FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

CATI SURVEY REPORT: FINAL PERFORMANCE EVALUATION OF THE FEED THE FUTURE ETHIOPIAN VALUE CHAIN ACTIVITY

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ACRONYMS

Acronym	Description
CATI	Computer-Assisted Telephone Interview
COVID-19	Coronavirus Disease 2019
IGA	Income-Generating Activity
IPM	Integrated Pest Management
LOA	Life of Activity
ME&A	ME&A, Inc.
MLA	Meat and Live Animals
PHH	Post-Harvest Handling
PICS	Purdue Improved Crop Storage Bags
SNNPR	Southern Nations, Nationalities, and People's Region
THM	Transformative Household Methodology
USAID	United States Agency for International Development
RFS	Bureau for Resilience and Food Security
USAID	United States Agency for International Development
VC	Value Chain
VCA	USAID/Ethiopia Value Chain Activity

1. INTRODUCTION/BACKGROUND

This document presents a summary report of the results of the midterm and endline computer-assisted telephone interview (CATI) surveys conducted as part of the midterm and endline performance evaluations of the USAID/Ethiopia Value Chain Activity (VCA) conducted by ME&A Inc. (ME&A) under the USAID Bureau for Resilience and Food Security (RFS) Program Evaluation for Effectiveness and Learning (PEEL) Project. The report is intended as a stand-alone report to supplement the final VCA evaluation report submitted to USAID/Ethipopia and RFS. The purpose of this stand-alone report is to present a comprehensive summary of the major findings from the the two CATI surveys in a format that allows USAID/Ethiopia and RFS to understand their relevance to VCA's value chain support interventions and USAID agricultural support programming.

Also motivating this report is that, for reasons of space and narrative flow, the final evaluation report was not able to provide a comphrehensive presentation of CATI survey results meaning that a number of potentially salient findings were necessarily edited out of the report. Further, while ME&A's CATI sub-contractor GeoPoll did provide comprehensive PowerPoint slide decks summarizing each of the two CATI survey results, these were long, dense presentations with results presented out of context in terms of their relevance to VCA and USAID. This report thus seeks to fill in the gaps related to comprehensiveness and context/relevance found in these other two reporting formats.

The mid-term and endline CATI surveys were admininstered to samples of approximately 500 beneficiary small farmers each drawn from VCA's client farmer database. The midterm CATI survey was originally intended as one of several data collection methods for the mid-term VCA performance evaluation scheduled to begin March 2020. The Mission, however, cancelled the mid-term evaluation due to concerns about the emerging coronavirus disease 2019 (COVID-19) pandemic; however, it elected to proceed with the CATI survey, as it is done entirely by mobile phone and does not require face-to-face interactions. In lieu of the midterm performance evaluation, the Mission opted to substitute a final performance evaluation, which took place during the first half of 2021 and which also included a CATI survey, albeit a different version and administered to a different sample of beneficiary farmers, again drawn from VCA's client farmer database, than the midterm CATI survey.

2. METHODOLOGY/SAMPLING

GeoPoll conducted real-time mobile survey interviews via voice, text, and mobile app methods with a sample of 500 farmers for the midterm CATI survey and 513 farmers for the endline CATI survey who had benefited from Activity interventions in the six targeted value chains (VCs) in each of the four implementation regions. The sampling frame for both midterm and endline CATI surveys was the comprehensive dataset of beneficiary farmers in each of the six priority VCs maintained by Fintrac. To create the survey samples, GeoPoll randomly selected names from the VCA beneficiary datasets for whom a mobile phone was listed stratified by region, gender, and VC with the aim to achieve an approximately equal representation across regions, a 50-50 gender split, and a sample size for each VC roughly proportionate to its representation in the overall beneficiary dataset.

Table 1 shows the demographic breakdown of the midterm and endline CATI survey samples. The midterm sample was evenly split between male and female, but the endline sample was disproportionately male at 61 percent male and 39 percent female.[1] The sample size was similar across the regions in both surveys, although with relatively fewer respondents from Tigray. More than one-third of the midterm

[1] By way of context, VCA's life of activity target (LOA) for women's participation in the Activity is 30 percent. As of March 31, 2021, women constituted 28 percent of VCA's client base, just below its 30 percent target. Thus, the share of women respondents in the endline CATI survey exceeded both the share of women beneficiaries at the time of the survey and the LOA target for women's participation.

respondents are in the maize (36 percent), dairy (35 percent), and meat and live animals (MLA) (35 percent) VCs, with fewer respondents in the poultry (18 percent), coffee (13 percent), and chickpea (7 percent) VCs. The endline sample is split evenly among VCs, although with relatively more respondents in the maize VC. The samples for both surveys included more non-youth (30 years old or above) respondents than youth (15-29 years old) farmers.

All midterm and endline survey results were tested to determine whether statistically significant difference existed in response patterns existed within key disaggregation categories (i.e., gender, region, VC, and age (youth vs. non-youth) using either a Pearson's chi-square test[2] or an ordinary least squares regression.[3] The findings below report those cases in which the chi-square or regression tests found a statistically significant differences within the relevant disaggregation category at one of three levels of statistical significance: $p<0.05$, $p<0.01$, or $p<0.001$.[4] If no statistically significant result is reported for a particular result and disaggregation category below, the reader may conclude that no statistically significant difference exists in the data.[5]

Table 1: CATI Survey Respondents by Gender, Region, VC, and Age

Midterm CATI Survey (N=500)		Endline CATI Survey (N=513)	
Sex	%	**Sex**	%
Male	50%	Male	61%
Female	50%	Female	39%
Region	%	**Region**	%
Amhara	25%	Amhara	27%
Oromia	25%	Oromia	28%
SNNPR	25%	SNNPR	25%
Tigray	25%	Tigray	21%
VC	%	**VC**	%
Maize	36%	Maize	23%
Chickpea	7%	Chickpea	17%
Coffee	13%	Coffee	19%
Dairy	35%	Dairy	18%

[2] Chi square tests are used for categorical variables to determine whether there exists a significant difference in an outcome (dependent variable) (*e.g.*, types of support received) among categories of an independent variable (*e.g.*, gender). It does this by comparing observed results (or frequency counts) with expected results (frequencies) for each outcome (*e.g.*, yes/no) and each group (*e.g.*, male/female). Chi square tests the null hypothesis that there is no relationship between the outcome variable of interest and the relevant independent variable. Using the example above to illustrate (*e.g.*, support received as outcome variable and gender as independent variable), a statistically significant chi square test is interpreted to mean that there is a statistically significant difference in the types of support received by men and women.

[3] Ordinary least squares regression is a process in which a straight line is used to estimate the relationship between two interval/ratio level variables. The "best-fitting line" is the line that minimizes the sum of the squared errors (hence the inclusion of "least squares" in the name).

[4] The p-value, or probability value, is a number describing how likely it is that the data would have occurred by random chance (*i.e.*, that the null hypothesis of no relationship is true). The smaller the p-value, the stronger the evidence that one should reject the null hypothesis and conclude a significant relationship exists. In the above context, p-values of 0.05, 0.01, and 0.001 indicate a 5 percent, 1 percent, and 0.1 percent probability that the observed relationship would have occurred by chance.

[5] When reporting statistically significant differences between disaggregation groups, the report only tells whether the difference is statistically significant and at which significance level; it does not provide the actual values for each disaggregation group. This reporting format, which adopts the format used for ME&A's population-based survey reports to RFS, was selected so as not to overwhelm the reader with numbers and thus avoid bogging down the narrative flow. In other words, what is important is that a significant difference exists and less so the absolute size of this difference. If USAID prefers, these numbers can be added into subsequent versions of this report.

Midterm CATI Survey (N=500)		Endline CATI Survey (N=513)	
Poultry	18%	Poultry	18%
MLA	35%	MLA	20%
Age Group	%	**Age Group**	%
29 years old and below (youth)	28%	29 years old and below (youth)	28%
30 years old and above	72%	30 years old and above	72%

3. FINDINGS/CONCLUSIONS

In this section, we present findings and conclusions from both the midterm and endline CATI surveys, categorized under the 17 key themes listed below, which align with specific outcome objectives targeted by VCA intercentions:

1. Activity Implementation
2. Implementation of VCA Training
3. Access to Inputs
4. Access to Finance
5. Yield/Productivity
6. Marketing/Commercial Linkages
7. Sales/Income
8. Use of On-Farm Production
9. Improved Practices
10. Increased Investments
11. Post-Harvest
12. Gender and Youth
13. Nutrition
14. Income Diversification
15. Cooperative Support
16. COVID-19
17. Political/Civil Unrest

Note that the endline CATI survey repeated some questions from the midterm CATI survey (*i.e.*, adoption of improved production and postharvest practices, on-farm yields and income, access to finance) and also asked new questions to measure how Activity interventions had affected household income, nutritional status, livelihood diversification options, participation in non-farming income-generating activities (IGAs), female and youth empowerment, and other areas of interest to Fintrac and USAID/Ethiopia. Seven of the 17 themes are applicable to both surveys.

Note further that the conclusions found below are based solely on the perceptions of the smallholder beneficiary farmers who are the primary beneficiaries of VCA support, as reflected in the results of the CATI surveys. As such, they have not been verified using other means, at least for the purposes of this report.

3.1 ACTIVITY IMPLEMENTATION

3.1.1 Endline

Most Useful Types of VCA Support Provided

- Of the types of support received from VCA, more than half of respondents reported that training events were the most useful, less than one-fifth found demonstrations to be the most useful, while all other types of support were cited as the most useful much less frequently, rarely, or almost not at all (Table 2).

Significant Differences

- Men were more likely than women to find demonstrations and experience-sharing visits to be the most useful type of support provided ($p<0.01$).
- Women were more likely than men to find material support to be the most useful ($p<0.01$).
- Respondents in Oromia, Amhara, and SNNPR were more likely than respondents in Tigray to find demonstrations to be the most useful type of support provided ($p<0.001$).
- Maize farmers were more likely than other VCs to find demonstrations to be the most useful type of support provided ($p<0.01$).
- Coffee farmers were more likely than other VCs to find demonstrations, extension services, and material support to be the most useful types of support provided ($p<0.01$).

Table 2: Most Useful VCA Support Provided (Endline)

Type of Support	Most Useful	Second Most Useful	Third Most Useful	Total
Training events	53.8%	15.3%	6.7%	75.8%
Demonstrations	19.1%	13.4%	5.3%	37.8%
Material support	7.4%	9.3%	2.5%	19.2%
Experience-sharing events	6.6%	8.0%	2.8%	17.4%
Extension services	3.5%	2.3%	3.9%	9.7%
Field days	3.3%	3.5%	3.9%	10.7%
Trade fairs	0.6%	0.8%	0.4%	1.8%
Radio commercials	0.6%	0.0%	0.7%	1.3%
Telephone-based technical assistance (TA)	0.4%	1.6%	0.7%	2.7%
Radio talk shows	0.0%	0.4%	0.0%	0.4%
Other	0.4%	4.1%	1.4%	5.9%
None	4.3%	34.2%	57.7%	96.2%
Don't know	0%	8.0%	14.1%	22.1%

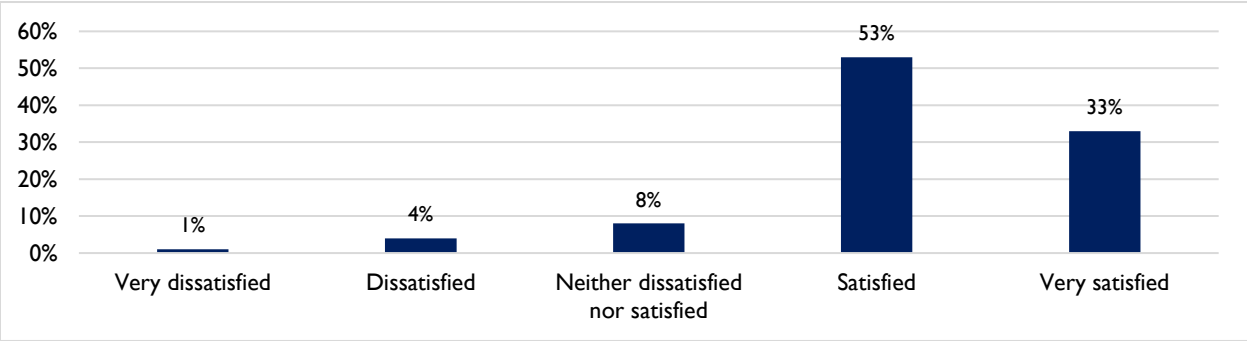
Satisfaction Level

- More than 80 percent of endline respondents were satisfied or very satisfied with the overall quality of VCA's support and the knowledge and expertise of persons providing that support (Figure 1).
- Respondents were similarly satisfied with the knowledge and expertise of persons providing support and the relevance, usefulness, and effectiveness of that support.

Significant Differences

- Women were more satisfied than men with the quality of the support provided ($p<0.001$).
- Respondents in Oromia were less satisfied with the quality of the support provided than respondents in Amhara, SNNPR, and Tigray ($p<0.001$).

Figure 1: Overall Quality of Support (Endline)



3.1.2 Conclusions

- Training events are the most useful types of support provided by VCA to its beneficiary farmers, followed at a distance by demonstrations and at an even greater distance by material support and experience-sharing events. No other type of support was cited by a significant number of beneficiary farmers as among the most useful, second more useful, or third most useful type of VCA support.
- VCA's smallholder farmer beneficiaries are strongly satisfied with the quality of support provided by the Activity as well as with the quality of the persons providing the support and the relevance, usefulness, and effectiveness of that support.

3.2 IMPLEMENTATION OF VCA TRAINING: FINDINGS

3.2.1 Endline

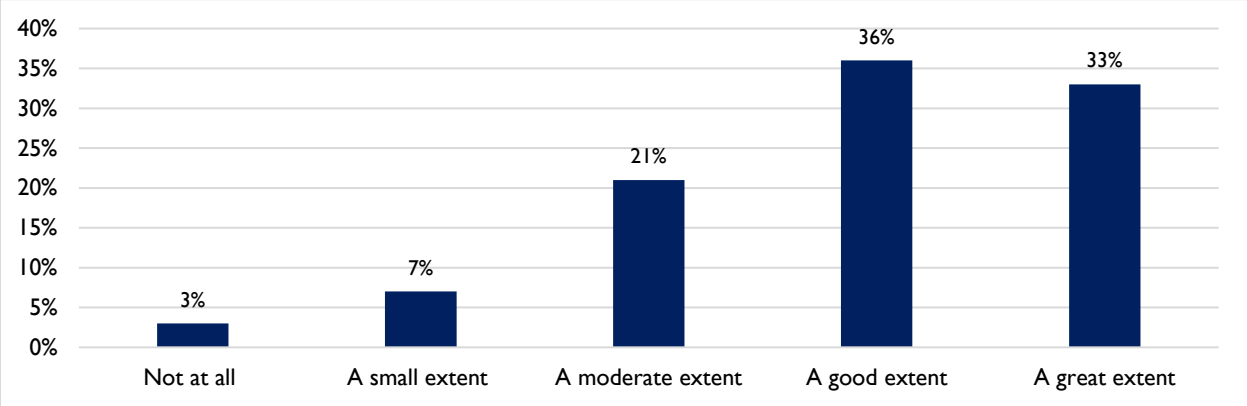
Implementation Extent

- Two-thirds of endline respondents implemented what they learned from the training provided by VCA to either a good or great extent (Figure 2).

Significant Differences

- Respondents in Oromia and SNNPR implemented what they learned from the training to a greater extent than respondents in Amhara and Tigray ($p<0.001$).

Figure 2: Implementation of What Farmers Learned (Endline)



Effect of Implementing Trainings on Agricultural Production Outcomes

- A positive and statistically significant relationship exists between the extent to which a respondent implemented what s/he learned from the VCA training and a variety of agriculture, dairy, and livestock production outcomes (Table 3).
- More than half of the dairy-, poultry-, maize-, and chickpea-specific outcomes covered by the survey exhibited this relationship indicating that adoption of practices, technologies, *etc.* covered by VCA training is, on average, associated with improved agricultural production outcomes.
- For example, among dairy farmers, increased adoption of what they learned from the VCA trainings is associated with increased access to vet services, artificial insemination, production inputs, machinery and equipment, and finance; improved animal health; increased milk yields; improved commercial linkages to buyers; and increased total sales and sales to collection centers and cooperatives or associations.

Table 3: Implementation Significance Level on VC Outcomes by VC (Endline)

Background Characteristic	VC					
	Dairy	MLA	Poultry Pullets | Eggs	Maize	Chickpea	Coffee
Outcomes						
Access to vet services	<0.01	n/a	<0.001	n/a	n/a	n/a
Access to artificial insemination	<0.01	n/a	n/a	n/a	n/a	n/a
Animal health	<0.05	<0.001	<0.05	n/a	n/a	n/a
Animal weight	n/a	<0.001	n/a	n/a	n/a	n/a
Access to quality feed	<0.01	n/a	<0.05	n/a	n/a	n/a
Total land under cultivation	n/a	n/a	n/a	<0.05	<0.001	n/a
Number of trees	n/a	n/a	n/a	n/a	n/a	n/a
Total production	n/a	n/a	n/a	<0.05	<0.01	<0.01
Yields	<0.01	n/a	n/a	<0.05	<0.001	<0.001
Post-harvest losses	n/a	n/a	n/a	<0.05	<0.001	<0.05
Quality of product sold	n/a	n/a	<0.01 | <0.001	<0.05	n/a	n/a
Commercial linkages to buyers	<0.001	n/a	n/a	<0.001	<0.001	<0.05
Access to hybrid seeds	n/a	n/a	n/a	<0.05	<0.01	n/a
Seed production	n/a	n/a	n/a		<0.01	n/a
Access to spray services	n/a	n/a	n/a	<0.05	<0.05	n/a
Access to Purdue Improved Crop Storage (PICS) bags	n/a	n/a	n/a	<0.05	<0.05	n/a
Access to production inputs	<0.01	n/a	<0.01	n/a	<0.001	n/a
Access to machinery & equipment	<0.05	n/a	<0.05	n/a	<0.01	n/a
Stocking capacity	n/a	n/a	0.007	n/a	n/a	n/a
Price per unit sold	<0.01	<0.05	<0.001 | <0.01	<0.05	<0.05	<0.05
Volume of sales	n/a	n/a	<0.01 | <0.001	<0.05	<0.05	<0.001
Number of sales	n/a	n/a	n/a	n/a	n/a	n/a
Value of sales	<0.01	n/a	<0.01 | <0.001	n/a	n/a	<0.001
Sales to collection centers	<0.001	n/a	n/a	n/a	n/a	n/a
Sales to cooperatives/ associations	<0.05	n/a	n/a	n/a	n/a	n/a
Income from sales	n/a	n/a	<0.01 | <0.001	n/a	<0.05	<0.01
Access to finance	<0.01	n/a	<0.05	<0.001	<0.05	n/a
Record keeping	n/a	n/a	n/a	n/a	n/a	n/a

3.2.2 Conclusions

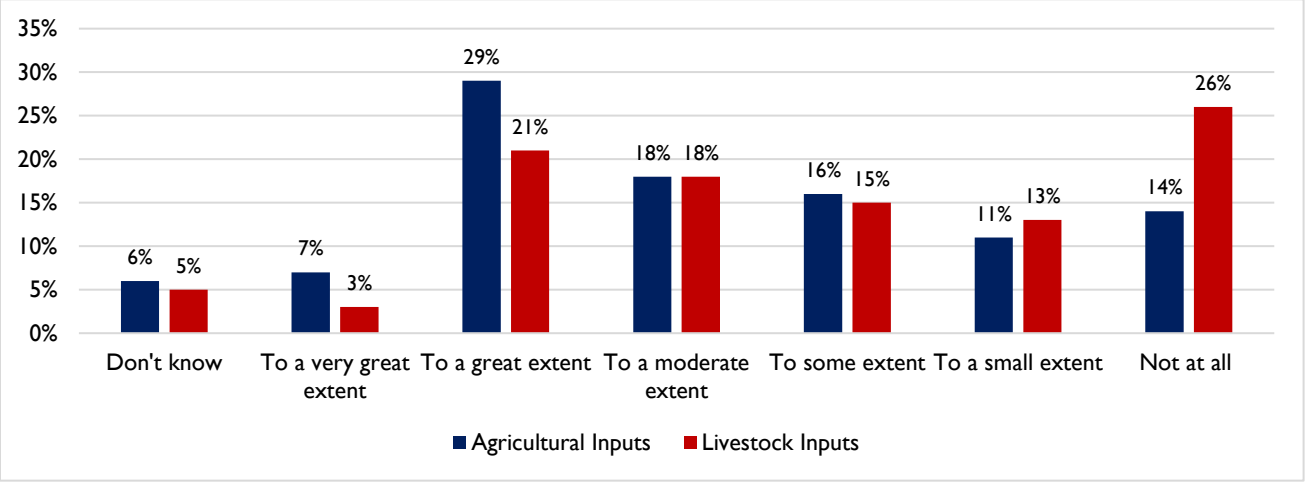
- VCA beneficiary farmers have, for the most part, implemented what they have learned from VCA support activities.
- Implementing what beneficiary farmers have learned from VCA support activities is strongly and positively associated with improved agricultural, dairy, and livestock production outcomes, including access to production inputs and services, sales, prices, and incomes.

3.3 ACCESS TO INPUTS

3.3.1 Midterm

- Thirty-six percent of midterm respondents who raised crops reported that their access to agricultural inputs had improved by a great or very great extent as a direct result of VCA support. Also counting those who said it improved by a moderate extent, the percentage increases to 54 percent. However, 14 percent of midterm respondents said that VCA's activities did not improve access to agricultural inputs at all as a direct result of VCA support (Figure 3).
- Twenty-four percent of midterm respondents who raised livestock reported that their access to livestock inputs had increased by a great or very great extent as a direct result of VCA support. Counting those who said it improved by a moderate extent, the percentage increases to 42 percent. However, 26 percent of midterm respondents said that VCA's activities did not improve access to livestock inputs at all (Figure 3). Fewer than 20 percent of respondents said that credit-based supply contracts, out-grower schemes, financial support, and VCA grants made accessing production input supplies easier.

Figure 3: Extent of Improvement of Access to Agricultural and Livestock Inputs Attributed to VCA (Midterm)



Significant Differences

- Respondents in Amhara found it easier to access livestock inputs, out-grower schemes, and financial support than respondents in Tigray (0<0.01).
- Respondents in Oromia and Tigray were less likely to say that VCA support made accessing agricultural inputs easier than respondents in Amhara and SNNPR (p<0.01).

3.3.2 Endline

- Depending on the VC in which they worked, a majority of endline respondents reported that access to the following inputs improved to a good or great extent as a direct result of VCA support: veterinary services, artificial insemination, quality feed, other production inputs, machinery and equipment, improved technologies, improved/certified/hybrid seeds, use of commercial spray services, and use of hermetic storage technology or PICS bags.

Significant Differences

- In the maize VC, access to inputs ($p<0.001$), hermetic storage technology (PICS bags) ($p<0.001$), production inputs ($p<0.05$), and machinery and equipment ($p<0.001$) improved more for respondents in Oromia than for respondents in SNNPR.
- In the chickpea VC, access to inputs ($p<0.05$), seed production ($p<0.05$), spray services ($p<0.05$), PICS bags ($p<0.05$), and general production inputs ($p<0.05$) improved more for respondents in Oromia than for respondents in Amhara ($p<0.05$).
- In the coffee VC, access to production inputs ($p<0.01$) and machinery and equipment ($p<0.01$) improved more for respondents in Oromia than for respondents in SNNPR ($p<0.01$).

3.3.3 Conclusions

- Overall, around one-quarter to one-half of VCA beneficiary farmers have materially improved their access to agricultural and livestock production inputs, depending on the VC and input in question.
- This conclusion is indicative both of meaningful improvement in accessing inputs and that large numbers of beneficiary farmers still lack access vital production inputs.

3.4 ACCESS TO FINANCE

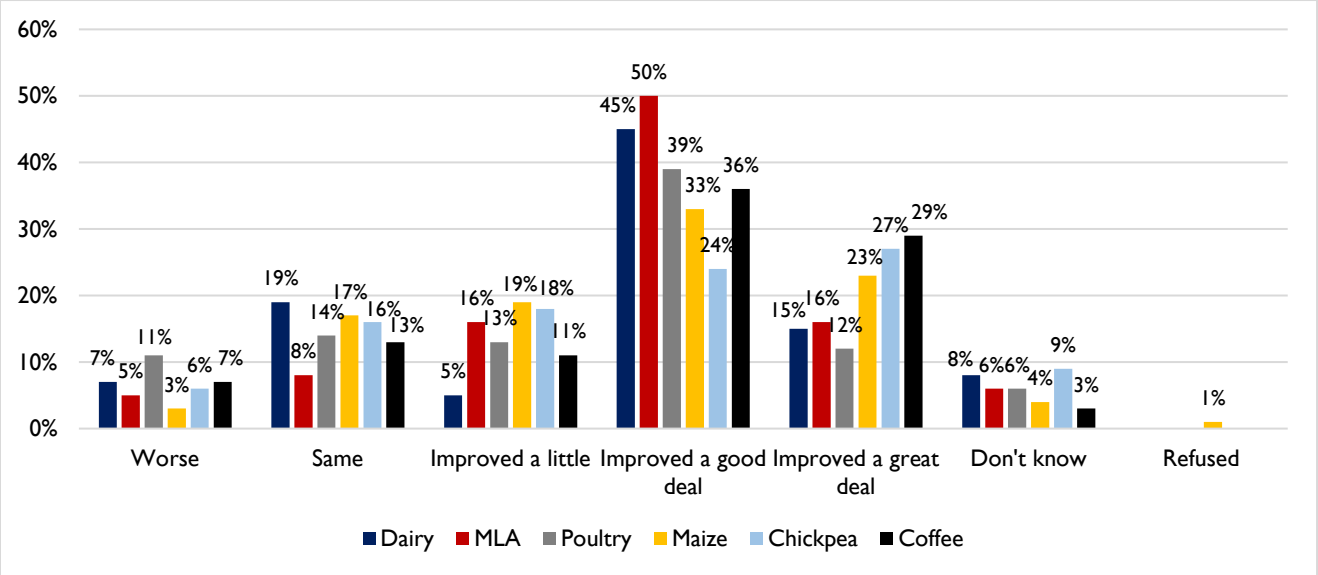
3.4.1 Endline

- More than one-half of the endline respondents said that their access to finance increased by either a good or great extent as a direct result of VCA support (Figure 4). This includes 60 percent of dairy farmers, 60 percent of MLA producers, 51 percent of poultry producers, 56 percent of maize farmers, 51 percent of chickpea farmers, and 65 percent of coffee farmers.
- Slightly more than one-half of dairy, MLA, and poultry respondents also reported that VCA support had improved their record keeping by a good or great extent as a direct result of VCA support.

Significant Differences

- In the chickpea VC, access to finance improved more among men than among women ($p<0.05$).
- In the MLA VC, access to finance improved more among men than among women ($p<0.05$).
- In the chickpea VC, access finance improved more for respondents in Oromia than for respondents in Amhara ($p<0.001$).
- In the coffee VC, access to finance improved more for respondents in Oromia than for respondents in SNNPR ($p<0.01$).

Figure 4: Extent of Improvement of Access to Finance Across VCs Attributed to VCA (Endline)



3.4.2 Conclusions

- VCA beneficiary farmers have on average increased their access to finance after receiving VCA support.
- Where VCA has provided support in book or record keeping (considered a pre-requisite to qualifying for a loan), that support has been effective in improving the beneficiaries' book/record keeping capacity.

3.5 YIELDS

3.5.1 Midterm

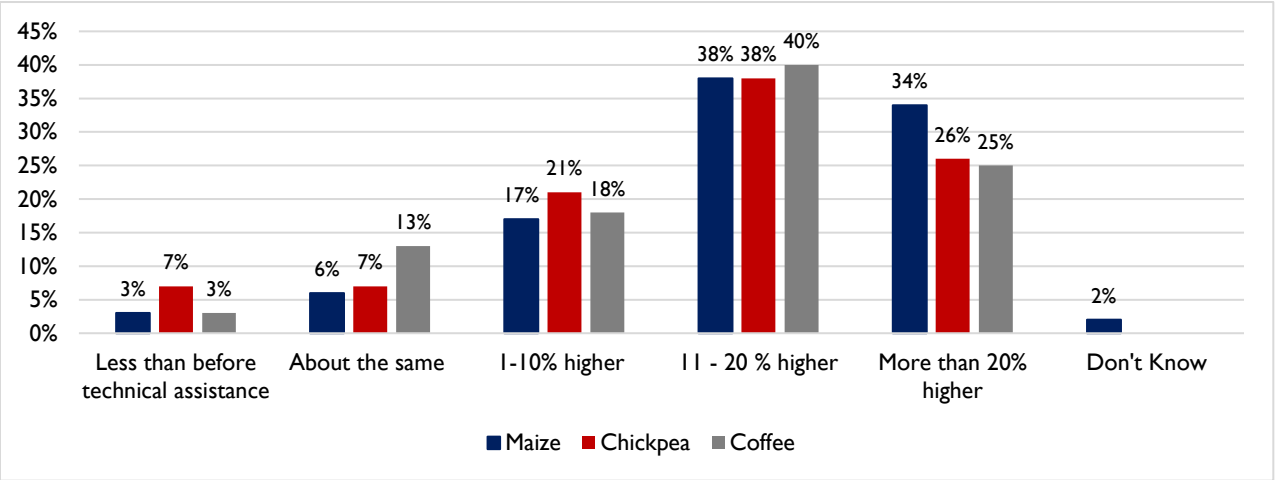
Maize, Chickpea, and Coffee

- More than 80 percent of midterm respondents noted an improvement in their maize, chickpea, and coffee yields after receiving VCA support, and more than half noted an increase of at least 10 percent or higher after VCA support (Figure 5).

Significant Differences

- Respondents in Amhara and SNNPR were more likely to increase their maize yields by greater than 10 percent than were farmers in Oromia ($p<0.001$).

Figure 5: Maize, Chickpea, and Coffee Yield Improvement (Midterm)



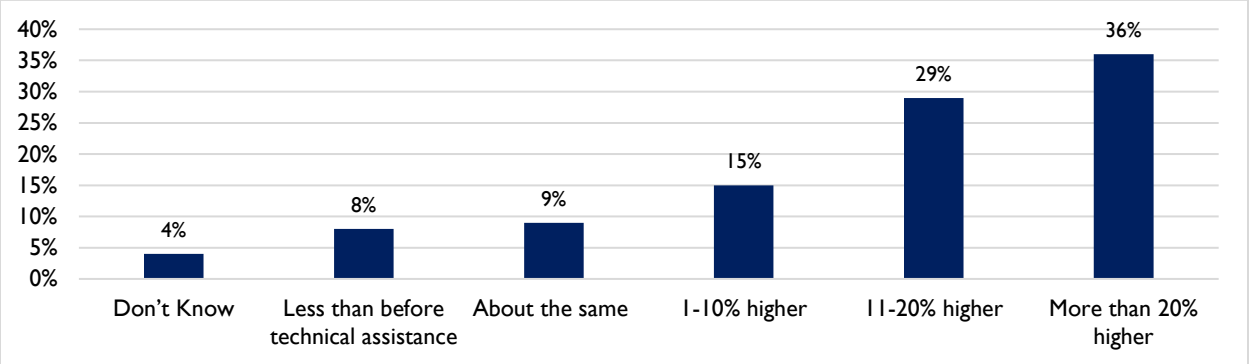
Dairy

- Seventy percent of midterm respondents noted an improvement in their dairy yields/productivity after receiving VCA support, with more than half noting a 10 percent or higher increase after VCA support (Figure 6).

Significant Differences

- Women were more likely than men to note an increase in their dairy yields after VCA support ($p<0.01$).
- Respondents in Amhara, Oromia, and SNNPR were more likely to see an increase in their dairy yields after VCA support than respondents in Tigray ($p<0.001$).

Figure 6: Dairy Animals Yield Improvements (Midterm)



Cattle

- Eighty-four percent of midterm respondents who raised cattle saw an increase in their cattle yields after receiving VCA support; more than half noted an increase of at least 10 percent after VCA support (Figure 7).

Significant Differences

- Respondents in Amhara and SNNPR were more likely to see an increase in cattle yields after receiving VCA support, whereas farmers in Tigray were less likely ($p<0.001$).

Sheep

- Nearly three-fourths of midterm respondents who raised sheep saw an increase in their sheep yields after receiving VCA support. This was distributed equally among the different ranges of improvement: 1-10 percent, 10-20 percent, and greater than 20 percent (Figure 7).

Significant Differences

- Men were more likely than women to report an improvement in sheep yields after receiving VCA support ($p<0.05$).

Poultry

- Approximately two-thirds of midterm respondents who raised poultry reported higher poultry yields after receiving VCA support.
- At the same time, around one-quarter of the same set of respondents reported lower poultry yields than before receiving VCA technical support (Figure 7).

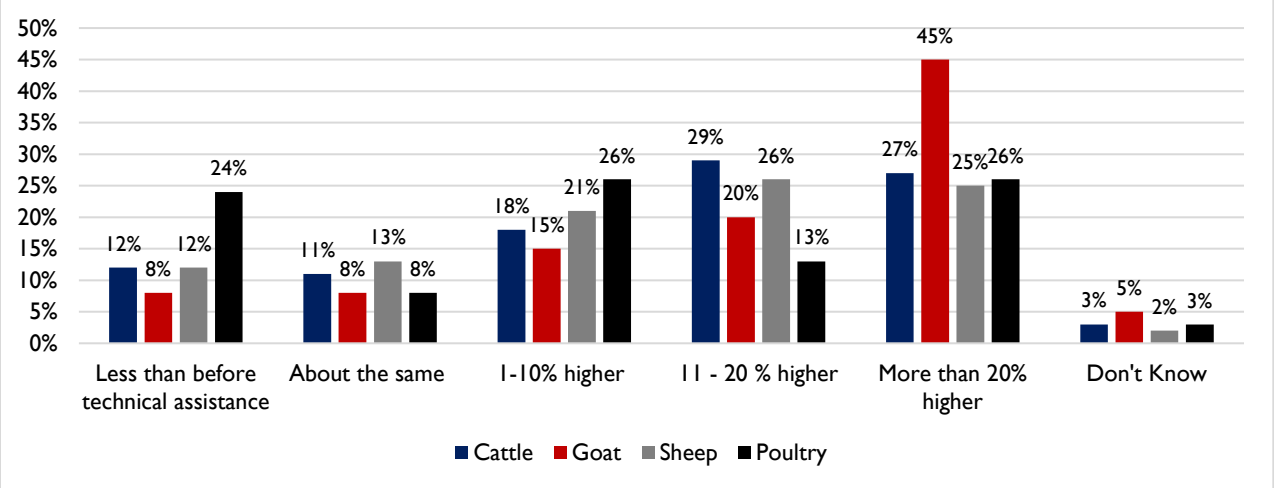
Significant Differences

- Respondents in Amhara, Oromia, and SNNPR were more likely to report an increase in poultry yields after receiving VCA support than respondents in Tigray ($p<0.001$).

Goats

- Eighty percent of midterm respondents who raised goats saw an increase in their goat yields after receiving VCA support. Nearly half of these noted 20 percent or higher yields following VCA support (Figure 7).

Figure 7: Cattle, Goat, Sheep, and Poultry Yield Improvements (Midterm)



Access to and Adoption of Improved Livestock Production Practices, Infrastructure, and Equipment

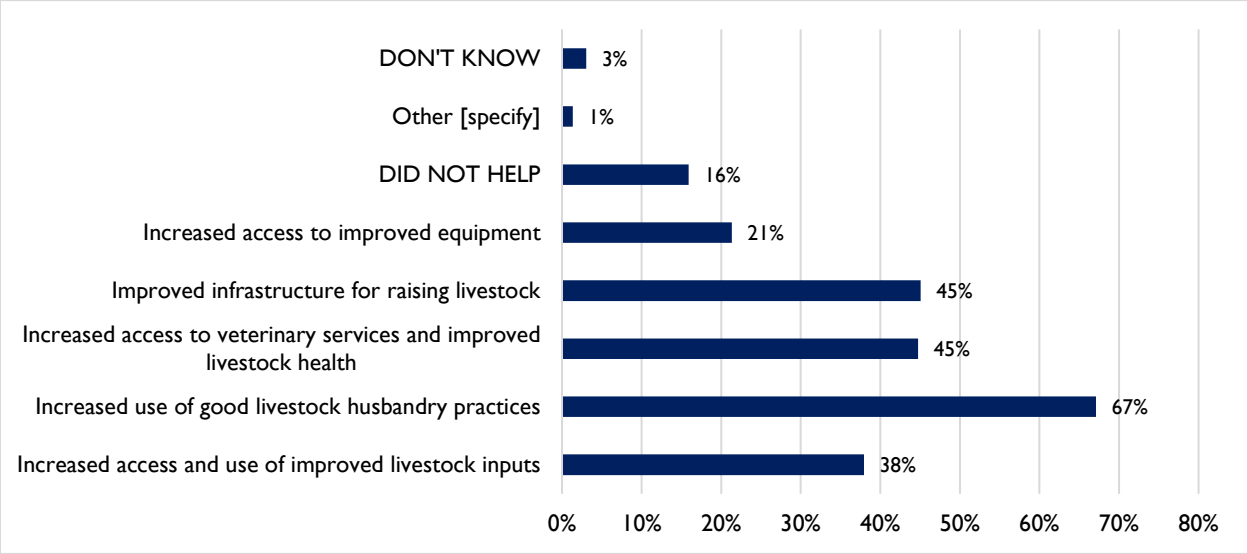
- Contributing to the increased livestock yields reported by midterm CATI respondents, nearly two-thirds of midterm respondents who raised livestock said that VCA support helped improve livestock operations by increasing their use of good livestock husbandry practices (Figure 8).
- In addition, around two-fifths of midterm respondents who raised livestock also reported that VCA's support helped them improve infrastructure for raising livestock, increased their access to veterinary services (and improved livestock health), and increased their access/use of livestock inputs.

- Another one-fifth of the same midterm respondents reported that VCA support helped increase their access to improved equipment for livestock raising.

Significant Differences

- Non-youth respondents were more likely to report increased use of livestock husbandry practices than youth farmers ($p<0.001$).
- Similarly, non-youth respondents were more likely than youth respondents to report that VCA support increased their access to vet services/livestock health services ($p<0.05$).
- Respondents in Amhara and Tigray were more likely to report that VCA support increased their access/use of improved livestock inputs, good husbandry practices, vet services, infrastructure for raising livestock, and improved equipment than respondents in Oromia and SNNPR ($p<0.01$).

Figure 8: Improved Productivity of Livestock Operations Attributed to VCA Support (Midterm)

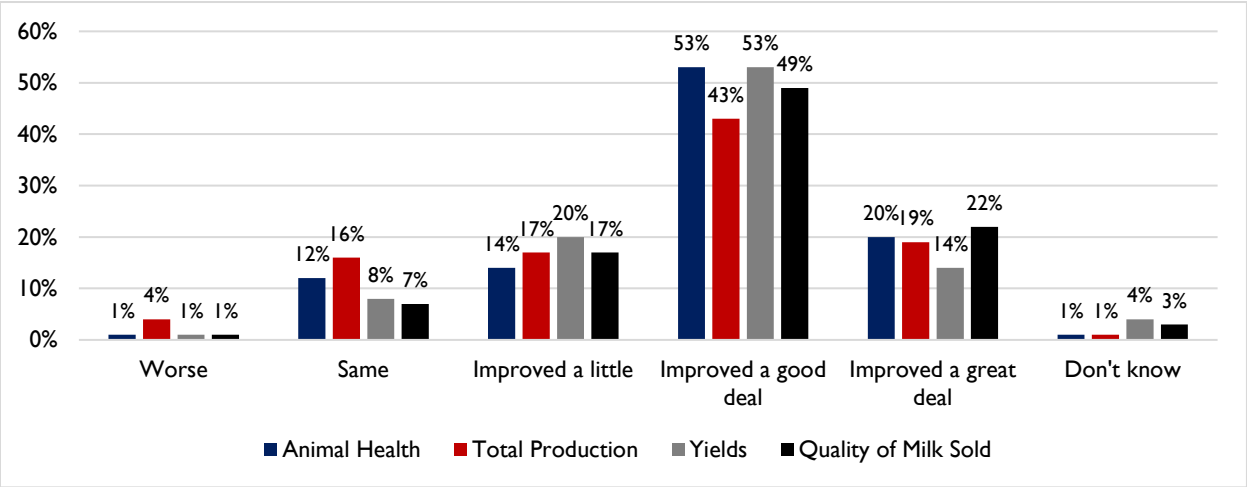


3.5.2 Endline

Dairy

- A majority of endline dairy respondents reported a good or great increase in animal health (73 percent), total production (62 percent), yields (67 percent), and quality of milk sold (71 percent) after receiving VCA support (Figure 9).
- Of those reporting good or great improvements, two-thirds attributed the improvement to VCA support.

Figure 9: Dairy Yield Improvements (Endline)



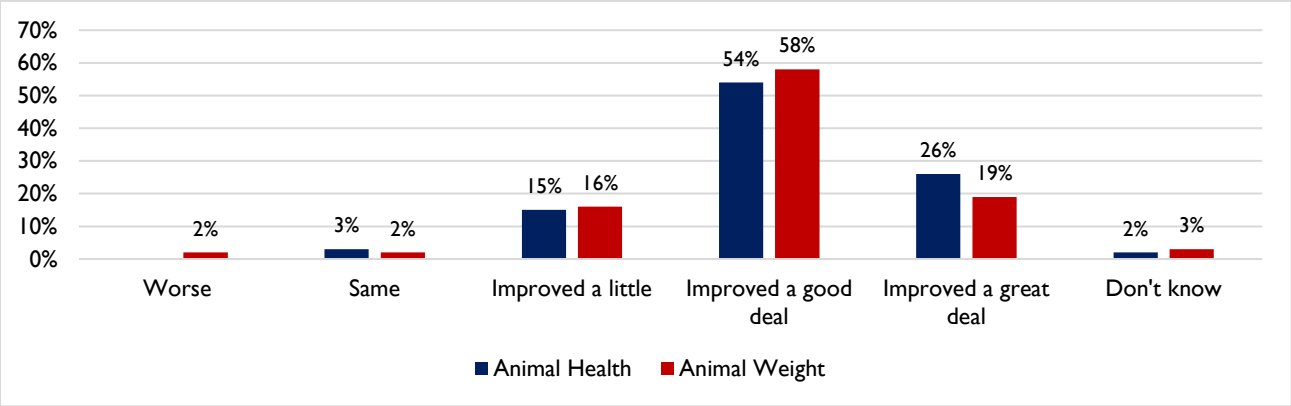
MLA

- A large majority of endline MLA respondents reported an increase in animal health (80 percent) and animal weight (77 percent) after receiving VCA support (Figure 10).
- Of those reporting good or great improvements, approximately four-fifths attributed the improvements to VCA support.

Significant Differences

- Men were more likely than women to report that animal weight had improved after VCA support ($p<0.05$).

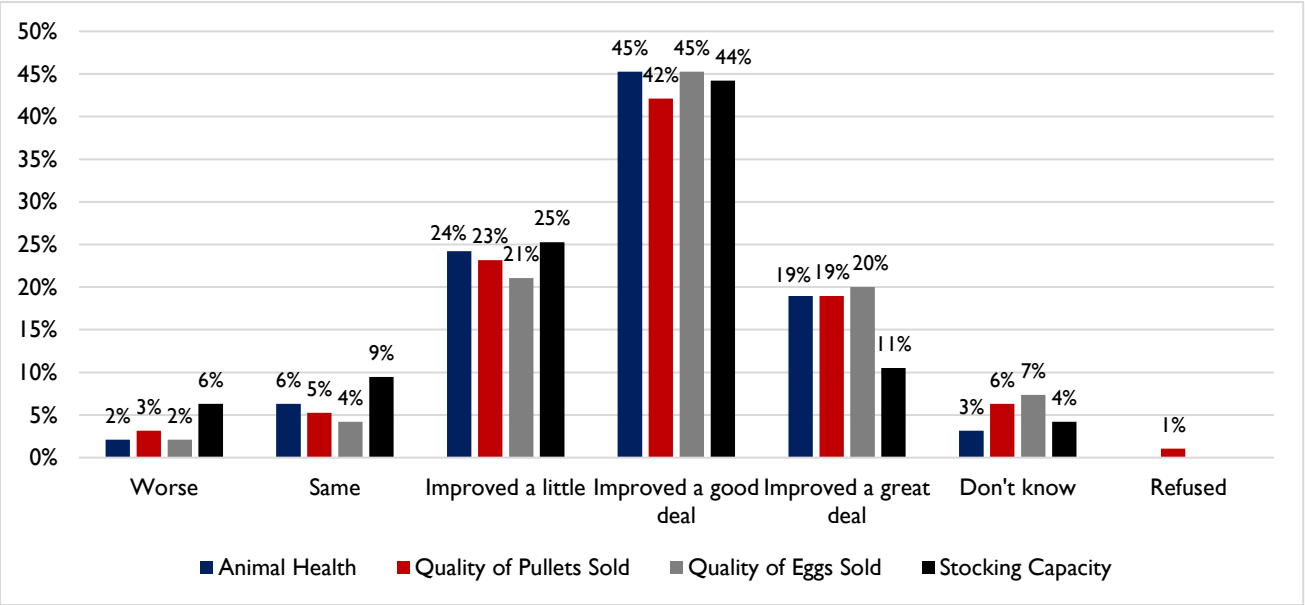
Figure 10: MLA Yield Improvements (Endline)



Poultry

- A majority of endline poultry respondents reported a good or great improvement in animal health (64 percent), quality of pullets sold (61 percent), quality of eggs sold (65 percent), and stocking capacity (55 percent) after receiving VCA support (Figure 11).
- Of those who reported good or great improvements, two-thirds attributed the improvements to VCA support.

Figure 11: Poultry Yield Improvements (Endline)



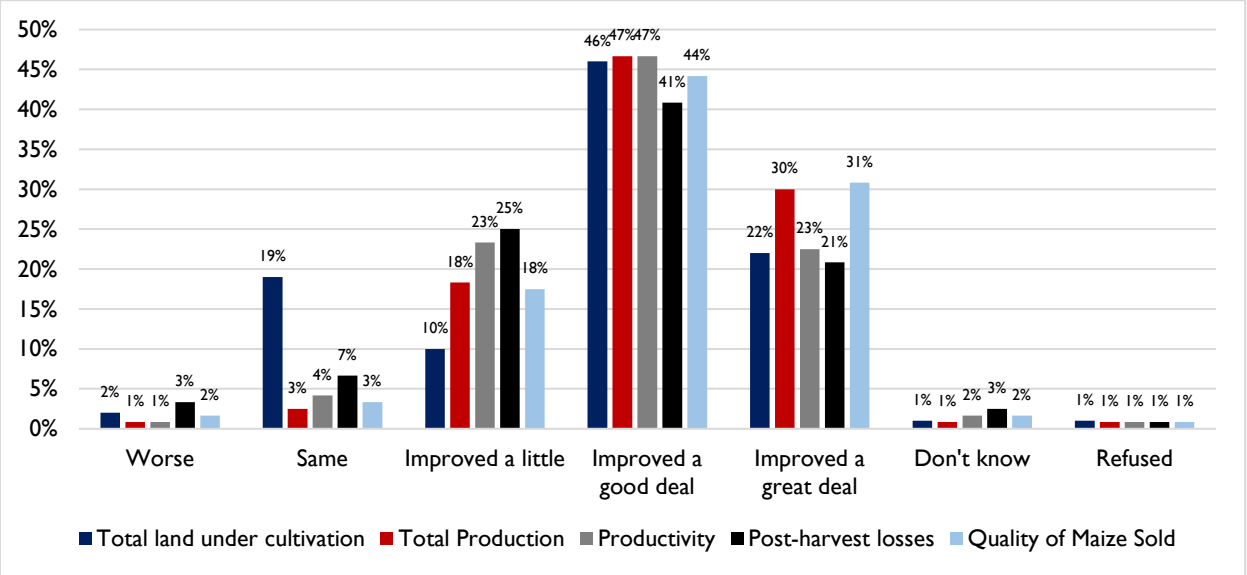
Maize

- A majority of endline maize respondents reported a good or great improvement in total land under cultivation (68 percent), total production (77 percent), productivity (70 percent), post-harvest losses (62 percent), and quality of maize sold (75 percent) after receiving VCA support (Figure 12).
- Of those who reported good or great improvements, two-thirds attributed the improvements to VCA support.

Significant Differences

- Respondents in Oromia were more likely to report that total land under cultivation had improved after receiving VCA support than respondents in SNNPR ($p<0.01$).

Figure 12: Maize Yield Improvements (Endline)



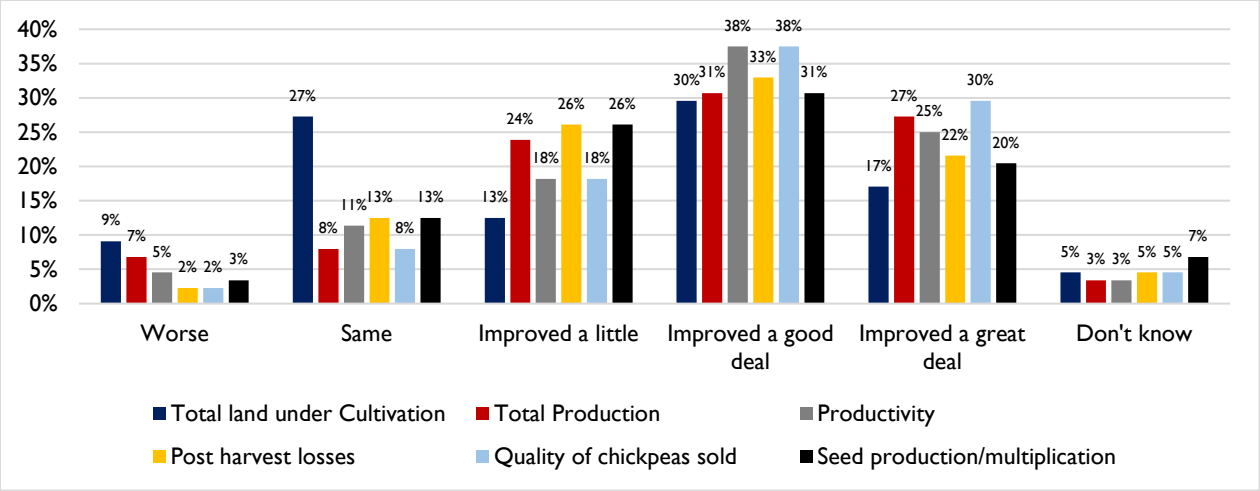
Chickpea

- A majority or near majority of endline chickpea respondents reported a good or great improvement in total land under cultivation (47 percent), total production (58 percent), productivity (63 percent), quality of chickpeas sold (68 percent), and seed production/multiplication (51 percent) after receiving VCA support (Figure 13).

Significant Differences

- Respondents in Oromia were more likely to report a good or great improvement in total land under cultivation, total production productivity, post-harvest losses, quality of chickpeas sold, and seed production/multiplication than respondents in Amhara ($p<0.05$).
- Men were more likely than women to report a good or great improvement in the quality of chickpeas sold ($p<.0.01$).

Figure 13: Chickpea Yield Improvements (Endline)



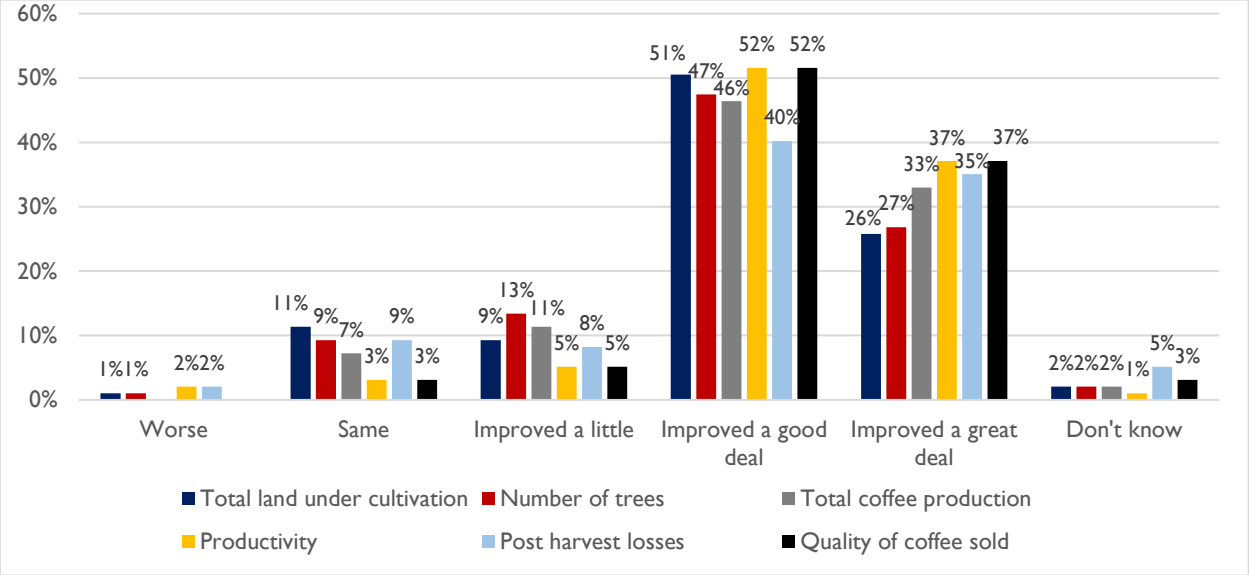
Coffee

- A majority of endline coffee respondents reported a good or great improvement in total land under cultivation (77 percent), number of coffee trees (74 percent), total coffee production (79 percent), productivity (89 percent), post-harvest losses (75 percent), and quality of coffee sold (89 percent) after receiving VCA support (Figure 14).
- Of those who reported good or great improvements, around three-quarters attributed the improvements to VCA support.

Significant Differences

- Respondents in Oromia were more likely to report that total land under cultivation, post-harvest losses, the number of trees, and total coffee production had improved compared to respondents in SNNPR ($p<0.05$).

Figure 14: Coffee Yield Improvements (Endline)



3.5.3 Conclusions

- VCA beneficiary farmers have improved their yields after receiving Activity support, regardless of production activity and VC in which they were engaged.
- At the same time, beneficiaries have improved their production performance across a range of outcomes, including depending on the VC, total production, product quality, animal health and weight, post-harvest losses, land cultivated, and adoption of improved animal husbandry practices.
- Between two-thirds to three-quarters of beneficiary farmers attribute these improvements to VCA support.

3.6 MARKETING/COMMERCIAL LINKAGES

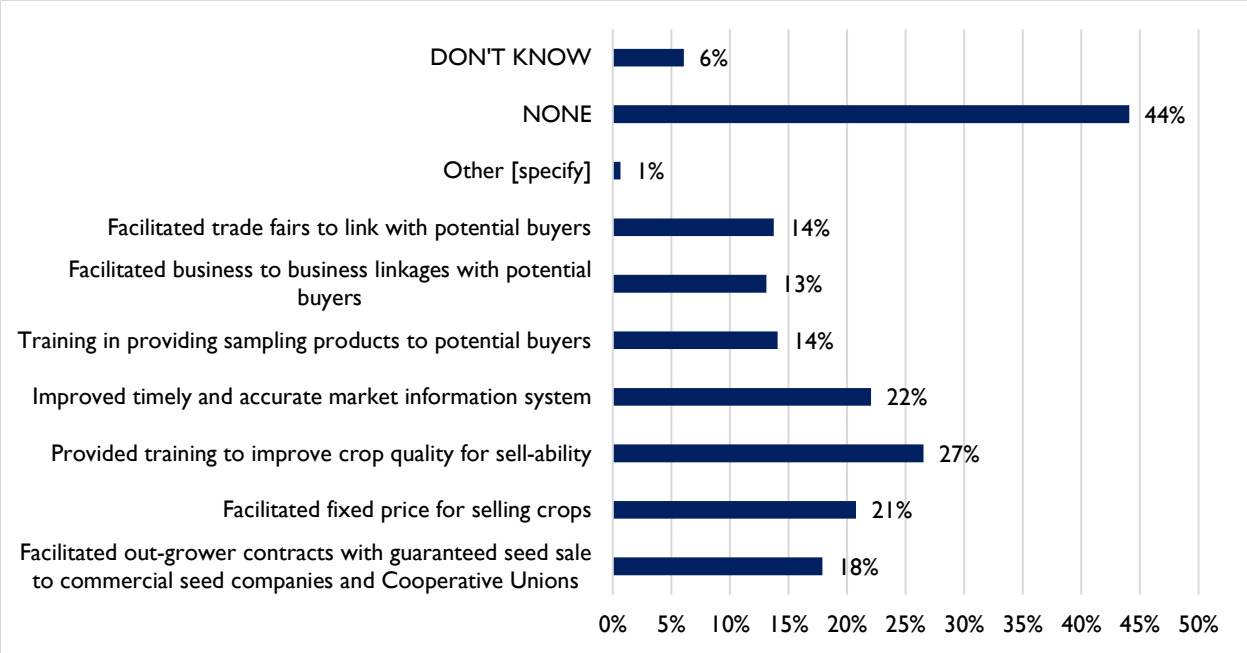
3.6.1 Midterm

- Forty-four percent of midterm respondents said there was nothing that VCA did that helped them market their crops (Figure 15).
- In terms of specific types of marketing support, just under one-quarter of respondents said that VCA had provided support to improve crop quality to increase saleability (27 percent), provided market information (22 percent), facilitated fixed crop prices (21 percent), facilitated out-grower relationships (18 percent), facilitated trade fairs or support to sample products for prospective buyers (14 percent), and facilitated business-to-business linkages with prospective buyers (13 percent).

Significant Differences

- Men were more likely than women to say that VCA provided support to improve crop quality for saleability ($p<0.01$).
- Men were more likely than women to say that VCA facilitated business-to-business linkages with potential buyers ($p<0.05$).

Figure 15: VCA Assistance in Crop Marketing (Midterm)

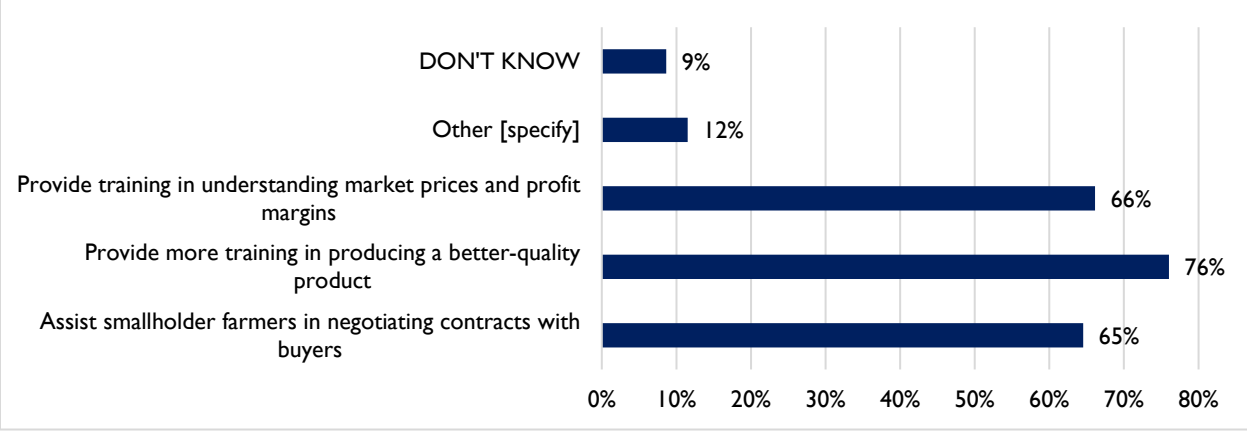


- When midterm respondents were asked how VCA could improve its marketing support for its beneficiary farmers, the most popular responses were to provide training on producing better quality products (76 percent), provide more training on market prices and profit margins (66 percent), and assist farmers to negotiate better prices with buyer (65 percent) (Figure 16).

Significant Differences

- Compared to respondents in Tigray, respondents in Amhara, Oromia, and SNNPR were more likely to say that VCA should provide more assistance in negotiating contracts with buyers and more training in producing better-quality products and understanding market prices and profit margins (P<0.01).
- Furthermore, proportionately more male respondents thought VCA should provide training in understanding market prices and profit margins (P<0.01).

Figure 16: Making VCA Assistance in Crop Marketing More Effective (Midterm)



3.6.2 Endline

- A minority of endline respondents in all six VCs (ranging from 7-35 percent) claimed to have received direct VCA support in marketing and sales or to access commercial markets (buyers) (Figure 17).
- Notwithstanding the lack of direct Activity support provided in marketing and sales and in access to commercial markets (buyers), the majority of endline respondents in each of the six VCs reported that commercial linkages to buyers had improved by a good or great deal after receiving support from VCA, including 67 percent of dairy farmers, 72 percent of MLA producers, 54 percent of poultry producers, 71 percent of maize farmers, 53 percent of chickpea farmers, and 71 percent of coffee farmers (Figure 18).

Significant Differences

- Commercial linkages to buyers improved more for maize farmers in Oromia compared to maize farmers in SNNPR ($p<0.05$).
- Commercial linkages to buyers improved more for chickpea farmers in Amhara compared to chickpea farmers in Oromia ($p<0.001$).
- Commercial linkages to buyers improved more for coffee farmers in Oromia compared to coffee farmers in SNNPR ($p<0.05$).

Figure 17: VCA Assistance in Market and Sales and in Accessing Markets (Endline)

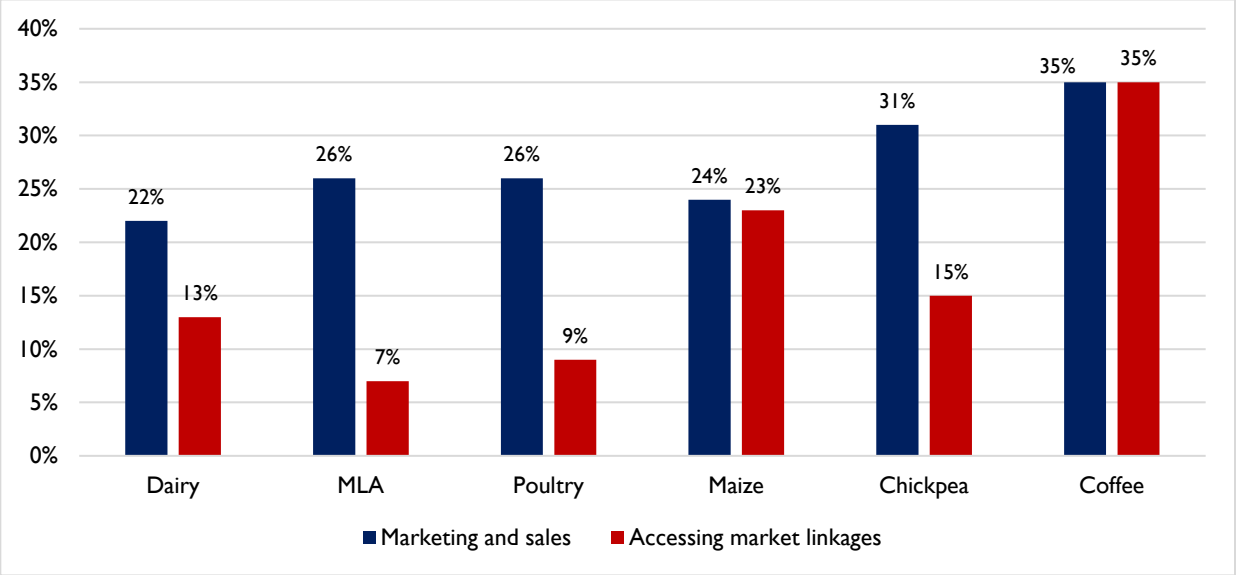
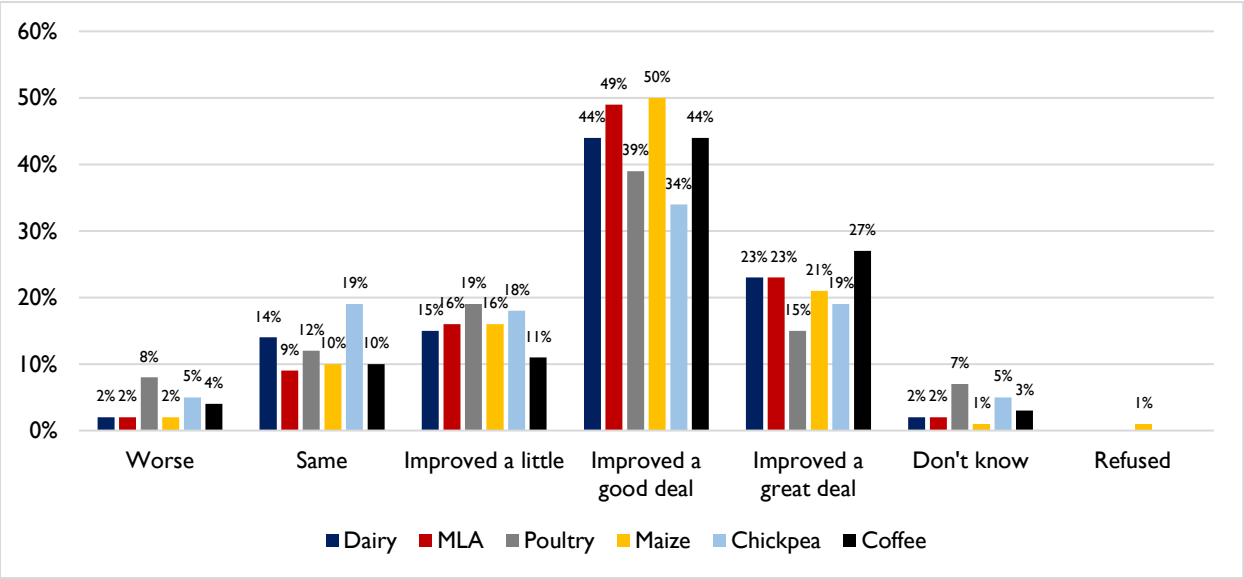


Figure 18: Improvement in Commercial Linkages to Buyers (Endline)



3.6.3 Conclusions

- Relatively few of VCA's beneficiary farmers received direct Activity support in marketing and sales or to access commercial markets/buyers.
- Despite the lack of direct Activity support in these areas, beneficiary farmers, on average, managed to improve their market linkages to commercial buyers after receiving VCA support, with the large majority of these attributing the improvement to VCA support.
- The above suggest at least two possible additional conclusions, or a combination of them. One is that beneficiaries did receive direct VCA support in marketing and sales and accessing commercial linkages but did not identify it as marketing, sales, or linkages support. The other is that Activity support in these areas was indirect or integrated in other types of support activities that made it difficult to beneficiaries to identify it as marketing, sales, or linkages support.

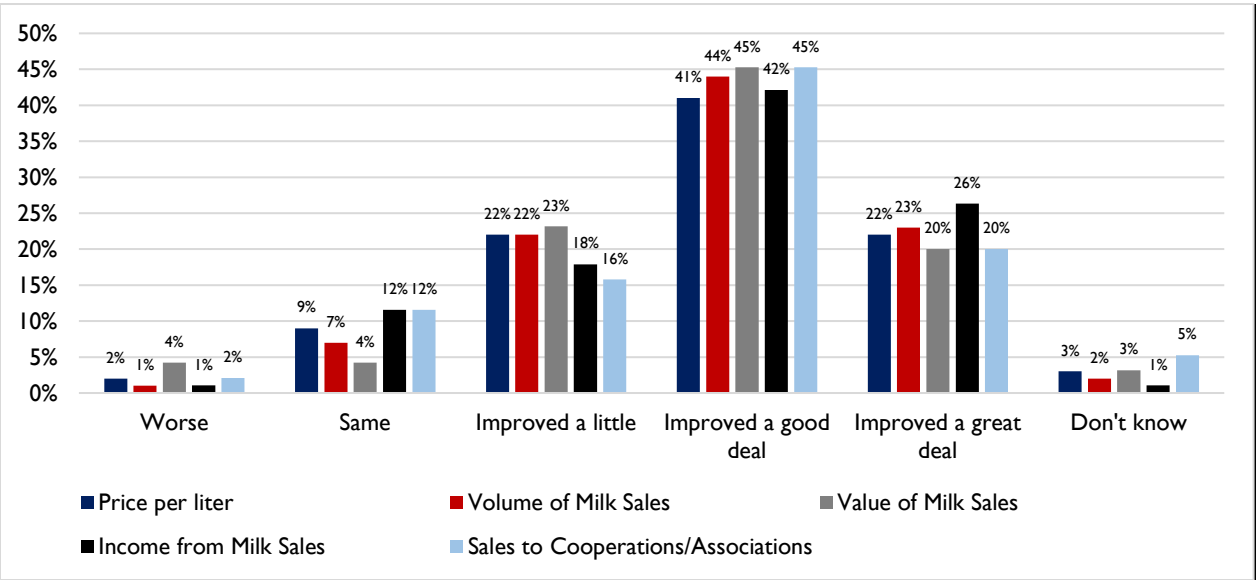
3.7 SALES/INCOME

3.7.1 Endline

Dairy

- A majority of endline dairy respondents reported a good or great increase in price per liter of milk sold (63 percent), volume of milk sold (67 percent), value of milk sold (65 percent), income from milk sold (68 percent), and sales to cooperatives/associations (65 percent) after receiving VCA support (Figure 19).
- Of those who reported a good or great improvement, approximately two-thirds attributed the improvement to VCA support.

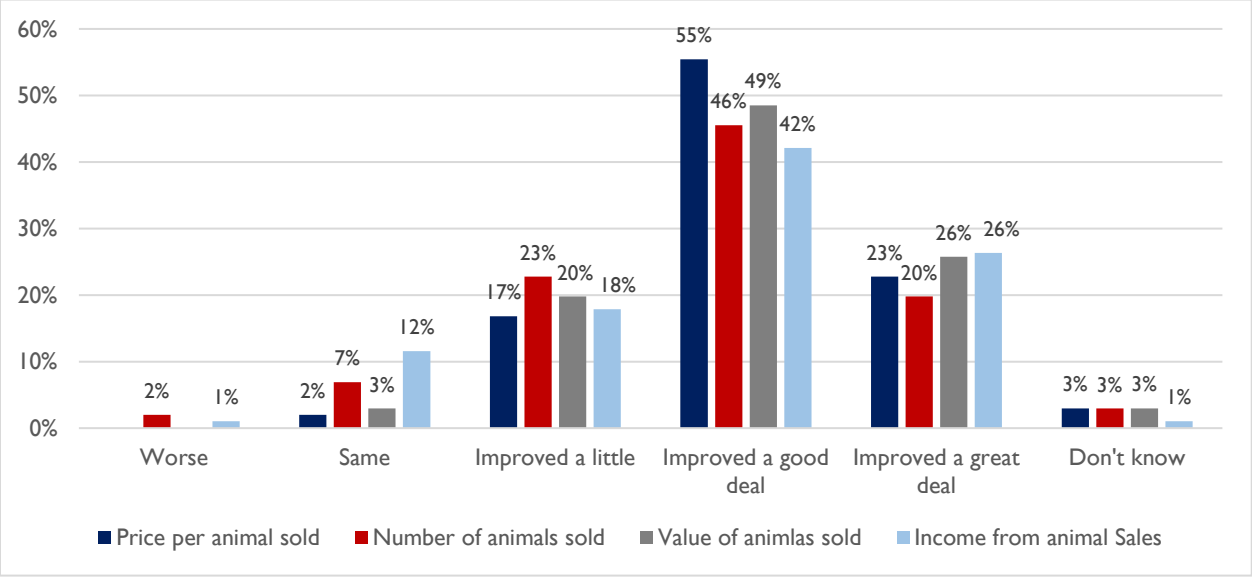
Figure 19: Dairy Sales/Income Improvements (Endline)



MLA

- A majority of endline MLA respondents reported a good or great improvement in the price per animal sold (78 percent), number of animals sold (66 percent), value of animals sold (75 percent), and income from animals sold (68 percent) after receiving VCA support (Figure 20).
- Of those who reported a good or great improvement, approximately two-thirds attributed the improvement to VCA support.

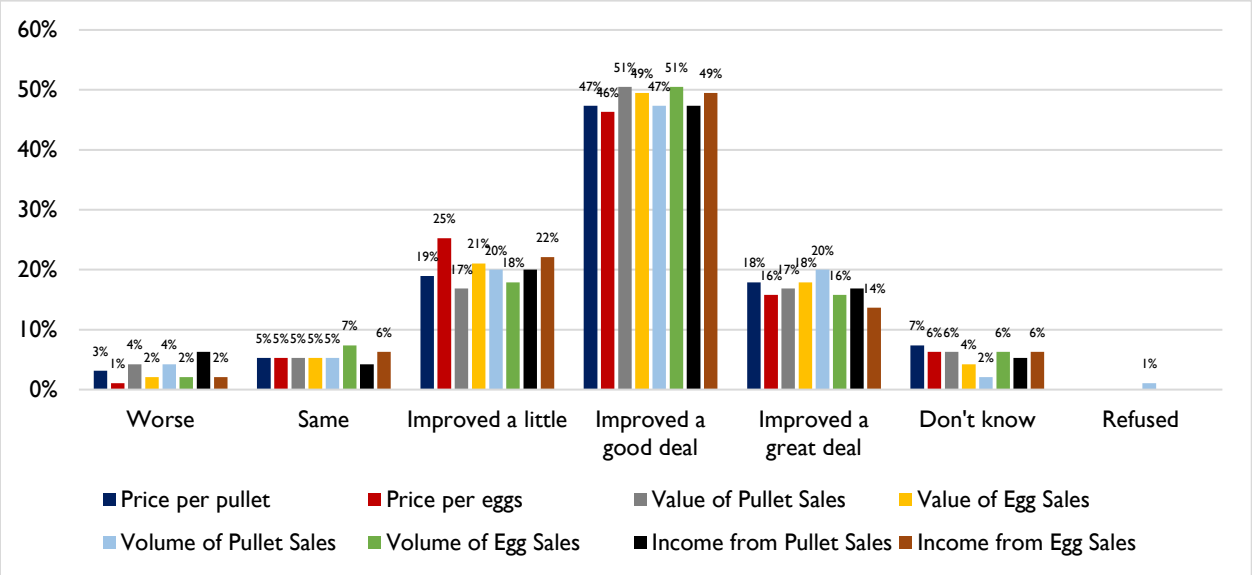
Figure 20: MLA Sales/Income Improvements (Endline)



Poultry

- A majority of endline pullet producers reported a good or great improvement in the price per pullet sold (65 percent), value of pullets sold (68 percent), volume of pullets sold (67 percent), and income from pullets sold (64 percent) (Figure 21).
- A majority of egg producers reported a good or great improvement in the price per egg sold (62 percent), value of eggs sold (67 percent), volume of pullets sold (67 percent), and income from pullets sold (63 percent) (Figure 21).

Figure 21: Poultry Sales/Income Improvements (Endline)



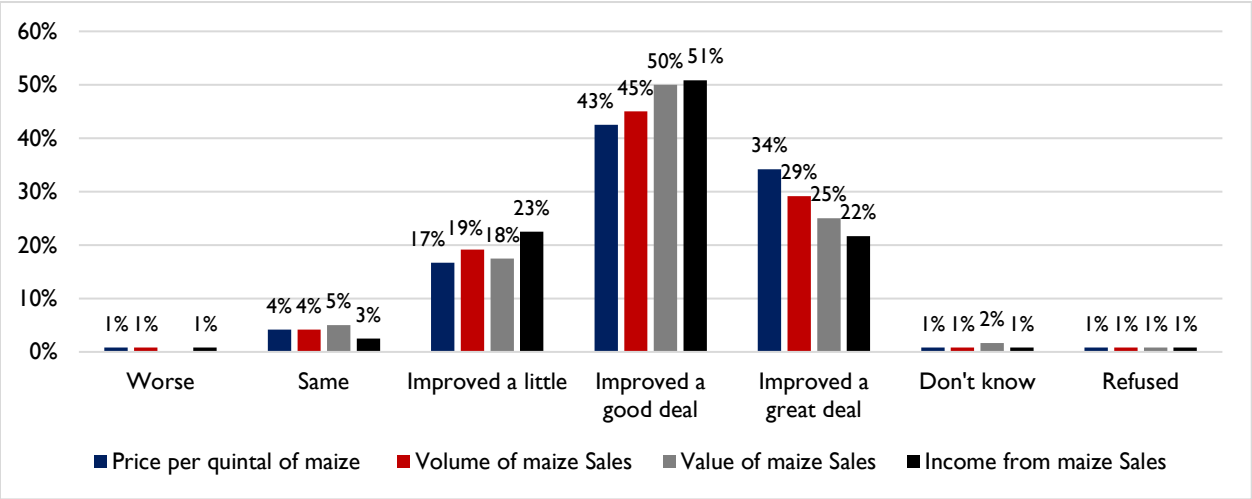
Maize

- The majority of endline maize respondents reported a good or great improvement in price per quintal sold (77 percent), volume of maize sold (74 percent), value of maize sold (75 percent), and income from maize sold (73 percent) after receiving VCA support (Figure 22).
- Of those who reported a good or great improvement, approximately two-thirds attributed the improvement to VCA support.

Significant Differences

- Respondents in Oromia were more likely to report that the price and value of maize sold had improved compared to respondents in SNNPR ($p<0.01$).
- Respondents in Oromia and SNNPR were more likely to report that income from maize sales had improved than respondents in Amhara and Tigray ($p<0.05$).

Figure 22: Maize Sales/Income Improvements (Endline)



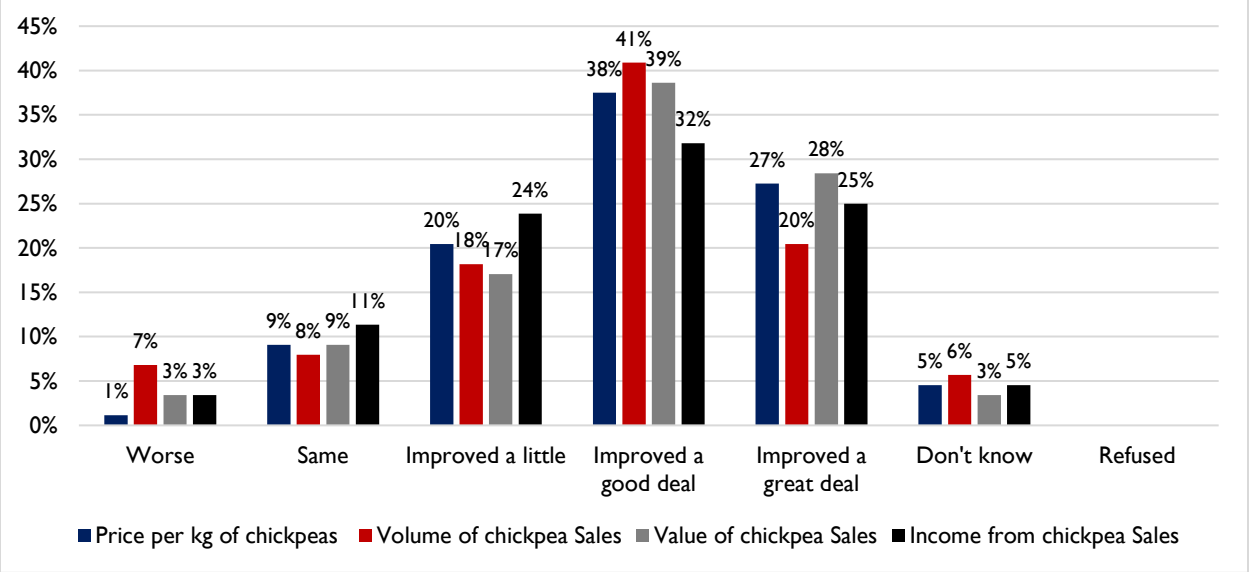
Chickpea

- The majority of endline chickpea respondents reported a good or great improvement in the price per kilogram sold (65 percent), volume of chickpeas sold (61 percent), value of chickpeas sold (67 percent), and income from chickpeas sold (57 percent) after receiving support from VCA (Figure 23).
- Of those who reported a good or great improvement, approximately one-half attributed the improvement to VCA support.

Significant Differences

- Men were more likely than women to report a good or great improvement in chickpea sales ($p<0.05$).
- Respondents in Oromia were more likely to report a good or great improvement in the price of chickpeas, the volume and value of chickpeas sold, and the income from chickpeas sold compared to respondents in Amhara ($p<0.01$).

Figure 23: Chickpea Sales/Income Improvements (Endline)



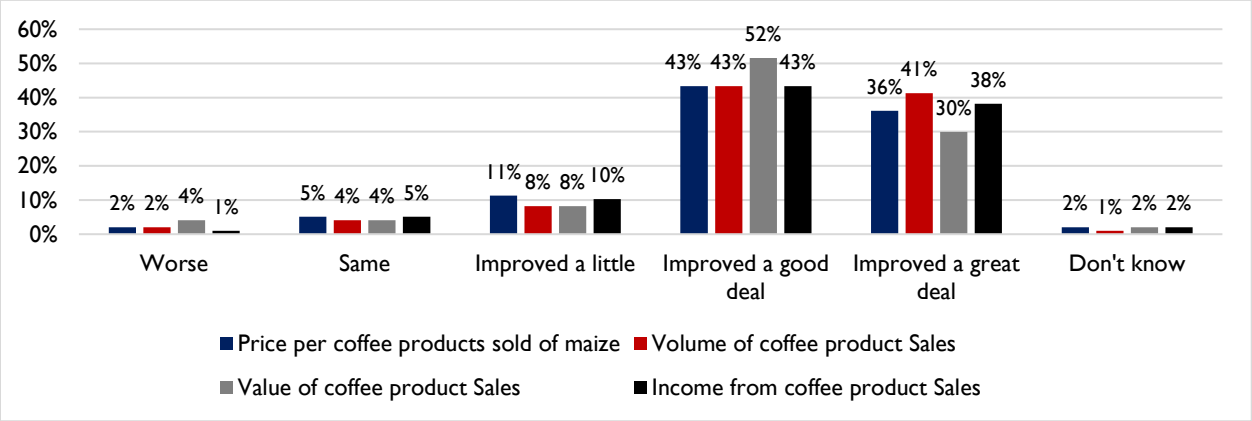
Coffee

- The majority of endline coffee respondents reported an good or great improvement in the price per coffee products sold (79 percent), volume of coffee products sold (84 percent), value of coffee products sold (82 percent), and income from coffee products sold (81 percent) after receiving VCA support (Figure 24).
- Of those who reported a good or great improvement, three-quarters attributed the improvement to VCA support.

Significant Differences

- Respondents in Oromia were more likely to report the volume of coffee products sold improved due to VCA support compared to respondents in Amhara ($p<0.01$).
- Respondents in Oromia were more likely to report that the value of products sold and the income from coffee product sold improved compared to respondents in SNNPR ($p<0.05$).

Figure 24: Coffee Sales/Income Improvements (Endline)



3.7.2 Conclusions

- VCA beneficiary farmers in each of its six priority VCs have improved the volume and value of sales, sales prices, and income from sales since receiving VCA support.
- One-half to three-quarters of beneficiaries attribute these improvements to VCA support.

3.8 USE OF ON-FARM PRODUCTION

3.8.1 Midterm

Maize

- On average, midterm maize respondents consume at home just under half of the maize they grow. This is slightly greater than the percentage of maize they sell to the market, and much greater than the combined percentage of maize that they gift, use for seed, and store (Figure 25).

Significant Differences

- Women sell more of the maize they produce than men ($p<0.001$).
- Women consume slightly more of the maize they produce than men ($p<0.001$).

- Men gift roughly twice the percentage of maize produced than women and use more maize as seed ($p<0.001$).
- Respondents in Amhara sell more of the maize they produce than respondents in Tigray and SNNPR ($p<0.001$).
- Respondents in Amhara consume the lowest percentage of maize produced compared to the other three regions ($p<0.001$).
- Youth sell a greater percentage of maize they produce than the non-youth ($p<0.001$).
- Youth use a slightly greater percentage of maize for seed than the non-youth ($p<0.01$).
- Non-youth consume a greater percentage of maize than do the youth ($p<0.001$).

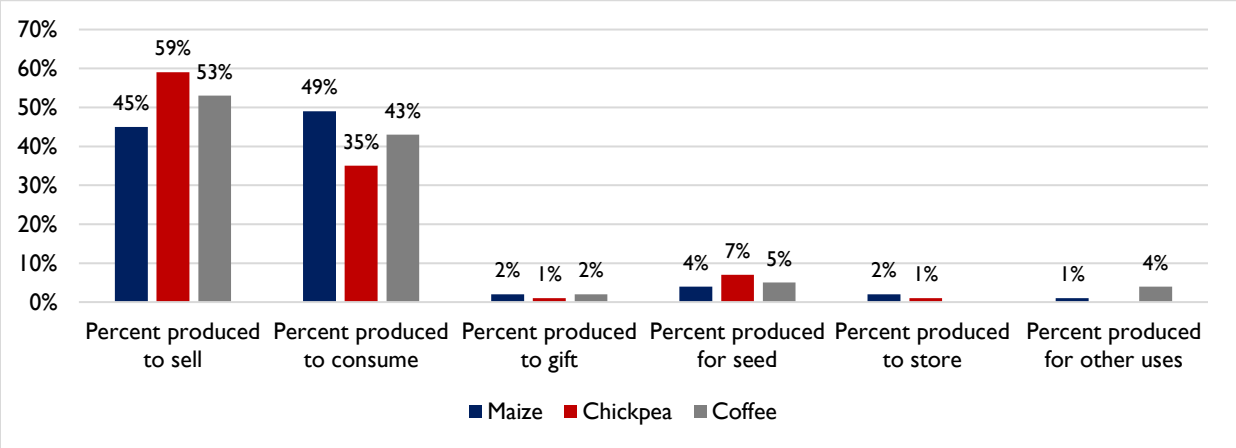
Chickpea

- On average, midterm chickpea respondents sell a little under two-thirds of their chickpeas to the market. This is nearly twice as great as the percentage that they consume at home (a little more than one-third) and much greater than the combined percentage of chickpeas that they gift, use for seed, and store (Figure 25).

Coffee

- On average, midterm coffee respondents sell to the market a little more than half of the coffee they produce. This is slightly greater than the percentage of coffee they consume at home (a little over two-fifths) and much greater than the combined percentage of coffee they gift, use for seed, and store (Figure 25).

Figure 25: Average Percentage of Crop Produced for Purpose (Midterm)



3.8.2 Endline

Milk

- On average, endline dairy respondents sell nearly-three fifths of the milk they produce, while consuming approximately a quarter of their production at home and gifting or losing less than one-tenth (Figure 26).

Significant Differences

- Men consume at home slightly more of the milk they produce than women ($p<0.001$).
- Men sell more of the milk they produce than women ($p<0.001$).
- Men gift slightly more milk they produce than women ($p<0.001$).
- Men lose slightly more of milk they produce than women ($p<0.001$).

MLA

- On average, endline MLA respondents sell nearly three-fifths of the livestock they raise, while consuming at home about one-third and gifting or only around 10%.

Significant Differences

- Women consume more of the livestock they raise than men ($p<0.001$).
- Women sell less of the livestock they raise than men ($p<0.001$).
- Women give away less of the livestock they raise than men ($p<0.001$).
- Women lose less of the livestock they raise than men ($p<0.001$).

Eggs

- On average, endline poultry respondents sell nearly three-fifths of the eggs they produce, while consuming at home nearly one-third and gifting or losing less than one-tenth of their eggs.

Significant Differences

- Women consume a higher percentage of eggs produced than men ($p<0.001$).
- Women gift a slightly lower percentage of their eggs then men ($p<0.001$).
- Women lose slightly less of their eggs than men ($p<0.001$).
- Men sell slightly more of the eggs they produced than women ($p<0.001$).

Poultry

- On average, endline pullet producers sell nearly three-fifths of the poultry they produce and consume nearly three-tenths at home. Pullets produced that are then gifted or lost constitute 12% of pullet production.

Significant Differences

- Women consume more pullets at home than men ($p<0.001$).
- Men sell a higher percentage of pullets than women ($p<0.001$).
- Women gift a slightly lower percentage of pullets than men ($p<0.001$).
- Women lose slightly more pullets raised than men ($p<0.001$).

Maize

- On average, maize producers sell 40% of the chickpeas they produce and 44%, while maize production that is either gifted or lost constitutes 15% of total maize production.

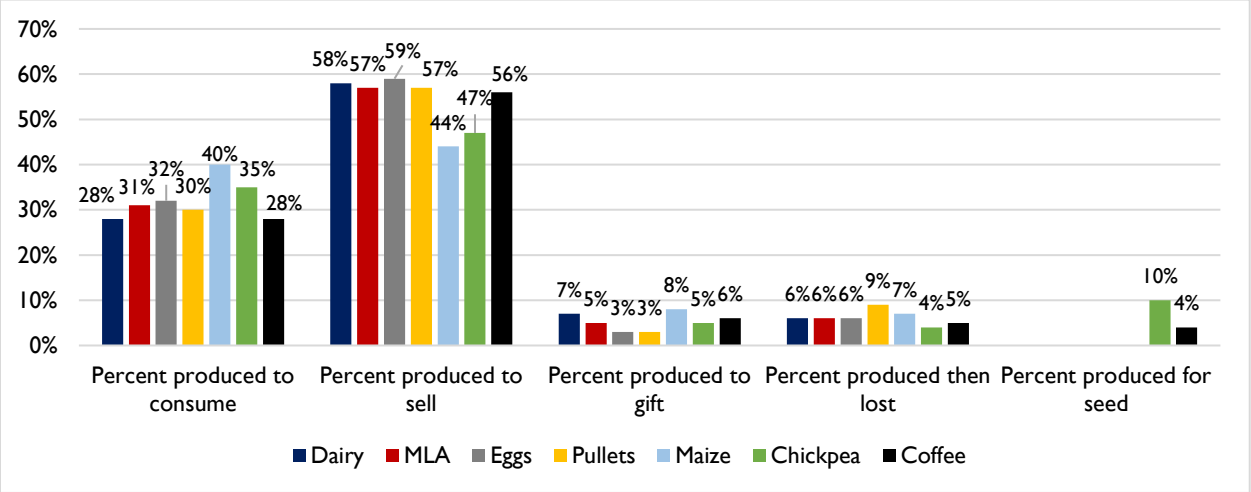
Chickpea

- On average, endline chickpea producers sell just over one-third of the chickpeas they produce and consume just under one-half. Chickpea production that is either gifted or lost constitutes less than 10% of total production, while chickpeas used for seed equals 10% of chickpeas produced.

Coffee

- Endline coffee respondents sell more than half of the coffee they produce, while consuming nearly one-third and gifting, using for seed, or losing a little more than one-tenth (Figure 26).

Figure 26: Average Percentage of Production Used for Different Purposes by VC (Endline)



3.8.3 Conclusions

- VCA beneficiary farmers on average sell approximately between 44% and 59% of the milk, MLA, eggs, pullets, eggs, maize, chickpea, and coffee they produce and (with a single exception in the mid-term survey) sell more than they consume at home.
- The same farmers consume at home on average around one-third of what they produce in each VC with a low of 28 percent and a high of 49 percent.
- The percentage of production that is either gifted, lost, or produced for seed never exceeds 20 percent and is consistenly in single digits or the low teens.

3.9 IMPROVED PRACTICES

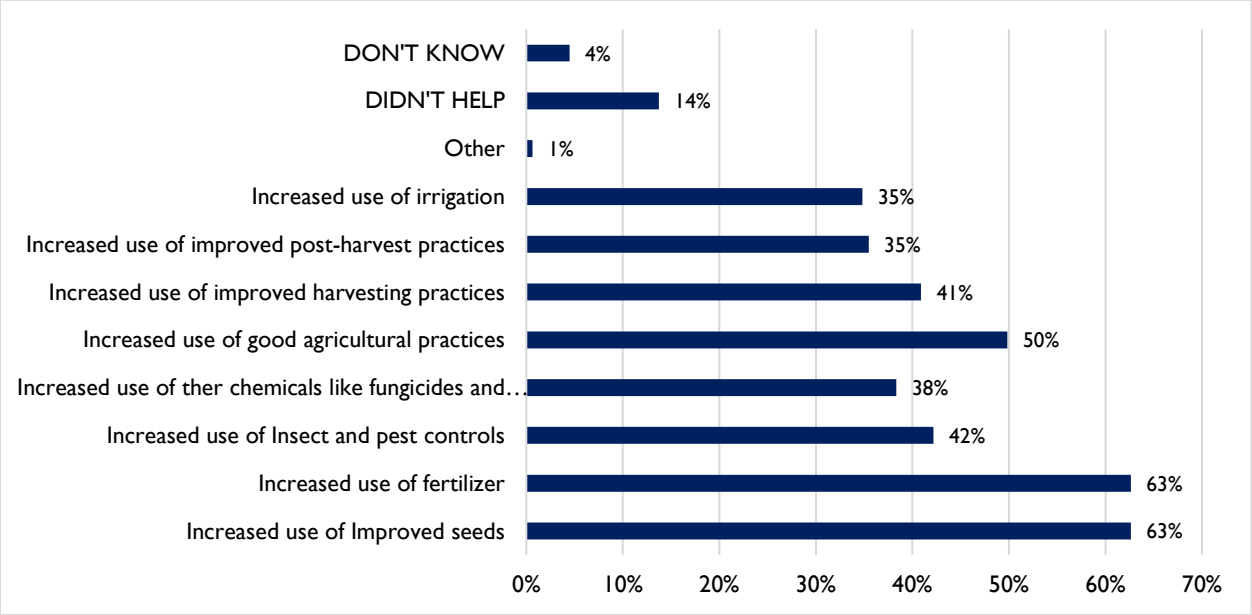
3.9.1 Midterm

- From one-third to nearly two-thirds of midterm respondents growing maize, chickpea, or coffee reported that VCA helped them improve their on-farm performance by increasing the use of irrigation (35 percent), improved post-harvest practices (35 percent), improved harvesting practices (41 percent), good agricultural practices (50 percent), chemicals (38 percent), insect/pest controls (42 percent), fertilizer (63 percent), and improved seeds (63 percent) after receiving support from VCA (Figure 27).
- Among these, increased use of fertilizer, improved seeds, and good agricultural practices were the most helpful forms of assistance for midterm respondents.

Significant Differences

- Respondents in Amhara and SNNPR increased their use of improved seeds, fertilizer, insect/pest control, chemicals, good agricultural practices, and improved harvesting practices more than respondents in Oromia ($p<0.01$).
- Men increased their use of pest control, good agricultural practices, and improved post-harvest practices more than women ($p<0.05$).
- Respondents in Amhara and SNNPR increased their use of improved post-harvest practices and irrigation more than respondents in Tigray ($p<0.01$).

Figure 27: Improved Practices for Crop Performance (Midterm)



3.9.2 Conclusions

- VCA beneficiary farmers growing maize, chickpea, or coffee have increased their adoption of improved production and post-harvest practices after receiving Activity support, although with wide variation in adoption rates depending on the specific practice, ranging from one-third to two-thirds of beneficiaries.

3.10 INCREASED INVESTMENTS

3.10.1 Midterm

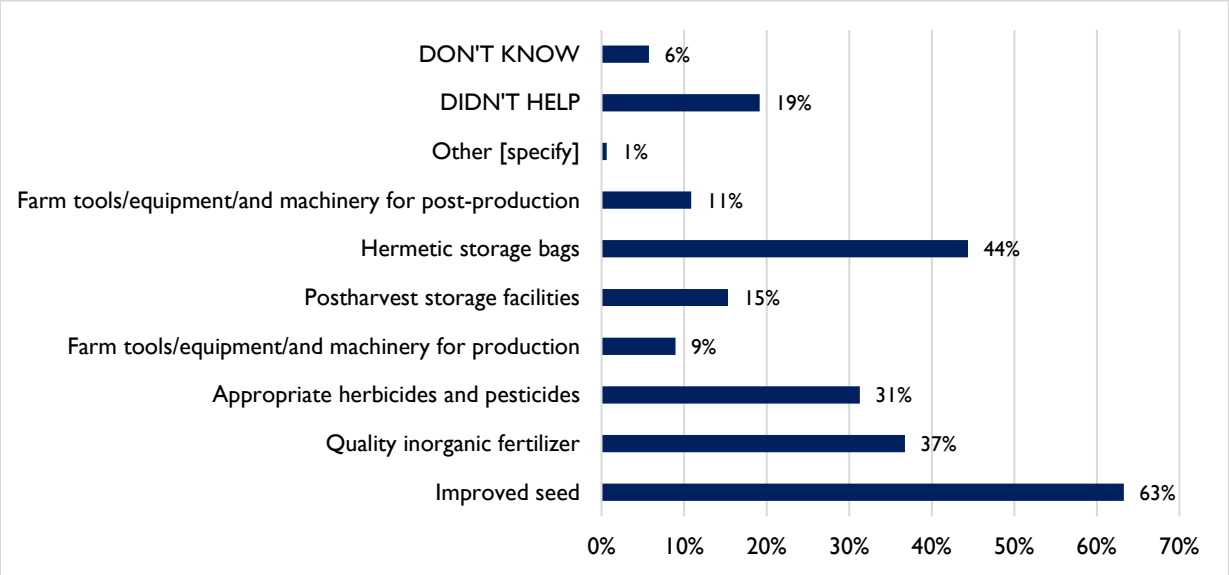
Farming Operations Investments

- Nearly two-thirds of midterm respondents growing maize, chickpea, or coffee invested in improved seeds after receiving VCA assistance (Figure 28).
- However, nearly one-fifth of the same respondents reported that VCA assistance did not help increase their investment in farming operations, which is larger than the percentage of farmers who invested in post-harvest storage facilities and farm tools/equipment for both production and post-production.

Significant Differences

- Respondents in Oromia and SNNPR were both more likely to invest in quality inorganic fertilizer and PICS bags than respondents in Amhara and Tigray ($p<0.05$).
- Men are more likely than women to invest in both herbicides and pesticides ($p<0.05$).

Figure 28: Investments in Farming Operations (Midterm)



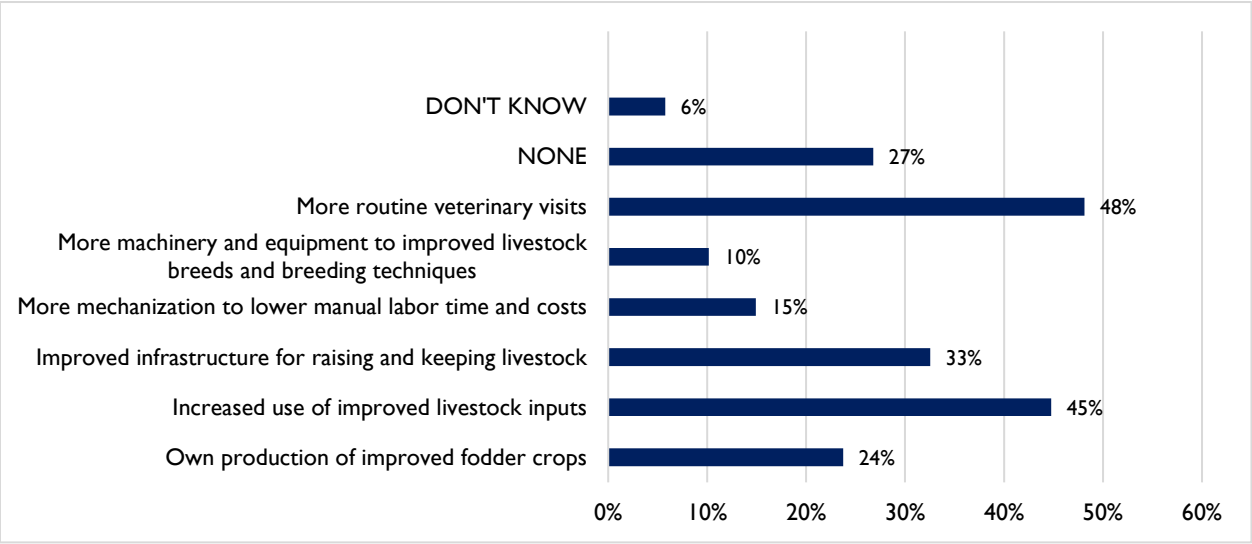
Livestock Operations Investments

- Nearly half of the midterm respondents raising livestock invested in more routine veterinary visits after receiving VCA assistance (Figure 29).
- Over a quarter of the same respondents did not invest in anything with VCA assistance, which is a larger amount than those who invested in own production of improved fodder crops (24%), mechanization (15%), and machinery and equipment (10%) (whether to improve livestock breed/breeding or to lower manual labor time and costs).

Significant Differences

- Respondents in Oromia and Tigray were more likely to invest in livestock than respondents in Amhara and SNNPR ($p<0.001$).
- Respondents in Tigray were more likely to invest both in increased use of improved livestock inputs and more routine vet visits than respondents in Oromia, Amhara, and SNNPR ($p<0.001$).
- Similarly, non-youth were more likely to invest in increased use of improved livestock inputs and more routine vet visits than youth ($p<0.01$).

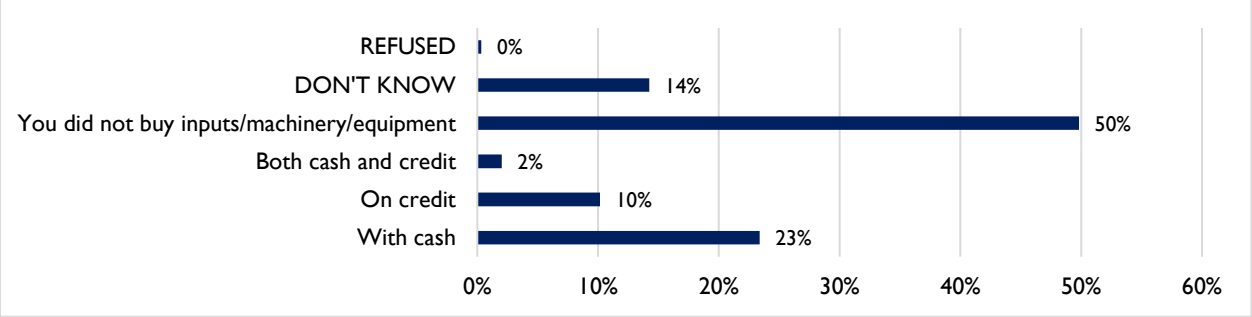
Figure 29: Investments in Livestock Operations (Midterm)



Livestock Input Purchasing

- Less than one-half (45 percent) of midterm respondents tending livestock invested in inputs/machinery/equipment/construction materials (Figure 30).
- Those who did purchase the above were more likely to do so using cash rather than credit.

Figure 30: How Livestock Inputs were Purchased (Midterm)



3.10.2 Conclusions

- VCA beneficiary farmers increased their investments in their crops and livestock production activities after receiving Activity support; however, the rate of investment varied from low to moderate depending on the item and was typically much lower than 50 percent (achieving this threshold only twice).

3.11 POST HARVEST

3.11.1 Midterm

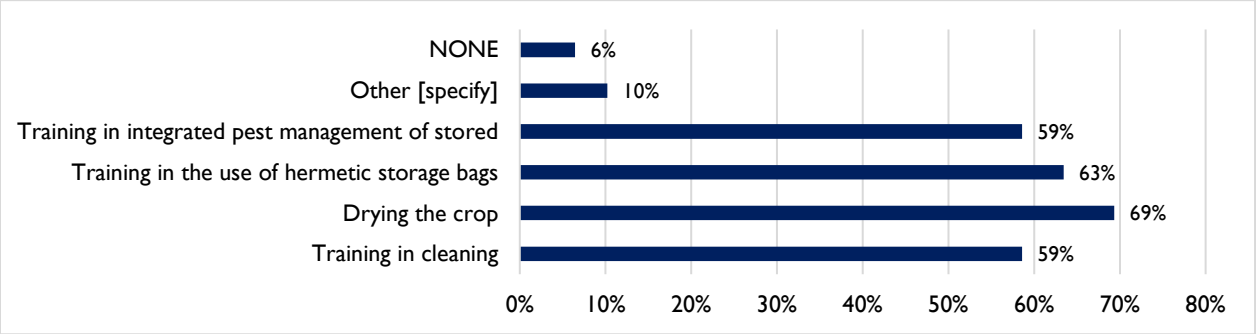
- More than two-fifths of midterm crop farmers reported attending a VCA training on crop post-harvest drying, storage, and handling practices, and more than one-third of crop farmers reported that VCA's assistance helped them increase their use of improved post-harvest practices.

- More than half of the midterm crop farmers reported that each of the following methods of VCA training on post-harvest practices made a big difference in lowering their post-harvest losses: training in integrated pest management (IPM) (59 percent), training in the use of hermetic storage bins/bags (63 percent), training in crop drying (69 percent), and training in cleaning (59 percent) (Figure 31).

Significant Differences

- Men found the post-harvest handling (PHH) training for both drying and IPM to be more effective at reducing post-harvest losses than women ($p<0.05$).
- Respondents in Amhara and SNNPR found PHH training for cleaning to be more effective at reducing their post-harvest losses than respondents in Oromia and Tigray ($p<0.001$).
- Respondents in Amhara and SNNPR found the PHH trainings for drying, storage bags, and IPM to be more effective at reducing their post-harvest losses than farmers in Oromia ($p<0.001$).

Figure 31: VCA Assistance Lowering Post-Harvest Losses (Midterm)



3.11.2 Conclusions

- VCA beneficiary farmers in the maize, chickpea, and coffee VCs have increased their adoption of a range of post-harvest practices with adoption rates averaging in excess of 60 percent for all practices included in the survey.

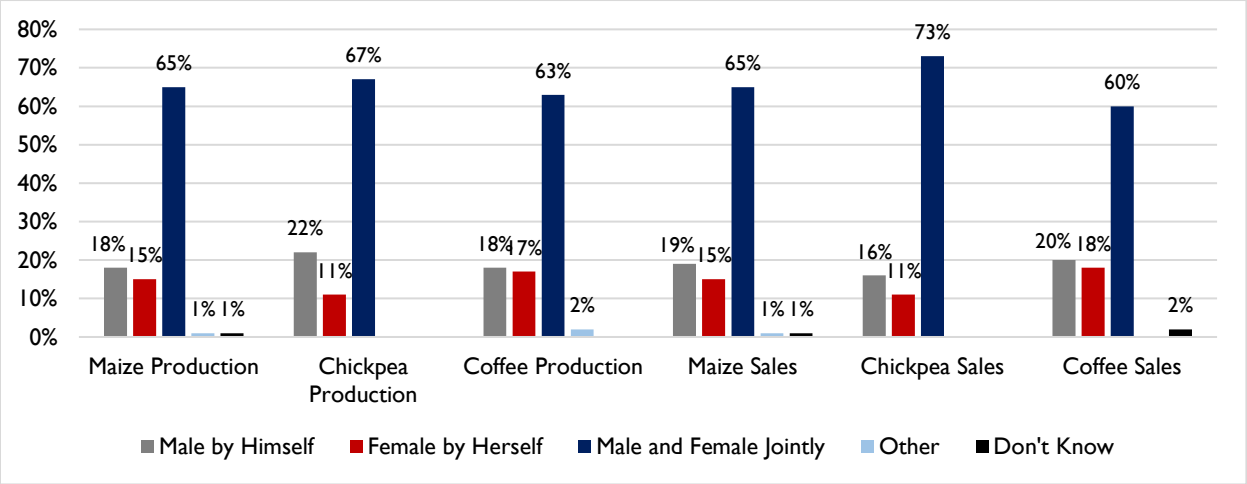
3.12 GENDER AND YOUTH

3.12.1 Midterm

Household Decision-Making: Crops

- Approximately two-thirds of midterm respondents growing maize, chickpea, and coffee reported that women and men made household decisions jointly regarding the production and sale of their crops and another one-fifth each reported that women were the primary decision-makers or that men were the primary decision-makers (Figure 32).

Figure 32: Household Decision-Making Regarding Maize, Chickpea, and Coffee Production and Sales (Midterm)



Household Decision-Making: Livestock

- Just over one-half of midterm respondents raising livestock reported that women and men made household decisions jointly regarding the production and sale of livestock and around one-fifth each reported that women were the primary decision-makers or that men were the primary decision-makers (Figure 33).

Significant Differences

- Men were much more likely than women to believe that males and females in their households made decisions jointly regarding the production and sale of livestock ($p<0.001$).
- Men were more likely than women to believe that men were the primary decision-makers, whereas women were more likely than men to believe that women were the primary decision-makers regarding livestock production and sales ($p<0.001$).
- Non-youth were more likely than youth to believed that either women were the primary decision-makers or that females and males jointly decided on livestock production ($p<0.001$) and sales ($p<0.01$).
- Respondents in Amhara, Oromia, and Tigray were more likely to report that males and females were joint decision-makers regarding livestock production and sales ($p<0.01$).

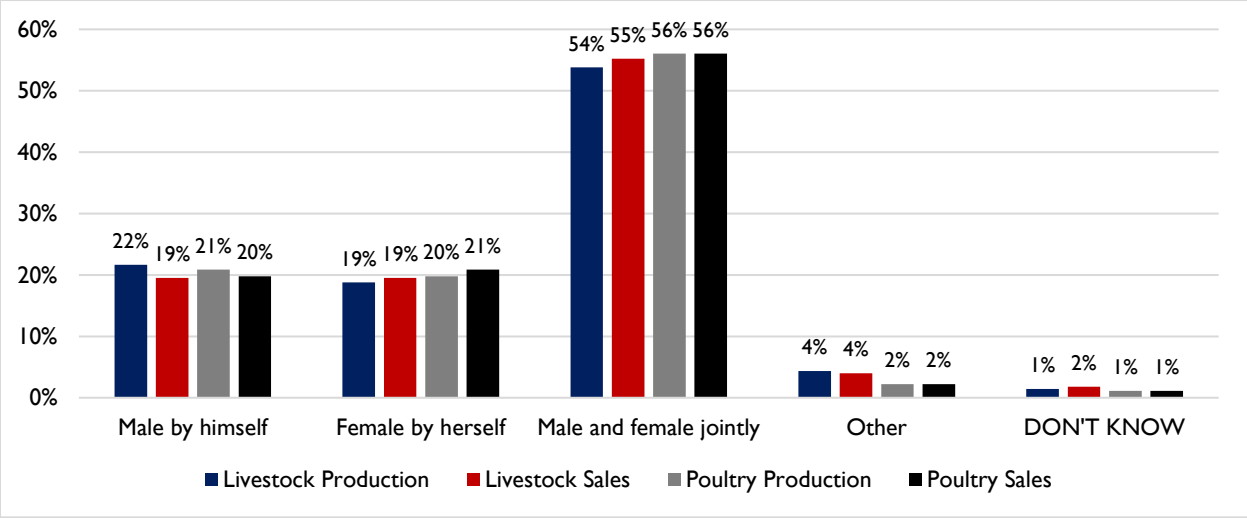
Household Decision-Making: Poultry

- Approximately three-fifths of midterm poultry producers reported that women and men made household decisions jointly regarding the production and sale of poultry, while around one-fifth each reported that women were the primary decision-makers or that men were the primary decision-makers (Figure 33).

Significant Differences

- Men were much more likely than women to believe that women and men made decisions jointly regarding the production and sale of poultry.
- Men were more likely than women to believe that men were the primary decision-makers, whereas women were more likely than men to believe that women were the primary decision-makers regarding livestock production and sales ($p<0.001$).

Figure 33: Household Decision-Making Regarding Livestock and Poultry Production and Sales (Midterm)



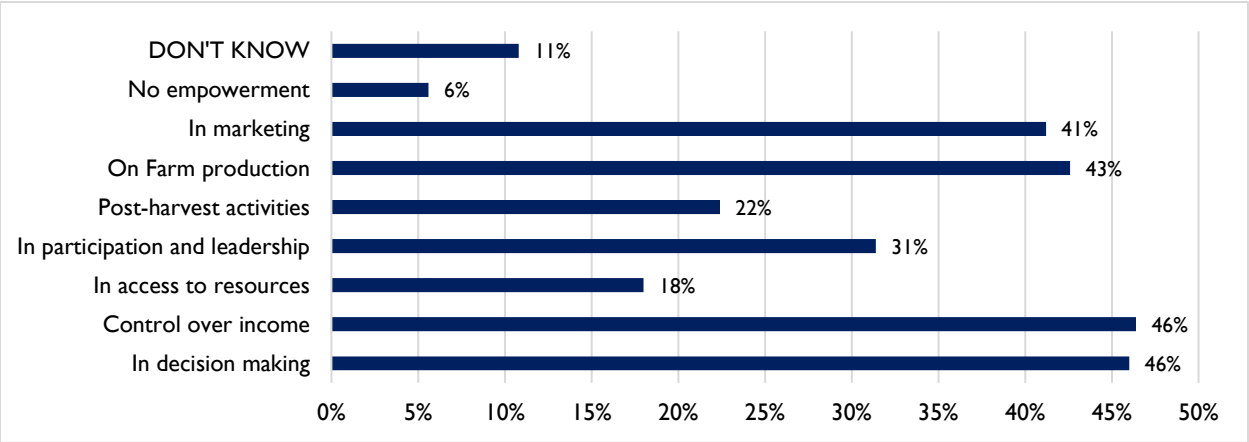
Empowerment

- Between 40-50 percent of midterm respondents reported being empowered by VCA's training and TA in marketing (41 percent), on-farm production (43 percent), control over income (46 percent), and decision-making (46 percent), whereas fewer than 10 percent of respondents reported no empowerment stemming from VCA's support (Figure 34).

Significant Differences

- Men were more likely than women to believe that VCA support has empowered them in post-harvest activities and on-farm production ($p<0.001$).
- Non-youth were more likely than youth to believe that VCA helped empower them in decision-making ($p<0.01$) and participation and leadership ($p<0.05$).
- Respondents in Amhara were more likely than respondents in the other three regions to believe that VCA empowered them in decision-making ($p<0.01$).
- Respondents in Oromia were more likely than respondents in the other three regions to believe that VCA empowered them concerning control over income ($p<0.05$).
- Respondents in Amhara were likely than respondents in SNNPR to believe that VCA empowered them concerning post-harvest activities ($p<0.001$).

Figure 34: Empowerment from VCA Support (Midterm)



3.12.2 Endline

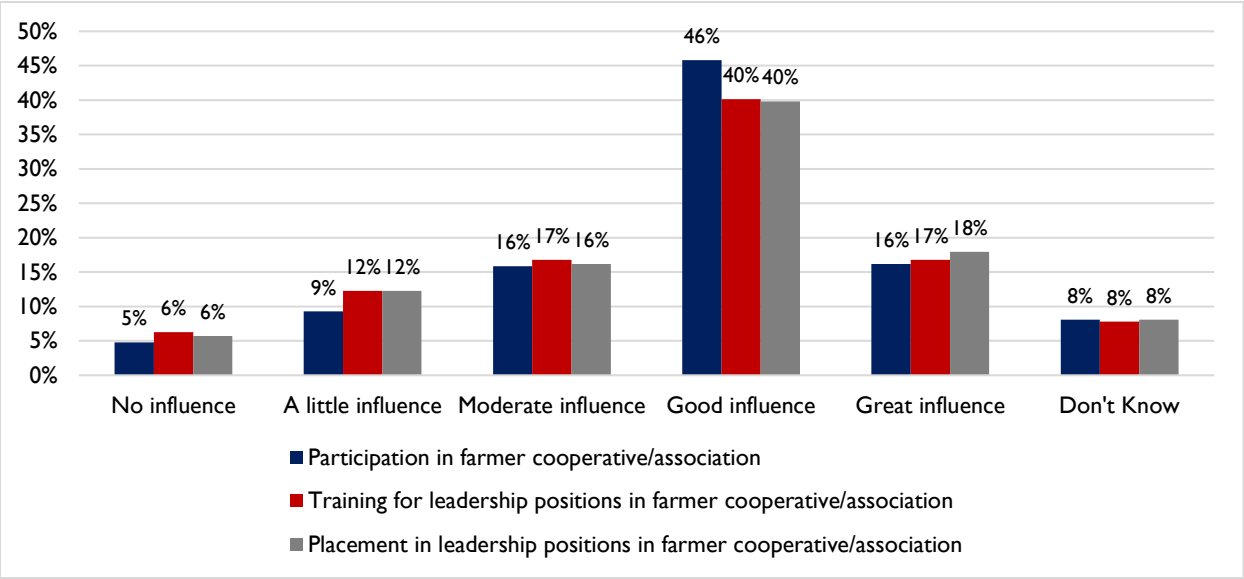
Women and Youth in Farmer Cooperatives/Associations

- Approximately three-fifths of endline cooperative/association members said that VCA positively influenced both women's participation in farmer cooperatives/associations and training for and placement in leadership positions in their farmer cooperative/association to a good or great extent (Figure 35).
- A similar percentage of endline cooperative/association members said that VCA positively influenced youth participation and opportunities in their farmer cooperative/association to a good or great extent.
- Almost all endline cooperative/association members said that VCA had at least some influence on women's participation and leadership training and placement and youth participation and opportunities in their farmer cooperative/association.

Significant Differences

- Women were more likely than men to believe that VCA assistance had a great influence on both youth participation and opportunities in their farmer cooperative/association ($p<0.05$).
- Respondents in Oromia, Amhara, and SNNPR were much more likely than respondents in Tigray to say that VCA assistance contributed to an increase in women's participation, leadership training, and leadership placement and in youth participation and opportunities in their cooperative/association ($p<0.001$).

Figure 35: VCA Influence on Women in Farmer Cooperative/Association (Endline)



Women and Youth Trainings Received

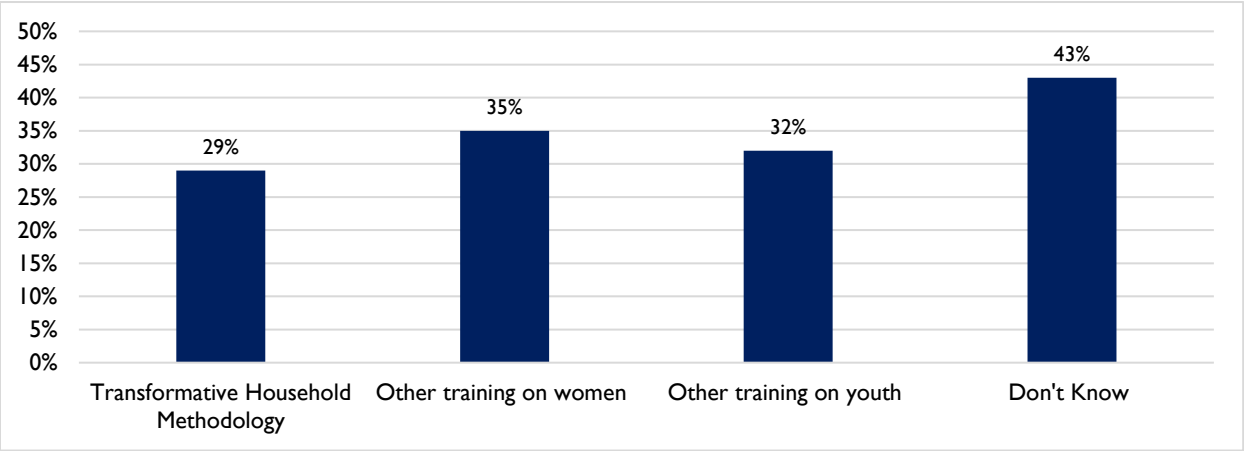
- More than two-fifths of endline survey respondents did not know whether they have received trainings on topics related to women and/or youth from VCA (Figure 36).
- Nearly three out of ten respondents said they received training on the Transformative Household Methodology (THM) and about one-third reported having received other trainings on women and youth.[6]

Significant Differences

- More respondents in Oromia, SNNPR, and Tigray reported receiving THM training than respondents in Amhara ($p<0.05$).
- More respondents in Oromia and Amhara reported receiving other trainings related to women than respondents in Tigray ($p<0.001$).
- More respondents in Oromia reported receiving trainings related to youth than farmers in Amhara ($p<0.001$).
- Respondents who received the most VCA support in the coffee and MLA VCs were more likely to receive other trainings related to women ($p<0.05$).
- Respondents in the coffee, maize, and chickpea VCs were more likely to receive other trainings related to youth than respondents in the coffee, dairy, or MLA VCs ($p<0.01$)
- Respondents who received the most VCA support in the poultry VC were less likely to receive other trainings related to youth ($p<0.05$).

[6] THM is a participatory approach used to spark dialogue within households and communities. THM looks at both productive and household responsibilities and identifies whether there are household members – typically women and girls – who are responsible for a disproportionate amount of work.

Figure 36: Women/Youth Training Received (Endline)



Women/Youth Trainings' Contributions

- Over 90 percent of endline survey respondents agreed or strongly agreed that the women's training provided by VCA contributed to:
    - A more equitable sharing of household decision-making about financial matters and agriculture or agri-business activities between women and men (Figure 37),
    - A more equitable sharing of domestic tasks between women and men (Figure 37),
    - A more equitable sharing of agriculture/agri-business tasks between women and men (Figure 37),
    - Increased opportunities for women to participate in agriculture/agri-business activities (Figure 37), and
    - Increased leadership opportunities for women in agriculture/agri-business activities (Figure 37).
- Over 90 percent of endline survey respondents agreed or strongly agreed that the youth training provided by VCA contributed to:
    - Increased opportunities for youth to participate in agriculture/agri-business activities (Figure 38), and
    - Increased leadership opportunities for youth in agriculture/agri-business activities (Figure 38).

Significant Differences

- Respondents in Oromia were more likely than respondents in the other three regions to agree that VCA's women's training had contributed to a more equitable sharing of decision-making about financial matters between women and men in their households ($p<0.01$).

Figure 37: How VCA Women's Training Contributed to Increased Equity Between Men and Women (Endline)

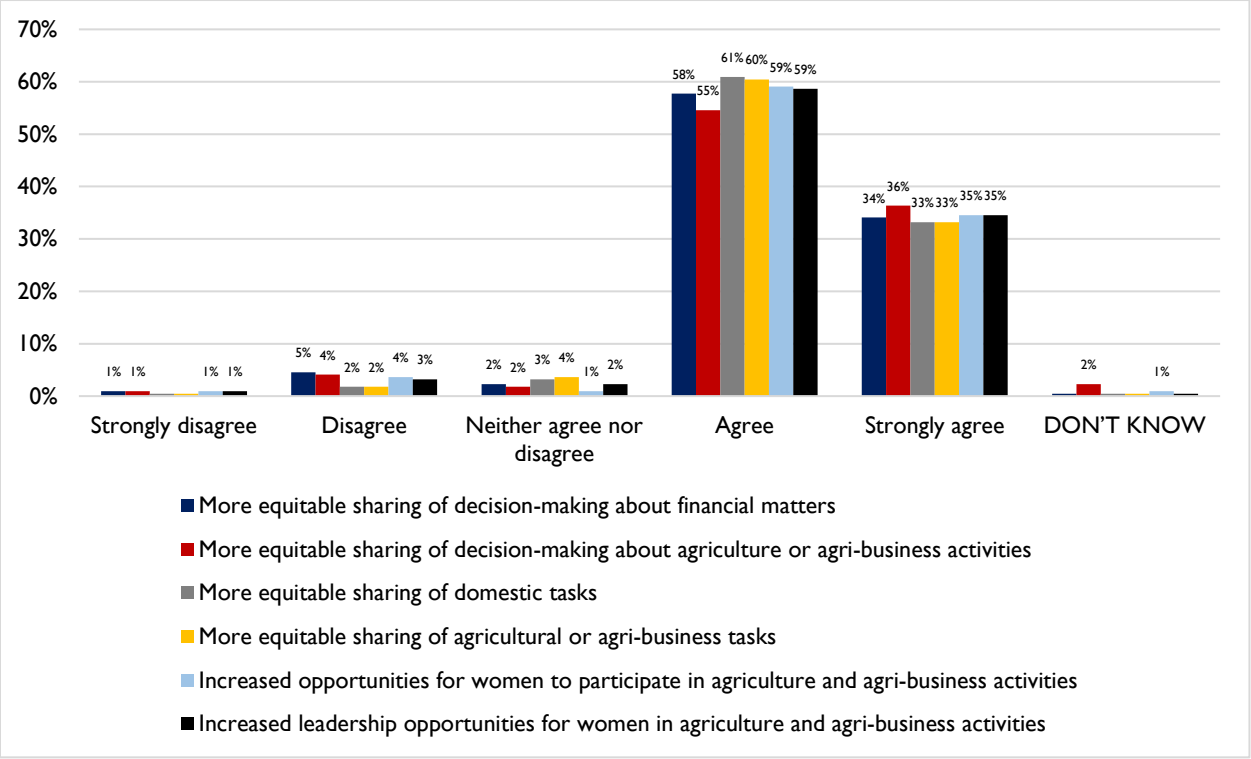
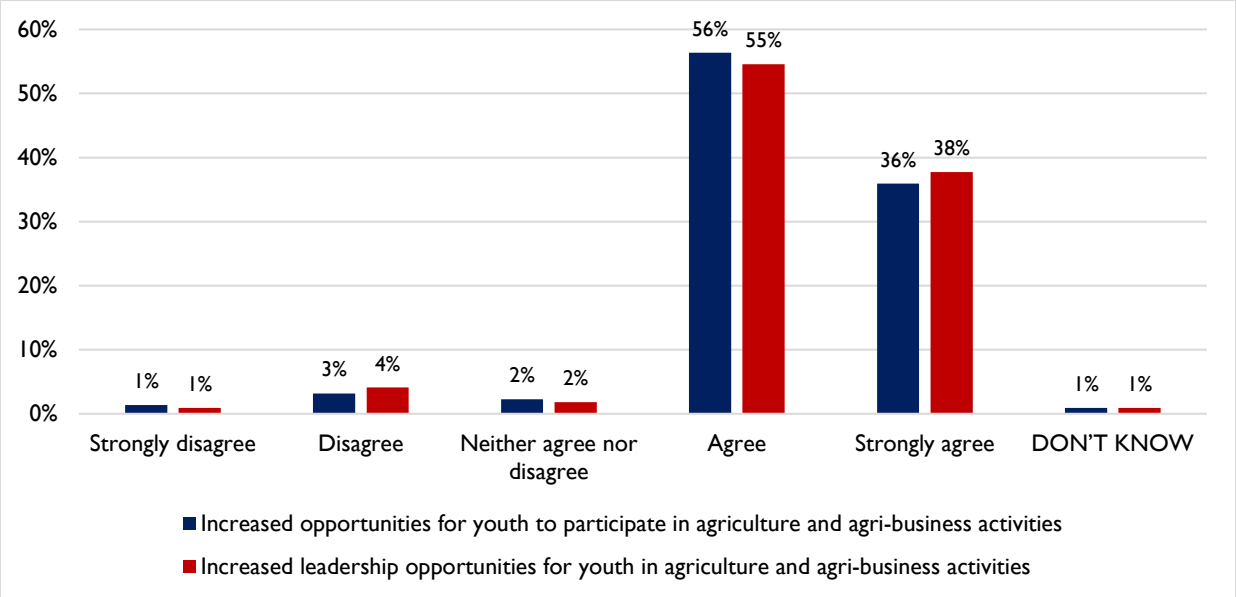


Figure 38: How VCA Women's Training Contributed to Increased Opportunities for Youth (Endline)



3.12.3 Conclusions

- VCA beneficiary farmers largely agree that women and men jointly make decisions about the production and sale of crops and livestock within farmer households.
- VCA training on gender empowerment issues contributed at the midterm to empowering beneficiary farmers in areas such as marketing, production, control over income, and intra-household decision-making, although this effect was reported in fewer than one-half of training participants.
- By the endline, however, substantial majorities of beneficiary farmers who participated in Activity gender and youth empowerment trainings claimed that the trainings had improved women's and youth's participation and leadership opportunities within their farmer cooperatives and their overall empowerment as measured by things like opportunities to participate and take leadership roles agricultural and agribusiness production and (for women) sharing of domestic and agricultural production tasks with men and improved intra-household decision-making.

3.13 NUTRITION

3.13.1 Midterm

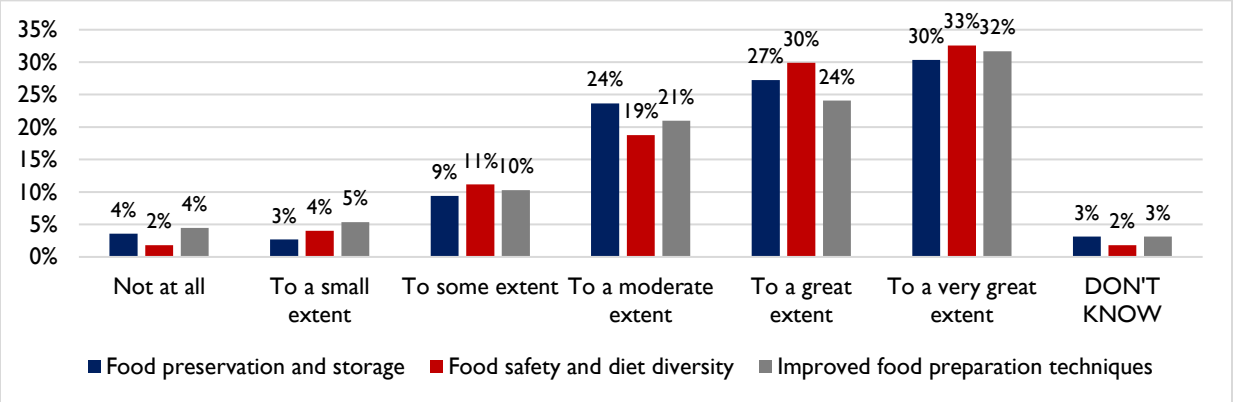
Nutrition Training

- Nearly half of midterm respondents said they attended a VCA training program related to nutritional habits on food preservation and storage, food safety and diet diversity, and improved food preparation techniques (Figure 39).
- Between one-half and two-thirds of these same respondents said each of these three types of trainings helped them improve their household's access to safe and diverse foods to a great or very great extent.

Significant Differences

- Non-youths attended VCA trainings related to nutritional habits more than youths ($p<0.01$).
- Respondents in Amhara and Oromia participated in VCA trainings on nutritional habits more than respondents in Tigray and SNNPR ($p<0.001$).
- Respondents in Amhara, SNNPR, and Tigray were more likely than respondents in Oromia to say that VCA's nutrition training helped them improve their household's access to safe and diverse foods ($p<0.001$).

Figure 39: Extent to Which VCA Nutrition Training Improved Access to Safe and Diverse Foods (Midterm)



Nutrition Behavior Change

- Nearly all (97 percent) of midterm respondents who received VCA nutrition support said that the support stimulated a behavior change in their and their children's nutrition and eating habits.

Significant Differences

- Respondents in Tigray were more likely that respondents in other regions to claim that VCA support stimulated behavioral changes in nutrition and eating habits ($p<0.001$).

3.13.2 Endline

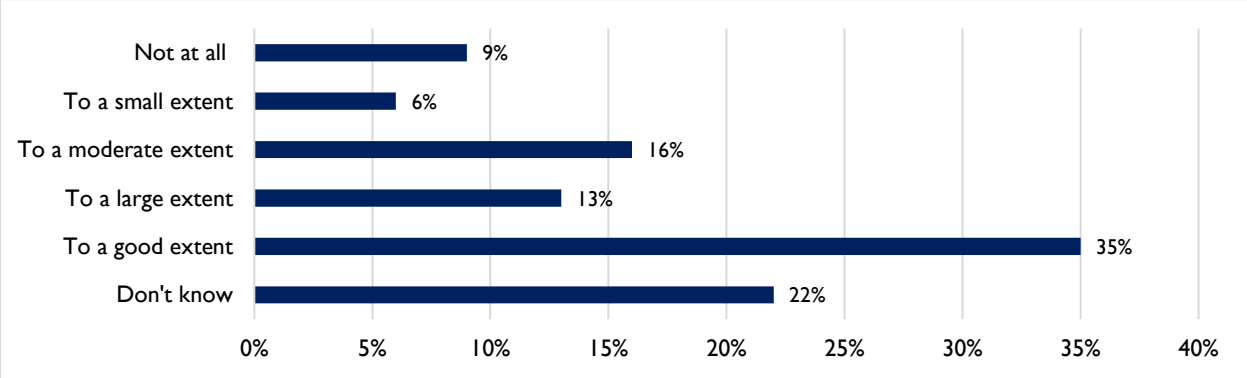
Nutritional Status

- Just short of one-half of endline respondents said that VCA is working to improve the nutritional status of women and children to a good or large extent (Figure 40).

Significant Differences

- Respondents in Tigray, Oromia, and Amhara were more likely than farmers in SNNPR to say that VCA is working to improve the nutritional status of women and children ($p<0.001$).

Figure 40: Extent to Which VCA Is Working to Improve the Nutritional Status of Women and Children (Endline)



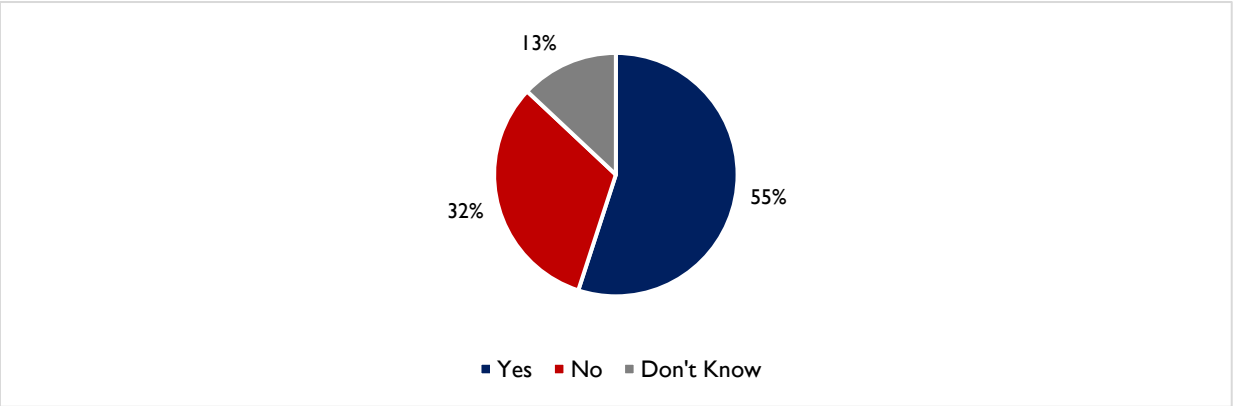
Nutritional Training Participation

- More than half of endline respondents said they have participated in training programs related to nutritional habits provided by VCA, and nearly one-third said they have not (Figure 41).

Significant Differences

- Respondents in Oromia participated in nutritional habits training programs more than respondents in the other three regions surveyed ($p<0.001$).

Figure 41: Participation in VCA Training Programs Related to Nutritional Habits (Endline)



Nutritional Training Effects

- Nine of ten endline respondents reported that VCA nutritional training improved each of the following to a good or great extent in their households: access to diverse and nutritious foods; behavior change in the eating habits of the children, women, and adults; diversified and nutritious diets eaten by children, women, and adults; and the nutritional status of children, women, and adults.

Significant Differences

- Respondents in Amhara, Oromia, and SNNPR were more likely than respondents in Tigray to agree that:
    - Household access to diverse and nutritious foods had improved after VCA's nutritional training ($p<0.05$),
    - Nutritional training stimulated behavior change in the eating habits of women and adults ($p<0.01$),
    - Children, women, and adults ate more diversified and nutritious diets because of the nutritional training ($p<0.01$), and
    - Nutritional training improved the nutritional status of children and adults ($p<0.05$).
- Respondents in Amhara and Oromia were more likely than farmers in SNNPR and Tigray to agree that the nutritional training stimulated behavior change in the eating habits of children ($p<0.01$) and improved the nutritional status of women in their households ($p<0.05$).

3.13.3 Conclusions

- VCA beneficiary farmers who participated in nutritional trainings increased their access to safe and nutritious foods, adopted improved nutritional habits, including the consumption of a more diverse and healthy diet for themselves and their children, and improved their and their children's nutritional status.
- While reported nutritional outcomes were generally positive at the midterm, they had become significantly more positive by the endline.

3.14 INCOME DIVERSIFICATION

3.14.1 Endline

Number and Diversity of Income-Generating Activities

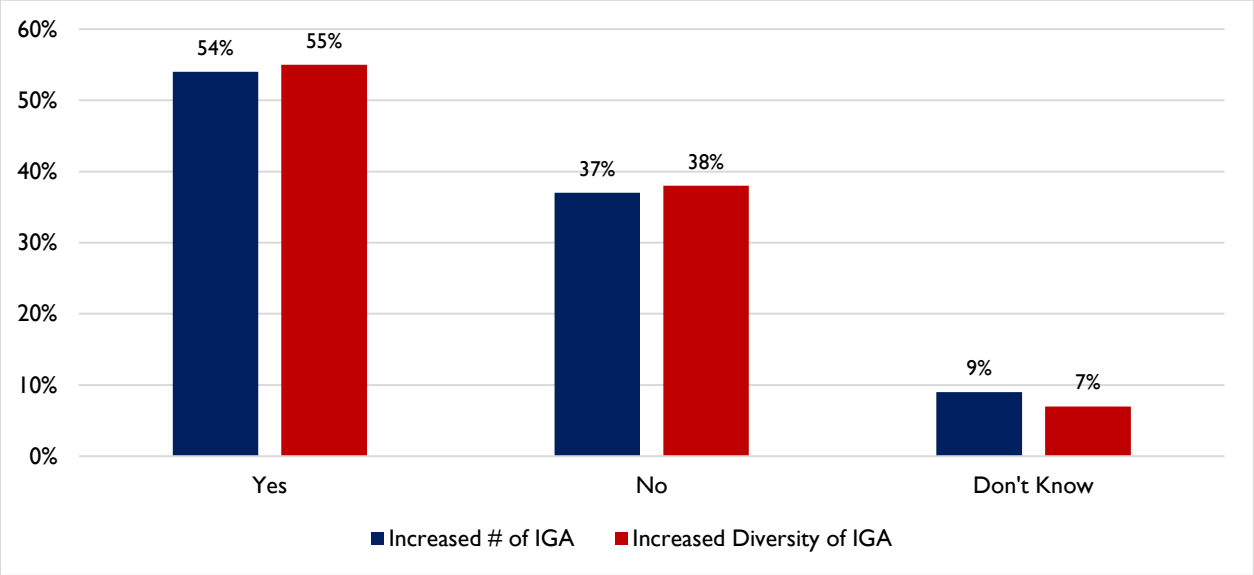
- Since receiving VCA support, more than half of endline respondents have increased both the number and diversity of IGAs in their household (Figure 42).

- Of those who increased the diversity of IGAs, 76 percent increased their diversity of non-agriculture IGAs.

Significant Differences

- Men were more likely than women to have increased the number of IGAs ($p<0.05$).
- Respondents in the maize, chickpea, coffee, or dairy VCs were more likely to increase the number of IGAs than respondents in the poultry and MLA VCs ($p<0.05$).

Figure 42: Increased IGAs After Receiving VCA Assistance (Endline)



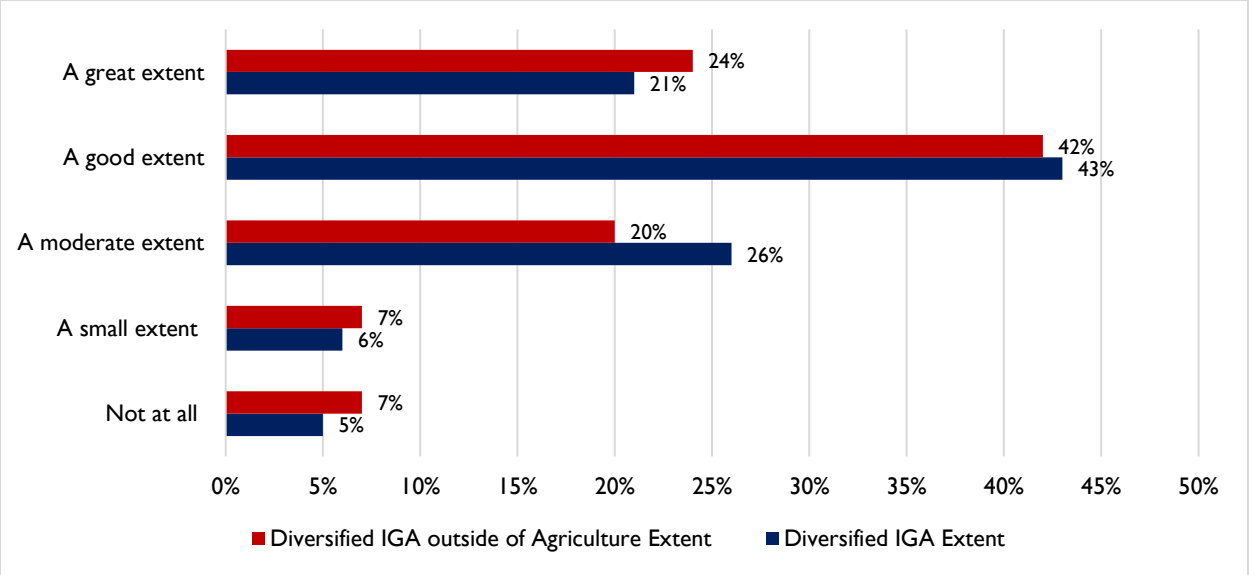
Increased/Diversified Income Attributed to VCA

- Of those endline respondents who had increased and/or diversified the number of IGAs, slightly less than two-thirds in each case attributed the increase/diversification to a good or great extent to VCA support (Figure 43).

Significant Differences

- Men were more likely than women to attribute the increased number/diversity of IGAs to VCA support ($p<0.05$).
- Respondents in Amhara were more likely to attribute the increased number/diversification of IGAs to VCA support ($p<0.05$).

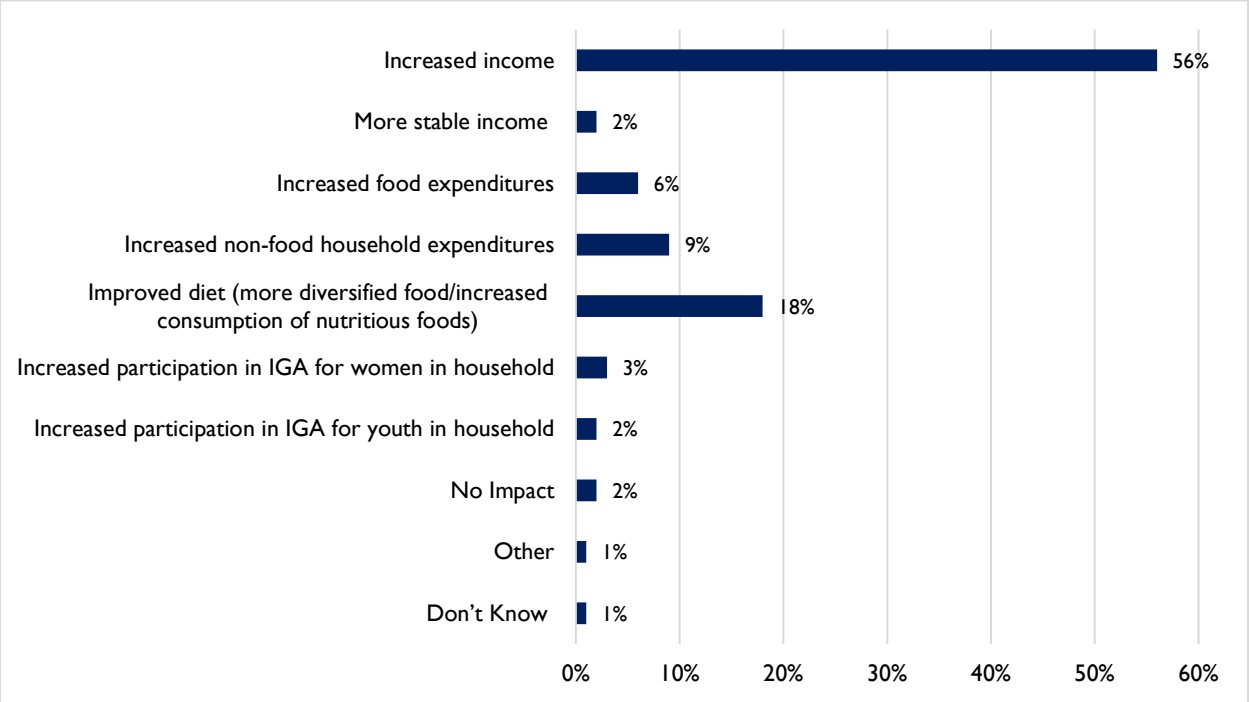
Figure 43: Extent of Increased/Diversified IGAs Attributed to VCA (Endline)



Effects on Households

- Over one-half of endline respondents said the primary effect of increasing the number/diversity of IGAs was an increase in household income followed at a distance by an improved diet (Figure 44).

Figure 44: IGA Effects on Household (Endline)



3.14.2 Conclusions

- VCA farmer beneficiaries who received support in IGA diversification successfully increased the number and/or diversity of their household IGAs, albeit by a small majority. Overall, those who did diversify their IGAs attributed it to VCA support.
- Those beneficiary farmers who did diversify their IGAs did so predominantly in non-agriculture IGAs.
- The primary benefit to IGA diversification is increased income with an improved diet coming in a distant second.

3.15 COOPERATIVE/ASSOCIATION SUPPORT

3.15.1 Endline

Cooperative/Association Membership

- Nearly two-thirds of endline respondents belong to a cooperative or association (Figure 45).

Significant Differences

- Men were more likely to be members of cooperatives or associations than women ($p<0.01$).
- Respondents in the dairy, maize, chickpea, and coffee VCs were more likely to be a cooperative or association member than respondents in the poultry or MLA VCs ($p<0.001$).

Cooperative/Association Assistance

- Nearly three-fourths of cooperative/association members in the endline survey received assistance from VCA to improve their cooperative's/association's operating capacity (Figure 46).

Significant Differences

- Cooperative/association members in Oromia and SNNPR were more likely to receive VCA assistance, than members in Tigray and Amhara ($p<0.001$).

Figure 45: Farmers Belong to Cooperative (Endline)

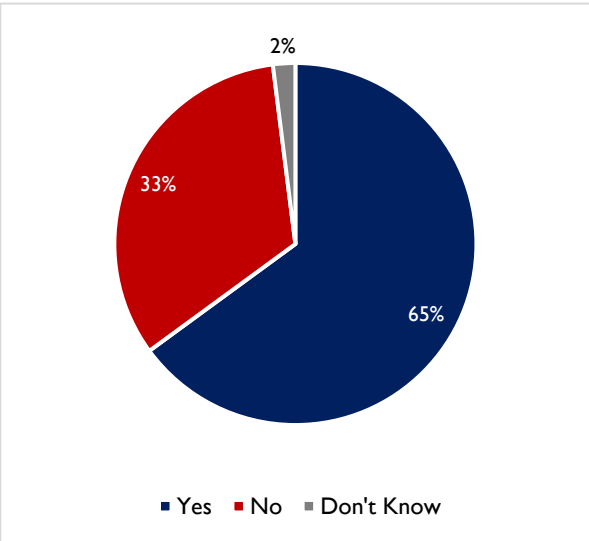
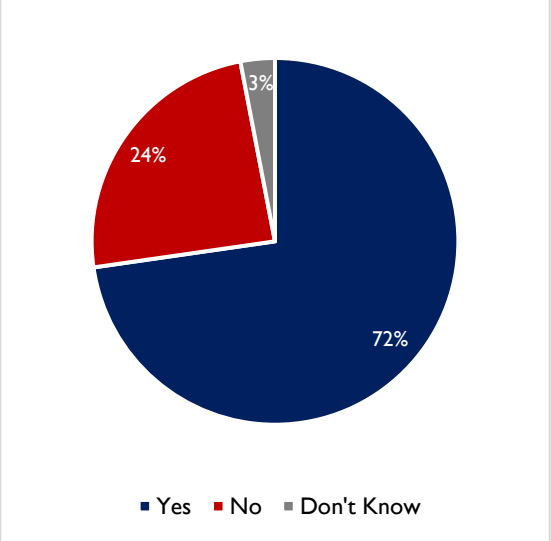


Figure 46: Cooperatives Get VCA Assistance (Endline)



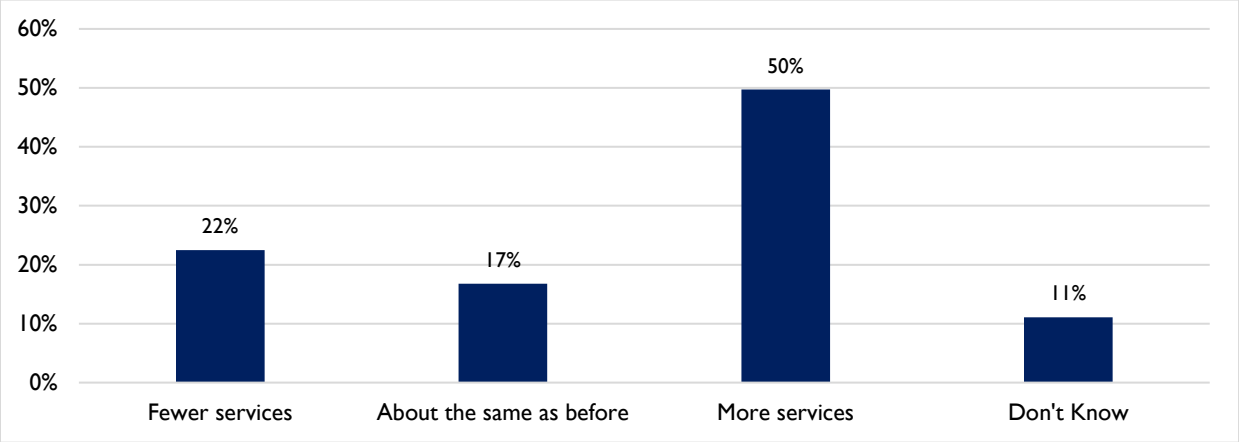
Level of Cooperative/Association Services

- Half of the endline cooperative/association members reported that their cooperative or association has provided more services since receiving VCA support (Figure 47).

Significant Differences

- Cooperatives/associations in Oromia and SNNPR were more likely to offer more services after receiving VCA support than cooperatives/associations in Amhara and Tigray ($p<0.01$).

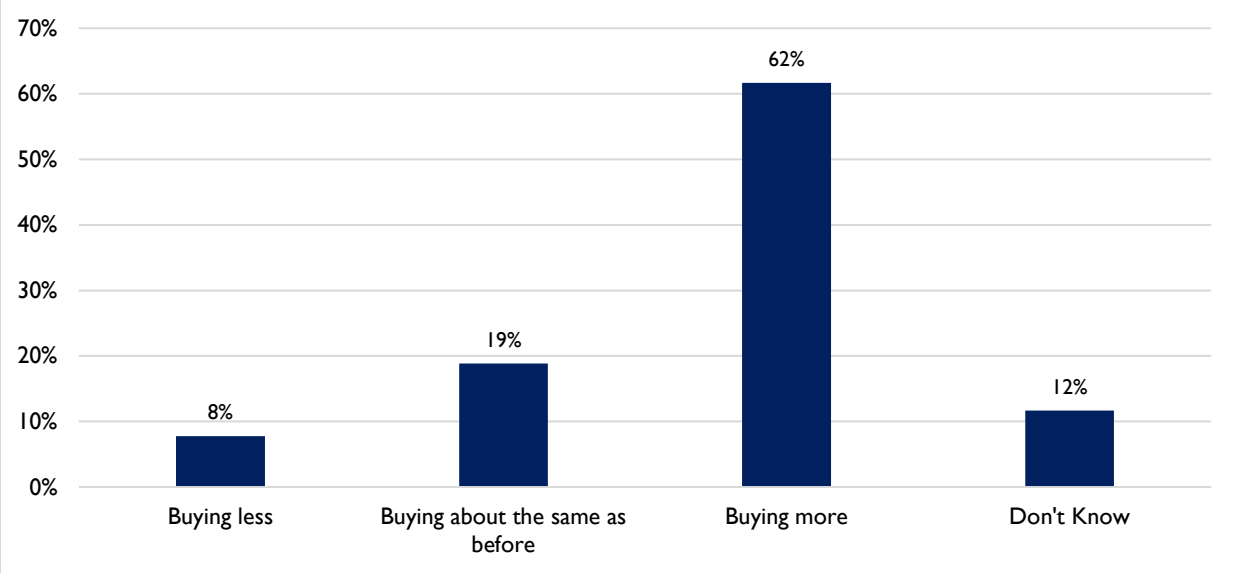
Figure 47: Provision of Cooperative/Association Services Since VCA Assistance (Endline)



Cooperative/Association Purchases From Members

- More than half of the endline cooperative/association members reported that their cooperative/association is buying more from its members since receiving VCA support (Figure 48).

Figure 48: Amount of Production Bought From Cooperative/Association Members Since VCA Support (Endline)



Significant Differences

- Cooperatives/associations in Oromia and SNNPR buy a greater amount of member production than cooperatives/associations in Amhara and Tigray ($p<0.01$).
- Cooperatives/associations in the MLA, maize, chickpea, and coffee VCs bought more of their members' production than those in the poultry and dairy VCs ($p<0.01$).

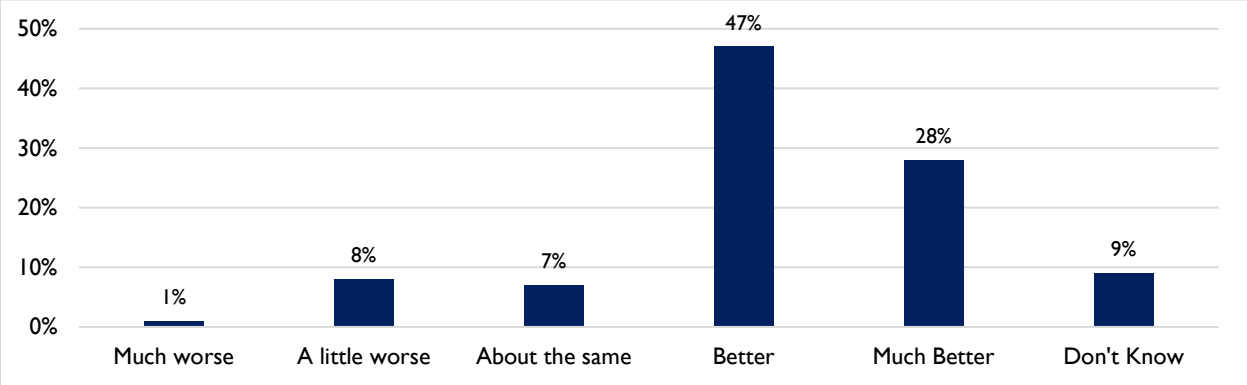
Operations of Cooperatives/Associations

- Three-fourths of cooperative/association members reported that their cooperative/association is operating better or much better since receiving assistance from VCA (Figure 49).

Significant Differences

- Cooperative/association members in Oromia, Amhara, and SNNPR were more likely to report that their cooperative/association had improved their operations than respondents in Tigray ($p<0.001$).

Figure 49: Operations of Cooperatives Since Receiving VCA Support (Endline)



3.15.2 Conclusions

- Those farmer cooperatives or associations that received VCA capacity-building support by and large improved the quality of services offered to their members, including purchasing more produce from them, and were operating better after receiving Activity capacity-building support.

3.16 COVID-19

3.16.1 Midterm

COVID-19 Effects on Farmers

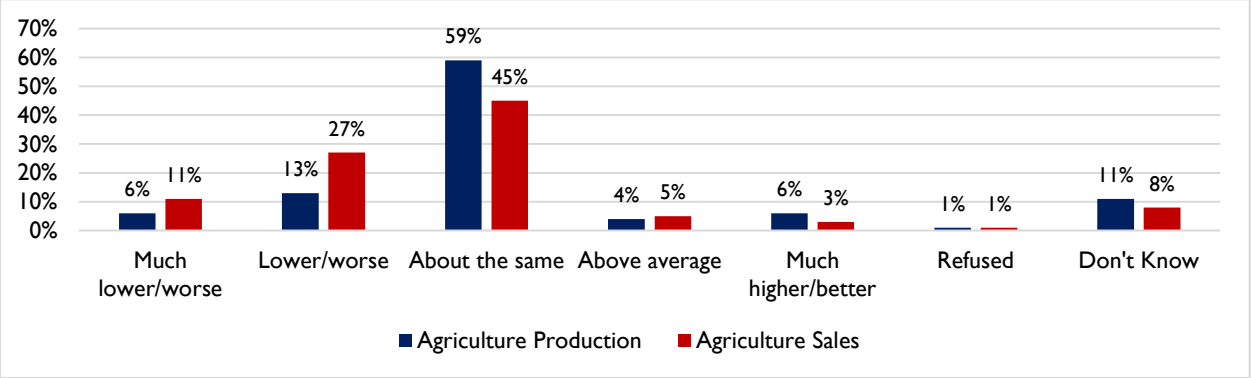
- More than half of midterm respondents reported that, despite the health crisis related to COVID-19, their agricultural production has remained about the same, while fewer than 20 percent said it had worsened (Figure 50).
- Forty-five (45) percent of midterm respondents reported that, despite the health crisis related to COVID-19, their ability to sell their agricultural products has remained the same compared to 38 percent who said their ability to sell agricultural products was either somewhat or much worse.

Significant Differences

- Youth were more unsure of how COVID-19 affected their agricultural production compared to non-youth ($p<0.05$).

- Youth were more likely to report that their ability to sell products during the COVID-19 pandemic was much worse, whereas non-youth farmers were more likely to report their ability to sell products was only somewhat worse ($p<0.05$).

Figure 50: COVID-19 Effect on Agriculture Production and Agriculture Sales (Midterm)



3.16.2 Endline

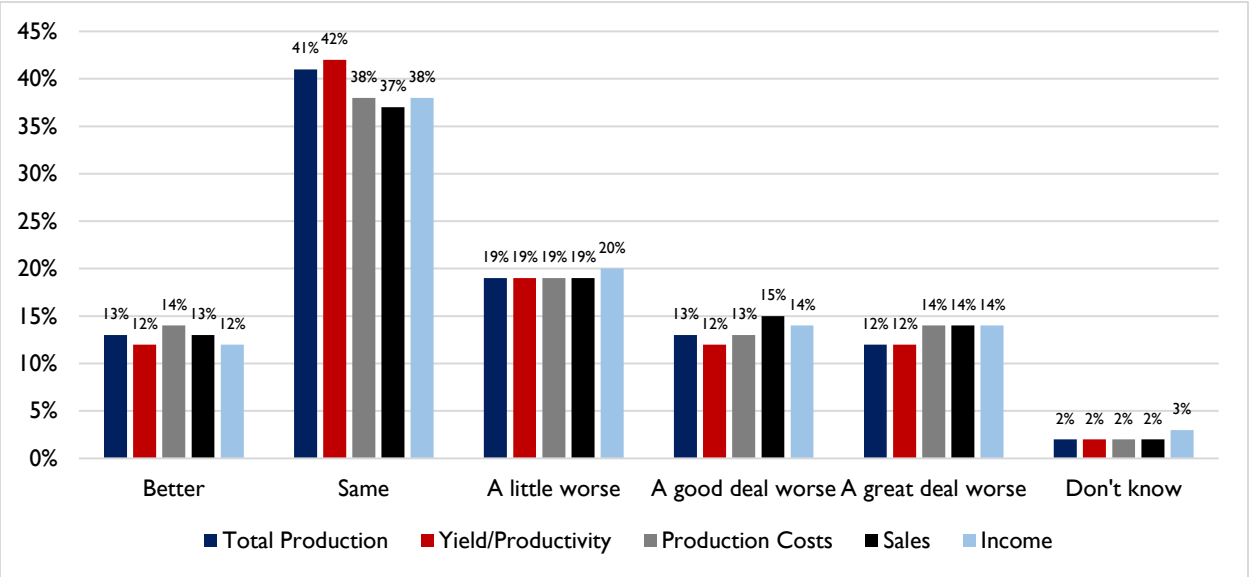
COVID-19 Effects on Farmers

- Two-fifths of endline respondents reported that, despite COVID-19, their total production, yields/productivity, production costs, sales, and income remained the same (Figure 51).
- Nearly one-half of the respondents further reported that their total production, yields/productivity, production costs, sales, and income had worsened due to COVID-19.

Significant Differences

- Respondents in Tigray were more likely to experience worsened total production, productivity, production costs, sales, and income due to COVID-19 than other regions ($p<0.01$).
- Women were more likely to report that COVID-19 had negatively affected yields/productivity, whereas men felt that productivity was the same or better ($p<0.01$).
- Women were more likely than men to report that COVID-19 had worsened production costs and income ($p<0.05$).
- Respondents in the poultry VC reported that COVID-19 had worsened their production costs and incomes more so than in the other VCs ($p<0.05$).
- Respondents in the poultry, dairy, or maize VCs were more likely to report that COVID-19 had worsened their sales than respondents in the other VCs ($p<0.05$).

Figure 51: COVID-19 Effect on Agriculture (Endline)



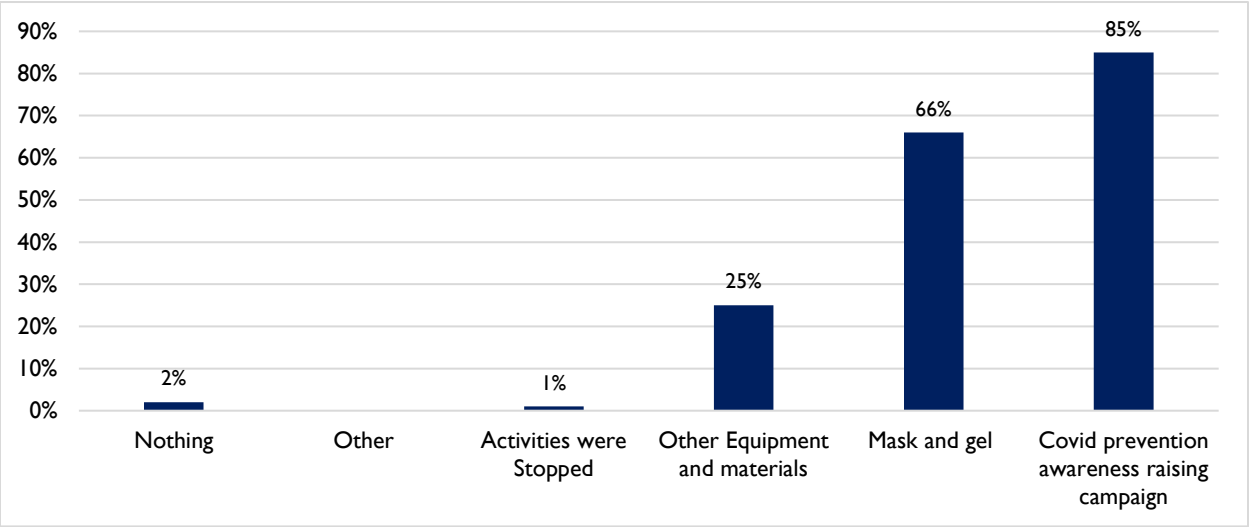
VCA COVID-19 Support

- More than half of endline respondents reported that VCA has provided them with support to help deal with COVID-19, with most endline farmers receiving COVID-19 prevention awareness campaign support or mask and hand sanitizer supplies (Figure 52).

Significant Differences

- Respondents in Tigray were less likely to receive information from VCA about other forms of support for dealing with COVID-19 compared to respondents in other regions ($p<0.001$).
- Respondents in the maize, chickpea, and coffee VCs were more likely to receive information about other forms of support for COVID-19 respondents in the dairy, MLA, and poultry VCs ($p<0.01$).
- Respondents in the coffee or dairy VCs were more likely to receive COVID-19 prevention awareness campaign support than respondents in the other five VCs ($p<0.01$).
- Respondents in the maize and chickpea VCs were less likely to receive COVID-19 prevention awareness campaign support ($p<0.05$) and respondents in Amhara and Tigray and in the chickpea VC were more likely to receive support for mask and hand sanitizer supplies ($p<0.05$).

Figure 52: Type of COVID-19 Support Received From VCA (Endline)



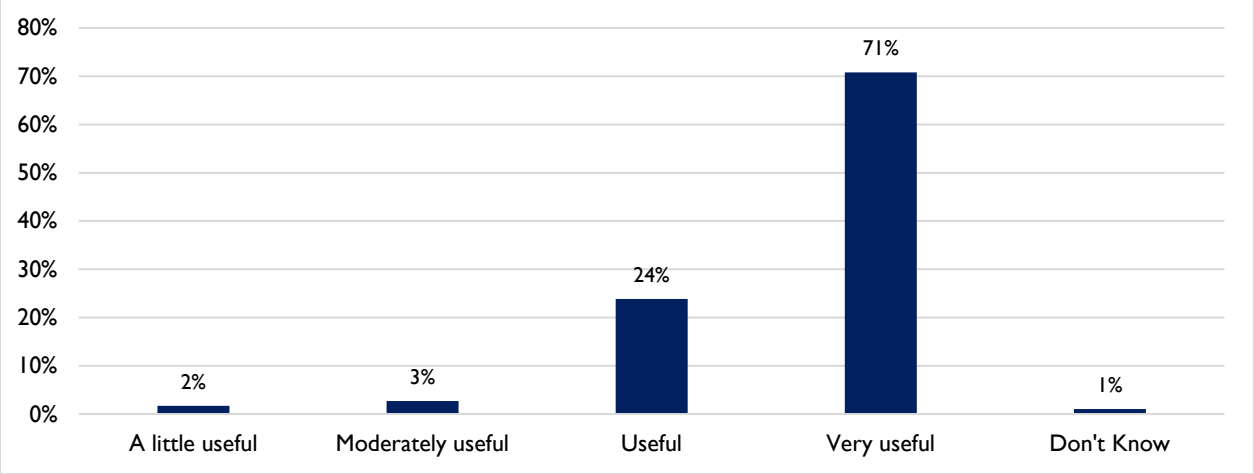
Usefulness of VCA COVID-19 Support

- Ninety-five (95) percent of endline respondents found VCA's COVID-19 support to be useful or very useful (Figure 53).

Significant Differences

- Respondents in Amhara, Tigray, and SNNPR were more likely to find the COVID-19 support useful or very useful, whereas farmers in Oromia were less likely to find the support useful ($p<0.001$).

Figure 53: Usefulness of VCA COVID-19 Support (Endline)



3.16.3 Conclusions

- A plurality to a majority of VCA farmer beneficiaries have not been adversely affected by the COVID-19 pandemic in terms of their production costs, production, yields, sales, and income. Those who are either a good deal or great deal worse are more or less matched by those who claim to be better off. The sum of those who are a good deal or great deal worse is still less than those who are no better or worse off as a result.
- Nonetheless, the (approximately) one-half of beneficiaries who received VCA COVID-19 support have, on balance, benefited significantly from that support.

3.17 POLITICAL/CIVIL UNREST

3.17.1 Endline

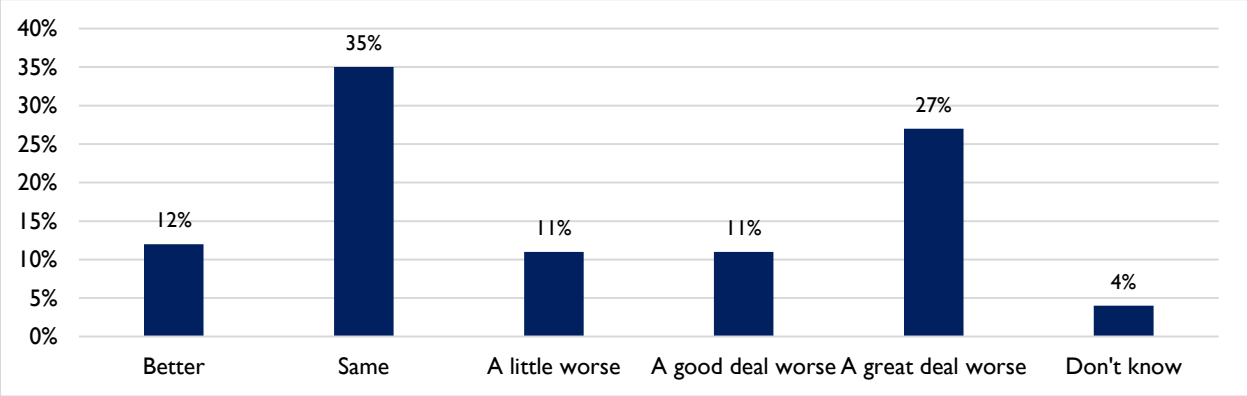
Political and Civil Effects

- Thirty-eight percent of endline respondents said that political or civil instability or violence had worsened their agriculture or agri-business activity a good or great deal compared to approximately one-third who said it had no effect (Figure 54).

Significant Differences

- Political or civil instability or violence negatively affected the agriculture or agri-business activity of farmers in Tigray the most relative to the other three regions ($p<0.001$).

Figure 54: Effects of Political/Civil Unrest on Agriculture/Agribusiness (Endline)



3.17.2 Conclusions

- Political and civil unrest has adversely affected about the same percentage of VCA beneficiary farmers as those who are either no worse off or better off than before they received VCA support.