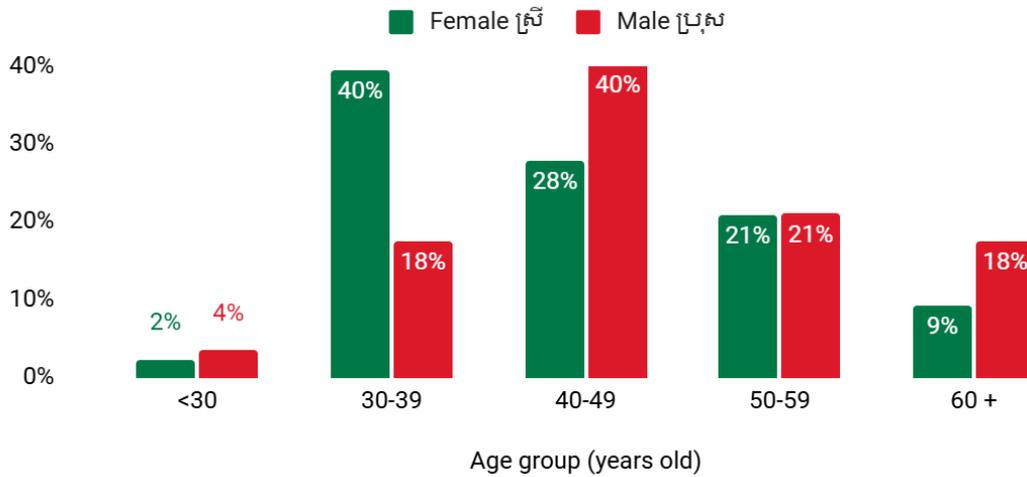


**Figure 6. Leave-No-One-Behind distribution of the endline sample (N=100)**

## Age

The endline sample shows a slight shift in age distribution, with the absence of a 19-year-old female farmer resulting in a higher average age for farmers, though the median age (44 years old) and overall age distribution remains similar to the baseline. Female farmers aged 30-39 now represent a stronger proportion of the sample. The median age of farmers from Banteay Meanchey remains the highest, Oddar Meanchey the lowest.

## Farmers by Age Groups and Gender



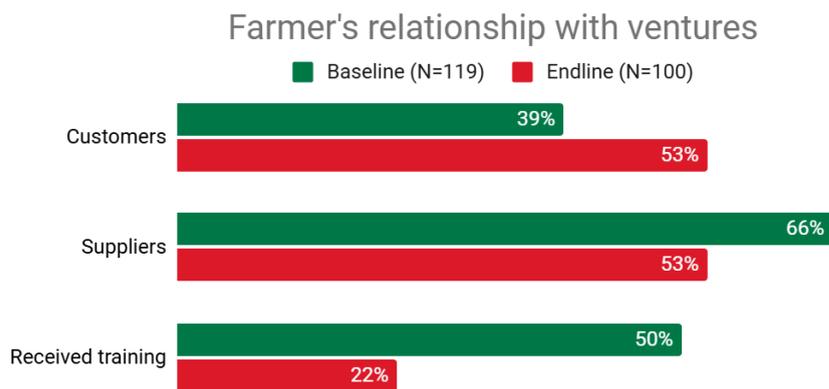
**Figure 7. Age distribution of the endline sample by gender (N=100)**

### Value Chain Role

All interviewed farmers are from the value chain of seven out of eight ventures in the Khmer Agriculture for the Future Accelerator program. The exception is Larano, whose business model focuses on working with depots rather than directly with farmers. Therefore, no farmers within Larano’s value chain were identified for the sample.

While the number of interviewed farmers decreased slightly across most ventures at endline, reflecting the smaller overall sample size in the endline, participation remained relatively consistent across ventures, with the largest groups still from two major ACs.

At endline, a larger share of farmers engaged with ventures as customers, while the proportion of suppliers declined. Fewer farmers reported receiving training, suggesting a shift in engagement toward commercial relationships rather than capacity-building activities.



**Figure 8. Distribution of farmers by relationships with ventures**

## 3.2. Agricultural Yield & Income Outcomes

### Land use characteristics

Overall, on average, farmers in the sample size increased the amount of land used (3.82 ha to **4.36 ha**), owned (2.8 ha to **3.53 ha**), but decreased that rented (3.2 ha to **2.84**). The largest amount of land and owned used increased from 8 ha and 15 ha to 30 ha. These suggest these farmers are growing in operations and toward larger scales compared to farmers in Cambodia in general, whose average land size is 2.1 ha, according to the Cambodia Agriculture Survey 2023.<sup>6</sup> In addition, compared to the baseline, interviewed farmers residing prioritized districts at the endline use a larger land size for cultivation than those in non-prioritized districts by 1.74 ha.

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<sup>6</sup> The Cambodia Agriculture Survey 2023 Complete Report (p. 28), distributed on December 19, 2024 in the CAS 2022 & CAS 2023 Release Workshop by the National Institute of Statistics, Ministry of Planning.

	Land used for cultivation			Land owned			Land rented		
	Average size	Minimum size	Maximum size	Average size	Minimum size	Maximum size	Average size	Minimum size	Maximum size
<b>Overall</b>	4.36	0.00	30.00	3.53	0.00	30.00	2.84	0.00	12.00
<b>Gender</b>									
Female	4.11	0.38	12.00	3.16	0.50	12.00	2.86	0.00	8.00
Male	4.55	0.00	30.00	3.82	0.00	30.00	2.83	0.24	12.00
<b>Provinces</b>									
Banteay Meanchey	4.43	0.00	30.00	3.91	0.00	30.00	2.27	0.50	4.00
Battambang	3.86	0.00	15.00	2.36	0.00	12.00	3.49	0.24	12.00
Oddar Meanchey	9.25	5.00	18.00	9.44	4.00	18.00	1.75	1.00	2.50
Preah Vihear	3.55	1.00	9.50	3.31	1.00	6.00	1.60	0.00	4.00
<b>District</b>									
Priority	3.84	0.00	15.00	2.78	0.00	12.00	3.16	0.00	12.00
Non-priority	5.58	0.50	30.00	5.29	0.00	30.00	1.99	0.50	4.00

**Table 7. Amount of land used, owned, and rented by gender, province, and district priority (N=100)**

## Overall Yield and Net Income Changes

Consistent with baseline results, rice remains commonly grown in all provinces in the endline evaluation. Vegetables are popular crops in Banteay Meanchey and Battambang, whereas cassava is a common choice for farmers in Oddar Meanchey and Preah Vihear. **Overall, typical farmers earned less at endline despite steady vegetables and rice outputs and declining cassava outputs.** This section will describe in detail the changes in yield and income of farmers across crop types between baseline and endline.

In terms of agricultural yield, **median yields** were mostly **stable for rice** (2,500 to 2,450 kg/ha), **increased for vegetables** (10,000 to 15,625 kg/ha), while **cassava and poultry declined** significantly overall (10,000 to 6,000 kg/ha, 20 to 14 birds). The drop is especially evident in priority districts and in Oddar Meanchey.

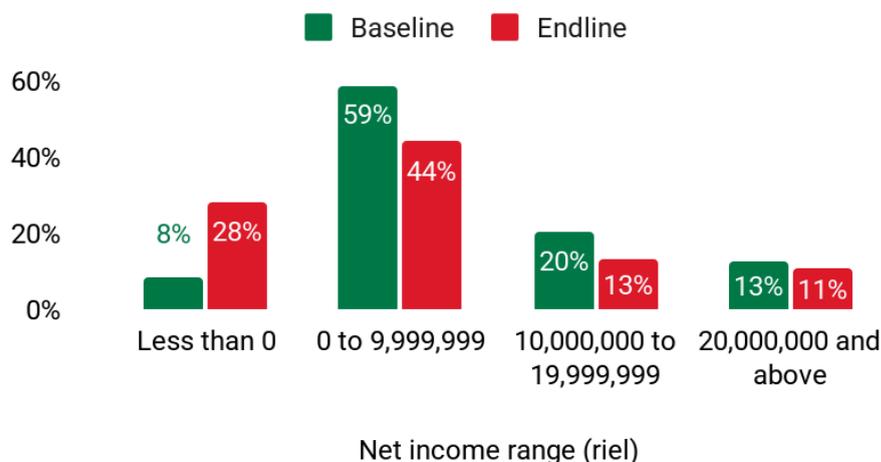
	Baseline (n=119)	Endline (n=100)	%Δ
<b>Median Yield (kg/ha)</b>			
<b>Vegetables</b>	10,000	15,625	56.25%
<b>Rice</b>	2,500	2,450	-2.00%
<b>Cassava</b>	10,000	6,000	-40.00%
<b>Median Net Income (riel)</b>			
<b>Overall</b>	5,220,000	2,380,000	-54.41%
<b>Vegetables</b>	3,400,000	1,900,000	-44.12%
<b>Rice</b>	2,000,000	500,000	-75.00%
<b>Cassava</b>	1,275,000	675,950	-46.98%

**Table 8. Median agricultural yield and income per farmer between baseline (N=119) and endline (N=100) by crop**

**Median net income fell across the board** from baseline to endline, showing that typical farmers' earnings declined by 54% at the endline (5,220,000 to 2,380,000 riel/person). Banteay Meanchey farmers saw the largest drop in median net income, down by about 7 million riel, followed by Battambang, by roughly 6.75 million riel, despite steady yields in both provinces between baseline and endline. Note that income averages<sup>7</sup> rose sharply due to a few very high earners, indicating a highly skewed distribution. These few high earners are in Oddar Meanchey, who also doubled the amount of land used for cultivation.

<sup>7</sup> The median shows what a typical farmer earns; the average can be pulled up or down by outliers, hence overstated average.

## Percentage of farmers by net income range



**Figure 9. Farmers' net income range between baseline (N=119) and endline (N=100)**

### Results by Crop

#### Vegetables

Roughly similar to the baseline, 45 out of 100 farmers (45%) grow vegetables, concentrating in Battambang and Banteay Meanchey. In the endline, farmers grew very different types of vegetables compared to baseline and with varied results. Of the 20+ types, most commonly grown vegetables types are cucumbers and varieties of herb, followed by bokchoys, cabbages, tomatoes. Vegetables that contribute the most income are jicamas, onions, cabbages, eggplants, and luffa.

Overall, the plot of land dedicated to vegetables shrunk from baseline to endline (0.32ha to 0.24ha). Median **vegetables yield increased** by over 5,000kg/ha, but median **net income dropped** almost by half (3.4m to 1.9m) regardless of gender and geography. More farmers earned less than 10 million riels or experienced a negative income between baseline and endline.

When examining the production and sales of vegetables, it is evident this **income drop can be attributed primarily to a drop in unit price**, which fell by 26%, from 2,501 to 1,856 riel/kg on average, despite improved production. Even though yields and sell-through both increased and unit costs improved (-17% riel/kg sold; -27% riel/kg produced), savings were not sufficient to match the price drop. Per-kg margins narrowed, and median net income declined. This drop in prices is also confirmed by several farmers' qualitative sharing, suggesting that after the Thai-Cambodian border conflicts, pricing has dropped. It has been reported that the import ban of fruit and vegetables from Thailand may have benefitted some farmers.<sup>8</sup> However, our endline data suggested a different reality. As such, whether the drop is related to border conflict or other factors deserves further due investigation.

Vegetable	Baseline (n=119)	Endline (n=100)	%Δ
Median Yield (kg/ha)	10,000	15,625	56%
Kg Produced	653,380	910,483	39%

<sup>8</sup> <https://www.khmertimeskh.com/501702912/cambodia-confirms-food-security-amid-thai-import-ban/>

Kg Sold	572,680	903,683	58%
Sell-through % <sup>9</sup>	88%	99%	13%
Price/kg (riel)	2,501	1,856	-26%
Expense/kg Produced (riel)	730	535	-27%
Expense/kg Sold (riel)	640	531	-17%
Gross Margin/kg	1,861	1,325	-29%
Median Net Income (riel)	3,400,000	1,900,000	-44%

**Table 9. Vegetables operational & unit economics in baseline (N=199) and endline(N=100)**

### Rice

Rice remains the most commonly grown crop with 76% of farmers growing at the endline, spreading across all four provinces. Land use for rice cultivation and median yield stay roughly the same as in baseline, at 2 ha and 2,450-2,500 kg/ha, respectively. However, **median net income on rice dropped significantly by 75%**, with the largest loss borne by farmers in Oddar Meanchey (negative income) and Battambang (breakeven), and farmers in non-priority districts.

The **rice income 75% decrease is primarily due to increasing production expenses and price drop**. Specifically, rice yield and sell-through were steady between baseline and endline. However, prices fell from ~1,110 to ~917 riel/kg (17%) while unit costs rose (10% riel/kg sold; 12% riel/kg produced). This created the sharpest margin squeeze among the three crops and drove a clear fall in median net income. Similar to the case of vegetables, some farmers suggested lower prices were an impact of the border conflict. A closer study is needed to determine correlation and inform more holistic understanding.

Rice	Baseline (n=119)	Endline (n=100)	%Δ
Median Yield (kg/ha)	2,500	2,450	-2%
Kg Produced	1,131,683	981,515	-13%
Kg Sold	938,790	804,225	-14%
Sell-through %	83%	82%	-1%
Price/kg (riel)	1,110	917	-17%
Expense/kg Produced (riel)	596	666	12%
Expense/kg Sold (riel)	494	545	10%
Gross Margin/kg	616	372	-40%
Median Net Income (riel)	2,000,000	500,000	-75%

**Table 10. Rice operational & unit economics in baseline (N=199) and endline(N=100)**

### Cassava

At the endline, 17% farmers grew cassava compared to 22% in baseline, concentrating in Oddar Meanchey and Preah Vihear. The median area of land used increased slightly. However, **cassava median yield dropped by 40% and median income dropped by 47%**, with the impact most experienced by those in Oddar Meanchey. **The drop in cassava is driven by reduced total production volume**, given all favorable market factors –

<sup>9</sup> Sell-through = kg sold ÷ kg produced.

sell-through increased from ~70% to 100%; average prices rose by 80%; and reduced unit costs (-43% riel/kg sold; -60% riel/kg produced). Even so, lower yields reduced total volume, and median income still fell despite better per-kg margins.

Cassava	Baseline (n=119)	Endline (n=100)	%Δ
Median Yield (kg/ha)	10,000	6,000	-40%
Kg Produced	641,870	906,195	41%
Kg Sold	451,620	906,195	101%
Sell-through %	70%	100%	42%
Price/kg (riel)	329	593	80%
Expense/kg Produced (riel)	133	53	-60%
Expense/kg Sold (riel)	93	53	-43%
Gross Margin/kg	235	540	129%
Median Net Income (riel)	1,275,000	675,950	-47%

**Table 11. Cassava operational & unit economics in baseline (N=199) and endline(N=100)**

### Poultry

The pattern of poultry raising in the endline is similar as in the baseline. About 35% of endline farmers raise poultry (compared to 25% in baseline), most residing in Battambang and Preah Vihear (~35-37%). Chicken remains popular, with 86% of poultry farmers raising. Several farmers raise poultry for self consumption rather than for sales. However, **median income from poultry also experienced a sharp drop, by 61%.**

### Discussion and Implications

Across all crops, median net incomes fell, while averages rose in some areas due to a few high earners, indicating that the income distribution was skewed. While the aggregate expenses increased by 2.8%, the rise in costs was not consistent across all crops. Rice saw a sharp increase in unit costs, while vegetables and cassava managed to reduce their per-kg costs. However, this cost reduction was not enough to offset the price declines seen in vegetables.

**The main drivers of the changes in net income and yield can be attributed to price and cost pressures.** The decrease in prices for vegetables and rice played a significant role in the income drop, despite steady yields. In particular, rice faced a combination of lower prices and higher input costs, which drove lower net income. In contrast, cassava benefited from both higher prices and lower input costs, but these were not fully offset by the significant drop in total yield.

These trends highlight **a broader issue of margin compression, even with steady yields.** Farmers are facing tighter margins due to fluctuating prices and rising costs, making it critical for ventures to focus on improving cost efficiency, negotiating better prices, and enhancing market access. Particularly for cassava, restoring yields and addressing post-harvest losses will be key to reversing income declines.

It is important to note that the smaller sample size at endline (100 farmers compared to 119 at baseline) may have influenced the results. Furthermore, the averaging of yield and prices across all types of vegetables and rice could introduce some degree of estimation error, which means the reported figures should be interpreted with caution. In addition, calculation of poultry yield is not consistent, sometimes by the number of birds and sometimes by kg, which posed difficulties in estimating changes in yield.

### 3.3. Experiences with CRA Ventures and CRA Products

#### Awareness of CRA concepts

The number farmers who have heard of the term CRA increased at the endline from 58% to 73%, and the increased awareness is higher among farmers in two ventures. Similar to in the baseline, farmers in three other venture's value chains show the highest awareness level.

#### Experiences with ventures' products and services

Farmers typically received various agricultural inputs from the ventures, including seed varieties, organic and inorganic fertilizers, and, in some cases, pesticides/herbicides, as well as essential equipment such as net houses. They used these inputs to grow vegetables, rice, and cassava.

When asked about their experience using the ventures' products and services, most farmers expressed satisfaction, consistent with baseline results. They reported being able to sell their products at better prices, access higher-quality inputs, and receive valuable technical support. The most commonly cited impacts were **increased yields and incomes**, which they attributed to **improved crop inputs, better market access, and enhanced farming techniques**.

All ventures' products received a highly positive Net Promoter Score from **11 (good products) to 75 (excellent products)**, suggesting highly positive and valuable interaction between program ventures and farmers. The only exception is with one venture, which received a -55 score from the 11 interviewed farmers. Half these farmers are neutral or unsure about working with the venture again. The negative score suggests some dissatisfaction among the interviewed farmers. This could be due to various factors, such as unmet expectations, challenges in product quality, or issues with communication and support. Given the small sample size, these results should be interpreted with caution. However, the low score highlights the need for further investigation into the concerns raised by these farmers and potential improvements in the venture's offerings or engagement strategies.

Farmers were also asked about competitors of the ventures/ACs within their access. About 56% of farmers could identify an alternative to the ventures, such as local depots, dealers, and markets. Farmers noted **higher selling prices**, easier access to market, **product quality**, as well as **brand name** were reasons they chose working with the ventures.

## DISCUSSION AND IMPLICATIONS

### Endline Outcome Results across Indicators

The report's findings suggest the following endline measures for KAF Accelerator's impact indicators.

No	Nurture LF's Indicators codes	Indicators (by logic Intervention)	Target	Baseline Measure	Endline Measure	Changes	Target Achievement	Notes
<b>Impact Indicator:</b> Vulnerable smallholder farming households and their communities are more resilient to climate change and have increased incomes through climate proofing of agroecological farming systems.								
1	IP.2	IP1. # of smallholder farmers that increased net agriculture income by at least 25%	30	0	22	22		Rice and vegetables income drop due to lower prices. Cassava income loss due to lower yield.
2	OC.1	IP2. # of farmers that experienced a 25% increase in yields	30	0	30	30	✓	
3		Farmers' feedback about CRA products and how they supported farmers	-	Stories	-	-	✓	Farmes mentioned increased yields and incomes thanks to improved crop inputs, better market access, and enhanced farming techniques as impacts
<b>Outcomes Indicator:</b> Vulnerable smallholder farmers use the promoted inputs, services, practices or technologies that allow for CRA								
4	OC.3.1	Number of farmers (as customers or suppliers/partners) who accessed the promoted CRA-oriented products of ventures	50	15,266 <sup>10</sup>	17,040	1,774	✓	

<sup>10</sup> This figure was reported as 12,066 in the baseline report and now corrected to 15,266.

<b>Outcomes Indicator: Incubated ventures increase business growth</b>							
5		OCB1. Average increase in ventures' monthly revenue in the past 12 months	30%	-	-	87%	✓
6	O.P.3.2.1	OCB 2. Number of new economic beneficiaries/customers that ventures work with	25	0	153	153	✓
7		OCB 3. Number of additional paid staff hired by participating ventures	10	159	178	19	✓
8		OCB 4. # of CRA products and/or services that have a potentially viable business model	14	0	17	17	✓
9		The most significant changes the ventures experienced since joining the program	-	Stories	-	-	✓
<b>Outcomes Indicator: Participants experienced personal growth and were satisfied with the program</b>							
10		Participants' feedback about the program	-	Stories	-	-	✓
11		OCP 6. NPS Score	60	0	88	88	✓

**Table 12. Results of impact and outcome indicators.**

## Discussions and Lessons Learned

The evaluation of the 2024 KAF Accelerator program revealed valuable insights into the performance of the participating ventures and their impact on farmers.

For the ventures, it is clear that intensive and tailored support has been effective in driving growth, particularly in terms of revenue and business expansion. The program's focus on strategic visibility, networking and connections, as well as operational and leadership strengthening has enhanced these ventures' capacity to scale and increase their market presence. One venture, for example, saw a significant sales increase after a social media spotlight. This underscores the importance of showcasing ventures through targeted promotional content, leveraging digital platforms and clear calls-to-action to convert visibility into sales in future support programs. The program's impact on participants' leadership skills and network expansion was another strong success factor, helping more mature ventures unlock strategic partnerships for scaling their operations.

In addition, it is clear that market access is essential for ventures' long-term sustainability. As seen in one ventures which shifted toward new markets, it is important to diversify market access to sustain revenue growth even as customer numbers decrease. This underscores a clear priority for further future business support on distribution channels and market access (e.g., buyer linkages, off-take agreements, logistics, sales skills, etc) to help ventures secure stable, higher-value sales.

While ventures saw significant improvements, the results for farmers are more mixed. Farmers' median net incomes declined by 54%, primarily due to price volatility for vegetables and rice, as well as a significant drop in cassava yields. Even though farmers provided positive feedback about their experiences with the ventures, especially appreciating improved inputs, technical support, and market access, the result suggests that while the ventures are growing, the benefits may not have consistently reached farmers, particularly in terms of income. The decline in farmer income highlights a gap in the current support program in meeting the overall Nurture's vision—limited focus on farmer engagement and impact measurement to manage business impact on farmers.

In addition to price volatility, border conflicts appear to have exacerbated challenges for farmers. When asked about border conflict impacts, some farmers reported challenges such as spoiled harvests due to unattended fields during evacuations, delays in crop cycles due to the uncertainty of the conflict, and a general decline in rice and vegetable prices. While it remains unclear if the drop in cassava yields is directly related to the conflict, cassava farmers in Preah Vihear, one of the most affected provinces, may be experiencing indirect impacts.

As ventures grow and thrive, ensuring that the economic benefits trickle down to farmers is essential for the program's overall success. As such, these findings highlight two critical implications. First, there is a need for a more comprehensive investigation into the short- and long-term effects of the broader conflict on agricultural production, as ongoing instability could exacerbate challenges for farmers, particularly in affected regions. Second, the gap presents an opportunity to strengthen farmer engagement and improve impact measurement within ventures. Future programming should further integrate farmer-focused strategies and help ventures better understand the direct impact of their products and services on farmer livelihoods. This could include more robust mechanisms for tracking income outcomes, market linkages, and product adoption at the farmer level to ensure that the benefits of venture growth are more equitably shared.

## ANNEXES

### Annex I. Detailed Yield and Income Results by Agricultural Products, Gender, and Locations

	Baseline				Endline			
	Vegetables (kg/ha)	Rice (kg/ha)	Cassava (kg/ha)	Poultry (bird)	Vegetables (kg/ha)	Rice (kg/ha)	Cassava (kg/ha)	Poultry (bird)
<b>Overall</b>	10,000	2,500	10,000	20	15,625	2,450	6,000	14
<i>Gender</i>								
Female	6,250	2,550	10,000	19	10,000	2,400	14,545	15
Male	12,000	2,500	10,000	25	20,000	2,500	4,375	10
<i>Provinces</i>								
Banteay Meanchey	10,000	4,000	-	30	16,146	4,000	-	15
Battambang	10,365	3,500	-	15	15,625	3,333	-	20
Oddar Meanchey	82,500	1,500	11,450	20	-	1,550	8,000	10
Preah Vihear	-	2,000	7,500	19	-	2,000	4,375	14
<i>District</i>								
Priority	16,250	3,000	10,725	20	12,500	2,486	9,000	10
Non-priority	10,000	2,500	7,750	86	18,750	2,450	3,750	71

**Table 13. Median agricultural yield per farmer between baseline (N=119) and endline (N=100) by geography and gender**

	Baseline			Endline		
	Number of farmers	Median Net Income (riel)	Average Net Income (riel)	Number of farmers	Median Net Income (riel)	Average Net Income (riel)
<b>Overall</b>	119	5,220,000	9,854,970	100	2,380,000	41,231,368
<i>Gender</i>						
Female	45	3,500,000	7,644,488	43	847,000	85,336,173
Male	74	7,213,500	11,199,182	57	2,800,000	7,959,323
<i>Provinces</i>						
Banteay Meanchey	28	12,275,000	14,556,318	25	5,235,000	11,616,973
Battambang	52	7,775,368	11,635,959	44	1,029,651	4,981,115
Oddar Meanchey	10	2,762,500	4,733,600	8	-525,000	442,979,125
Preah Vihear	29	2,540,000	3,888,228	23	1,379,000	3,030,889
<i>District</i>						
Priority	34	5,857,500	11,573,762	30	4,325,000	127,078,244
Non-priority	85	5,200,000	9,167,453	70	1,090,000	4,439,850

**Table 14. Median agricultural net income per farmer between baseline (N=119) and endline (N=100) by geography and gender**

	BASELINE				ENDLINE			
	Number of farmers	Median area of land used (ha)	Median yield (KG/ha)	Median net income (riel)	Number of farmers	Median area of land used (ha)	Median yield (KG/ha)	Median net income (riel)
<b>Overall</b>	48	0.32	10,000	3,400,000	45	0.24	15,625	1,900,000
<i>Gender</i>								
Female	12	0.60	6,250	3,050,000	18	0.24	10,000	1,200,000
Male	36	0.24	12,000	3,400,000	27	0.24	20,000	2,450,000
<i>Provinces</i>								
Banteay Meanchey	15	0.46	10,000	4,500,000	15	0.16	16,146	2,800,000
Battambang	32	0.32	10,365	2,100,000	30	0.24	15,625	1,400,000
Oddar Meanchey	1	0.001	82,500	-312,500	-	-	-	-
Preah Vihear	0	-	-	-	-	-	-	-
<i>District</i>								
Priority	11	0.24	16,250	6,825,000	11	0.16	12,500	2,000,000
Non-priority	37	0.39	10,000	2,500,000	34	0.25	18,750	1,740,000

**Table 15. Vegetable yield and income by geography and gender**

	Baseline				Endline			
	Number of farmers	Median area of land used (ha)	Median yield (KG/ha)	Median net income (riel)	Number of farmer	Median area of land used (ha)	Median yield (KG/ha)	Median net income (riel)
<b>Overall</b>	99	2.00	2,500	2,000,000	76	2.00	2,450	500,000
<i>Gender</i>								
Female	40	2.00	2,550	1,882,500	38	2.00	2,400	200,000
Male	59	2.00	2,500	2,250,000	38	3.00	2,500	1,200,000
<i>Provinces</i>								
Banteay Meanchey	24	2.00	4,000	3,300,000	18	3.00	4,000	3,154,120
Battambang	37	3.00	3,500	2,850,000	29	2.50	3,333	0
Oddar Meanchey	10	2.00	1,500	600,000	8	2.25	1,550	-200,000
Preah Vihear	28	1.30	2,000	1,800,000	21	1.50	2,000	470,000
<i>District</i>								
Priority	32	2.00	3,000	1,910,000	26	2.50	2,486	800,000
Non-priority	67	3.22	2,500	2,015,000	50	2.96	2,450	315,000

**Table 16. Rice yield and income by geography and gender**

	Baseline				Endline			
	Number of farmers	Median area of land used (ha)	Median yield (KG/ha)	Median net income (riel)	Number of farmers	Median area of land used (ha)	Median yield (KG/ha)	Median net income (riel)
<b>Overall</b>	26	1.35	10,000	1,275,000	17	1.60	6,000	675,950
<i>Gender</i>								
Female	10	1.00	10,000	2,225,000	9	2.00	14,545	675,950
Male	16	2.00	10,000	1,275,000	8	1.30	4,375	430,000
<i>Provinces</i>								
Banteay Meanchey	-	-	-	-	-	-	-	-
Battambang	-	-	-	-	-	-	-	-
Oddar Meanchey	9	2.00	11,450	1,225,000	7	4.00	8,000	-240,000
Preah Vihear	17	1.00	7,500	1,300,000	10	1.00	4,375	887,975
<i>District</i>								
Priority	12	2.00	10,725	1,312,500	8	3.25	9,000	880,000
Non-priority	14	1	7750	1275000	9	1.20	3,750	675,950

**Table 17. Cassava yield and income by geography and gender**

	Baseline			Endline		
	Number of farmers	Median number of birds owned	Median net income (riel)	Number of farmers	Median number of birds owned	Median net income (riel)
<b>Overall</b>	30	20	220,000	35	14	85,000
<i>Gender</i>						
Female	17	19	225,000	20	15	96,000
Male	13	25	200,000	15	10	85,000
<i>Provinces</i>						
Banteay Meanchey	5	30	800,000	5	15	85,000
Battambang	11	15	105,000	12	20	80,000
Oddar Meanchey	3	20	145,000	5	10	300,000
Preah Vihear	11	19	212,500	13	14	160,000
<i>District</i>						
Priority	9	20	200,000	11	10	85,000
Non-priority	21	86	225,000	24	71	119,980

**Table 18. Poultry yield and income by geography and gender**

## Annex 2. Baseline & Endline Business Screening Protocol

#	Collection Date	Data Collector	Venture name	Total revenue in the most recent 12 months	Number of customers in the most recent 12 months	Number of paid staff hired at the moment (not counting seasonal workers)	Number of CRA products/services	Number of farmers in the value chain	# female farmers

**Table 19. Baseline & endline business screening questions**

## Annex 3. Endline Farmer Interview Protocol

1. Farmer's Phone Number:

*This will be ID to match the farmer's data with other information.*

### Screening criteria:

2. Do you currently own 0.5–5 ha of land or planting (rented land does not count)?  
 Yes       No (end the interview)
3. Are you producing either the following: vegetables, rice, cassava, or poultry?  
 Yes       No (end the interview)

### Introduction

*Hi [INTERVIEWEE], My name is [NAME], and we are representatives from Impact Hub Phnom Penh, an organization that supports small businesses across many sectors, including agriculture. We are currently conducting surveys to better understand your climate-resilient and agroecological practices in farming. I have been introduced by [VENTURE'S NAME] to speak with you. May I invite you to be a part of this interview? It'll take about 30 minutes.*

*Let me share briefly with you the context of this survey. Our organization supports ventures and agriculture cooperatives like [VENTURE'S NAME]. We want to understand how the products and services of these ventures impact you as a customer/supplier. We'd like to interview you two times – today and one more time next year, around this same time.*

*We want to include some of your sharings in our reports to our funders and in a public report online. Potentially, we may also want to feature you and a photo of yourself or your farm in a case study. We can exclude your name from this sharing if you wish. Would that be okay with you? We have included information in this consent form. If you agree to these requests, please sign your name here.*

*Do you have any questions before we start?*

4. Data collector's name:       Pheakdey Tous       Soban Tours
5. Date of interview (DD/MM/YYYY): \_\_\_\_\_

### Data collection details

6. Data collection round: KAF Accelerator 2024
7. Data collection phase:       Baseline       Endline
8. Data collector's rights and consent:

I have been informed that my personal data (name and contact number) will be collected, stored, processed, and protected according to the HEKS/EPER Data Processing and Protection Policy published. I understand that I have the right to access, correct, or have my personal data erased. I can withdraw my hereby given consent anytime.

If I have questions or complaints regarding this Consent Declaration, I can contact at any time the following:

- Impact Hub Phnom Penh, the concerned HEKS/EPER partner organization, at [phnompenh@impacthub.net](mailto:phnompenh@impacthub.net) / 015 674 048

- or HEKS/EPER's data protection officer at [dataprotection@heks.ch](mailto:dataprotection@heks.ch) / + 41 44 360 8843.

I agree to the processing of my personal data.

Signature:

**Basic farmers' info**

9. Interviewee's rights and consent:

I have been informed that my personal data (name, gender, age, place of residence, interview answers) will be collected and used to analyze the performance of the Khmer Agriculture for the Future projects under the NURTURES program (also called "HEKS/EPER"). I am aware that my data are stored, processed, and protected according to the HEKS/EPER Data Processing and Protection Policy, which is published at <https://en.heks.ch/vs-data-protection>.

I understand that I have the right to access, correct, or have my personal data erased. I can withdraw my hereby given consent anytime.

If I have questions or complaints regarding this Consent Declaration, I can contact at any time the following:

- Impact Hub Phnom Penh, the concerned HEKS/EPER partner organization, at [phnompenh@impacthub.net](mailto:phnompenh@impacthub.net) / 015 674 048
- or HEKS/EPER's data protection officer at [dataprotection@heks.ch](mailto:dataprotection@heks.ch) / + 41 44 360 8843.

I have read the data processing principles myself, or the principles were explained to me by the interviewer and are clear to me.

I agree to the processing of my personal data.

*Take a screenshot of the call as proof.*

10. Interviewee's name:

11. Interviewee's residential location:

Province:	<input type="checkbox"/> Banteay Meanchey	<input type="checkbox"/> Battambang	<input type="checkbox"/> Oddar Meanchey	<input type="checkbox"/> Preah Vihear
District:	<input type="checkbox"/> Krong Paoy Paet <input type="checkbox"/> Krong Serei Saophoan <input type="checkbox"/> Malai <input type="checkbox"/> Mongkol Borei <input type="checkbox"/> Ou Chrov <input type="checkbox"/> Phnum Srok <input type="checkbox"/> Preah Netr Preah <input type="checkbox"/> Svay Chek <input type="checkbox"/> Thma Puok	<input type="checkbox"/> Aek Phnum <input type="checkbox"/> Banan <input type="checkbox"/> Bavel <input type="checkbox"/> Kamrieng <input type="checkbox"/> Koas Krala <input type="checkbox"/> Krong Bat Dambang <input type="checkbox"/> Moung Ruessei <input type="checkbox"/> Phnom Proek <input type="checkbox"/> Rotonak <input type="checkbox"/> Mondol <input type="checkbox"/> Rukhak Kiri	<input type="checkbox"/> Anlong Veaeng <input type="checkbox"/> Banteay Ampil <input type="checkbox"/> Chong Kal <input type="checkbox"/> Krong Samraong <input type="checkbox"/> Trapeang Prasat	<input type="checkbox"/> Chey Saen <input type="checkbox"/> Chhaeb <input type="checkbox"/> Choam Khsant <input type="checkbox"/> Krong Preah Vihear <input type="checkbox"/> Kuleaen <input type="checkbox"/> Rovieng <input type="checkbox"/> Sangkom Thmei <input type="checkbox"/> Tbaeng Mean Chey

		<input type="checkbox"/> Samlout <input type="checkbox"/> Sampov Lun <input type="checkbox"/> Sangkae <input type="checkbox"/> Thma Koul		
Village:				
Commune:				

12. Interviewee's gender:

Female ស្រី       Male ប្រុស       Non-binary ណាន ថៃណារី

Other ផ្សេងទៀត (specify): \_\_\_\_\_

13. Interviewee's age: \_\_\_\_\_

14. LNOB categories: Do you belong to or identify with any of the following groups? (Select all that apply):

*This information is collected to assess your self-identification with the rightsholder groups we intend to support. Help us aggregate non-identifiable information to improve our services. Sharing of this information is voluntary.*

P1/P2/Poor (if 'Poor,' specify reason: \_\_\_\_\_)

Head of household (meaning: main income earner of the household)

LGBTQIA+/Queer

Youth (18-30 years old)

Indigenous peoples

Ethnic minority

Persons with a disability/disabilities

Internally Displaced Persons (IDPs)

Migration

Other (specify): \_\_\_\_\_

I do not wish to answer

15. Name of Head of household: \_\_\_\_\_

16. Comment from data collector about interviewee's affiliation to discriminated/disadvantaged groups, if any: \_\_\_\_\_

### **Agricultural Yield & Income**

17. How many ha of land do you use for planting? \_\_\_\_\_

18. How many ha of planting land is the land you own? \_\_\_\_\_

19. Have you rented any land for planting? If yes, how many ha? \_\_\_\_\_

**Fill in the table below for the following questions:**

20. In the past 12 months (Nov 2023 - Oct 2024), which did you grow the following (check all that apply)?

- vegetable (specify: \_\_\_\_\_)
- rice
- cassava
- poultry (specify: \_\_\_\_\_)

Examples of vegetables: Cauliflower, Chili, Chinese kale, Cucumber, Eggplant, Green garlic, Ivy gourd, Lettuce, Morning glory, Pumpkin, Spinach, Squash/Winter squash, Yard long bean

21. In the past 12 months (Nov 2023 - Oct 2024):

Crop type	KG produced per hectare	Amount of ha this crop is planted on	KG total produced (auto-calculated)	KG sold	Price per KG sold	Estimated expenses (seeds, fertilizers, labor)	Gross Income (Riels) (auto-calculated)	Net Income (Riels) (auto-calculated)

Type of poultry (birds)	Number of birds owned	Number of Birds Sold	Poultry Selling price (ensure to use the same unit as last 2 questions)	Estimated expenses (feed, labor) (in riels)	Number of Eggs produced	Number of Eggs Sold	Egg Selling Price (ensure to use the same unit as last 2 questions)

**Experiences using CRA products**

22. The venture that the interviewee works with:
- សហគមន៍កសិកម្មគាសិសាមគ្គី (Tasey Samaki Agricultural Cooperative)
  - សហភាពសហគមន៍កសិកម្មបាត់ដំបង (Battambang Union of Agricultural Cooperatives)

- សហគមន៍កសិកម្មភូមិខ្ញុំ (Phum Khtum Agricultural Cooperative)
- សហភាពសហគមន៍កសិកម្មព្រះវិហារ (Preah Vihear Meanchey Union of Agricultural Cooperative)
- សហគមន៍កសិកម្មបូរីអភិវឌ្ឍន៍ (Borey Akpiwat Agricultural Cooperative)
- ខេមបូឌាន ស្ថេរនជាតិ ឌីវឡូបម៉ិន & ស៊ីបផ្លាយ (Cambodian Standard Development & Supply Co., Ltd)
- រោងជាងផលិតឧបករណ៍កសិកម្មស្យូតែវ (Larano)
- ខេមអេប្រ៊ីឡាឡា (Lala Garden)

23. Interviewee's role in the venture's value chain:

customer       supplier       receive training       other  
 (specify):\_\_\_\_\_

24. Have you ever heard about 'Climate Resilience Agriculture'?

Yes       No/Unsure

25. If yes, who told you about it?

26. And when?

27. What products/services are you using from ventures/AC? Tell us more about it

28. How did you learn about this product/service?

29. What made you decide to use this product/service?

30. Where have you applied this product/service (s) on your farm?

31. How satisfied are you with the products/services you've used?

32. What are the most significant changes you experienced after using them (soil quality? yield? income?)

33. What challenges did you encounter while adopting these products?

34. Have these challenges been resolved, and if yes, how?

35. Is there anyone else offering this kind of product/service to you other than the venture/AC?

36. How do you compare the product offered by the venture versus by other people?

*If there is a climate-resilient agriculture component to the product, ask farmers to compare CRA vs non-CRA product (e.g. organic vs. chemical fertilizer)*

37. How likely would you recommend this product to other farmers? (from 0-10)

38. How likely would you be to work with this venture again? (from 0 unlike to 10 very likely)

**Endline Added: Impact from the Thai-Cambodian border conflict (goal: understand conflict impact, level of damage, current situation)**

39. Were you living near/in the conflict zone when the conflict happened?

Yes       No, not too close

40. How did the conflict impact you personally?

41. How did the conflict impact your farming?

*Ask details about the damage and loss. For example: if farmers have to leave crops unattended, what crops were there and how many KG? If farmers' house was damaged, what was the level of destruction?*

42. How is the situation now for you? Has anything improved/stay the same/worsen?

43. Are you receiving any support from anyone/organization? How about [THE VENTURE]

44. What is your plan to manage the damage/loss?

Thank you. Data collection is now complete. We will call you again in a year to ask if anything has changed.