

Bayer Crop Science: DKsilos Follow-Up Study

Mexico & Honduras



Welcome To Your 60dB Results

We enjoyed following up with 152 DKsilos cattle ranchers whom we spoke to in the baseline study – they had a lot to say!

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Research Design

Bayer Crop Science aims to learn about the impact that DKsilos is having on beneficiary cattle ranchers in Mexico and Honduras, and how their experiences change over time.





60 Decibels set out to learn more about this through two Lean Data studies: a baseline study conducted in 2023 and a follow-up study conducted a year later. This report has the results, analysis, and insights from the follow-up study, conducted between January and March 2024.

Listening to cattle ranchers' voices during the follow-up study provided key insights into their journey with DKsilos over the last 12 months.

Lean Data Study	Baseline	Follow-Up
Sample Size	400 cattle ranchers	152 cattle ranchers (subset of respondents from baseline)
Rancher Profile	✓	
Silage and Livestock Production	✓	✓
Cattle Health	✓	✓
Impact Performance	✓	✓
Livelihood Stress & Confidence		✓
Training Experience		✓
Satisfaction with DKsilos & Technical Advisory	✓	✓
Climate Resilience		✓

Performance Snapshot

At the follow-up, cattle ranchers report deeper impact and higher satisfaction with DKsilos, compared to the baseline.

<p>Way of Farming</p> <p>61%</p> <p>'very much improved' (vs. 45% at baseline)</p> 	<p>Cattle Health</p> <p>69%</p> <p>'very much improved' (vs. 52% at baseline)</p>	<p>Impact</p> <p>44%</p> <p>quality of life 'very much improved' (vs. 29% at baseline)</p> 	<p>Self-Reported Outcomes</p> <ul style="list-style-type: none"> • 55% talk about increased income • 23% say their cattle are healthier • 20% report reduced stress 	<p>Cattle Rancher Voice</p> <p>"The yield of the DKsilos seed is very good and I think that there is no one around here that can beat it." - Male, Mexico</p> <p>Data Summary</p> <p>DKsilos Performance: 152 cattle rancher phone interviews between January to March 2024 in Mexico & Honduras.</p> <p>Quintile Assessment compares Project Performance with 60dB Farmer as Customer Benchmark comprised of 25 companies, 10 countries, and 6209 farmers. Full details can be found in Appendix.</p>
<p>Net Promoter Score®</p> <p>74</p> <p>on a -100 to 100 scale (vs. 69 at baseline)</p> 	<p>Challenges</p> <p>18%</p> <p>report challenges (vs. 18% at baseline)</p> 	<p>Livestock Production</p> <p>38%</p> <p>livestock production 'very much increased' (vs. 33% at baseline)</p> 	<p>Money Earned</p> <p>26%</p> <p>'very much increased' (vs. 20% at baseline)</p> 	<p>Performance vs. 60dB Benchmark</p>  <ul style="list-style-type: none"> • TOP 20% • TOP 40% • MIDDLE • BOTTOM 40% • BOTTOM 20%

Top Insights

1 Overall, cattle ranchers report deeper impact over time, with more pronounced farm improvements in Honduras.

At the follow-up, 61% of cattle ranchers report significant improvements in their way of farming because of DKsilos, which is higher than at the baseline (45%). Similarly, they report 'very much improved' cattle health (69%), which is also an uptick since the baseline (52%). Improvements in corn silage and livestock production at the follow-up is largely driven by Honduran cattle ranchers reporting a significant increase across both dimensions, compared to their Mexican counterparts. See pages [11](#) - [18](#).

4 At the follow-up, cattle ranchers report higher satisfaction with DKsilos than at baseline.

DKsilos' Net Promoter Score® of 74 at the follow-up is excellent and higher than at the baseline (69). Cattle ranchers continue to be satisfied because of the DEKALB seeds and the high-quality of technical assistance. Similarly, the technical assistance NPS has increased from 52 at the baseline to 61 at the follow-up. However, this result varies by country: Mexican cattle ranchers appear more satisfied with the technical advisory offered than their Honduran counterparts. See pages [28](#) - [29](#), [36](#) - [37](#).

2 Honduran cattle ranchers are more likely to report significant income and quality of life improvements than their Mexican peers.

47% of Honduran cattle ranchers at the follow-up report a significant increase in their income, compared to 16% in Mexico. Similarly, 67% report 'very much improved' quality of life (vs. 32% in Mexico), primarily driven by increased income. Confidence to invest in farming is also much higher in Honduras. However, Mexican cattle ranchers are more likely to report 'very much decreased' stress due to DKsilos than their Honduran counterparts. See pages [20](#) - [26](#).

5 Most cattle ranchers attribute their recovery and preparedness to face climate shocks to DKsilos.

Of those who have recovered from a climate shock (most commonly a drought), 80% of cattle ranchers say that DKsilos had a positive effect on their recovery. 76% say they feel more prepared for future shocks, largely due to the useful technical assistance and stock of cattle feed for the dry season encouraged by the program. Finally, 61% expect their recovery duration to be shorter because of DKsilos. See pages [40](#) - [43](#).

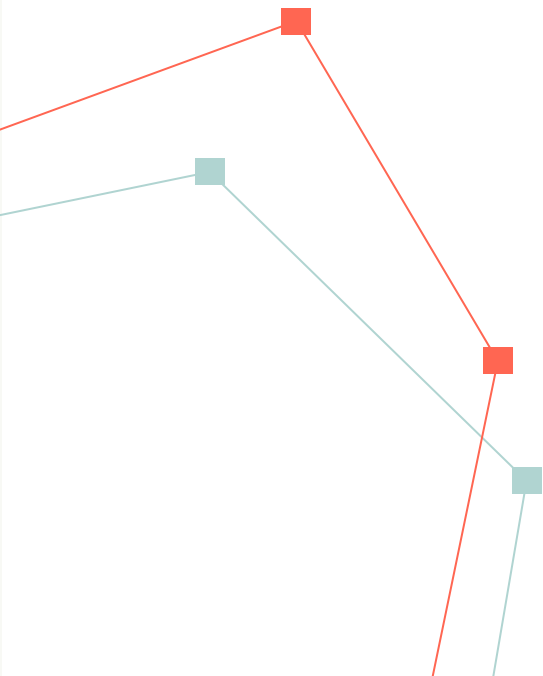
3 Greater application of training information is linked to deeper impact among cattle ranchers.

Cattle ranchers applying 'all' or 'most' of the training information provided by DKsilos are more likely to report improved farm practices, production, earnings, and cattle health compared to their peers applying only 'some' or 'none' of the training. Cattle ranchers in Mexico are more likely to say they understood 'all' of the training information compared to their peers in Honduras (73% vs. 51%). This indicates some room to strengthen training comprehension. However, training application levels are similar across the two countries. See pages [32](#) - [35](#).

Cattle Rancher Voices

We love hearing cattle ranchers' voices.

Here are some that stood out.



Impact Stories

80% shared how DKsilos had improved their quality of life

“Harvesting the majority of the crops gives me peace of mind because the harvest yields more and I no longer have to worry so much about it.” - Male, Mexico

“Because the truth is that I no longer spend so much on buying feed. I have also improved economically because I sell the silage.” - Male, Mexico

“It has improved in terms of animal feed. The support we receive in prices and the quality of livestock feed has made a big difference in our day-to-day lives.” - Female, Honduras

“The cattle produce better meat and that gives us more money to buy more, sow more and eat better, both for me and the animals.” - Male, Mexico

“I have obtained a good feed for the cattle that is preserved in difficult times. This gives me the peace of mind that I have things under control without having losses of both cattle and sales.” - Male, Mexico

“The cattle are healthier, the milk is of better quality, and we sell both, more milk and more cheese, which means more money.” - Female, Mexico

Opinions on Value Proposition

78% were Promoters and highly likely to recommend

“What convinces me about DKsilos to recommend it to a friend is their consultancy and their personalized technical assistance. They are always there to resolve my doubts and give me advice tailored to what I need.” - Male, Honduras

“Before, during, and after planting, they [technicians] clear up doubts. Their advice is preventive and proactive, and advisors like Julián Zavala here in Chiapas are very capable.” - Male, Mexico

“They are always keeping an eye on the planting and pest control so that the silage comes out in the best possible way.” - Male, Mexico

Opportunities for Improvement

18% experienced challenges with DKsilos

“I consider the seed to be very expensive and it really doesn't yield what it says on the bag it will yield. Besides, they haven't visited me, I've only bought the seed from them. - Male, Honduras

“The lack of attention from the technician meant that I could not plant this time. DKsilos did not come back to sell me the seed and I lost the opportunity to plant” – Male, Mexico

“The technician does not become a seller, they should provide more advice in the field, not only by phone.” - Male, Mexico

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“The truth is that before we had problems, we had pests, but since [DKsilos] was implemented, everything has improved a lot.”

- Male, Honduras

Demographics: Overview

The follow-up study sample consists of 38% of the cattle ranchers we spoke to at the baseline. Data related to rancher age, tenure, and region have been sourced from the baseline study.

Overall, the demographic breakdown of the follow-up sample resembles the baseline. However, the proportion of Honduran ranchers is higher at the follow-up than at baseline, which should be considered when interpreting the results.

The country breakdown is due to a combination of factors: contacts received (72% Mexico + 28% Honduras), eligibility of respondents, and response rates in each country.

Note: Results in this report have been segmented by baseline and follow-up. Statistically significant differences have been reported. The N value signifying sample size may vary based on the survey logic and the number of cattle ranchers who chose to skip a question or were unable to answer it.

The majority of cattle ranchers we spoke with are male and have been engaging with DKsilos for 4 years.

About the DKsilos Cattle Ranchers We Spoke With

Data relating to respondent characteristics (n = 152)

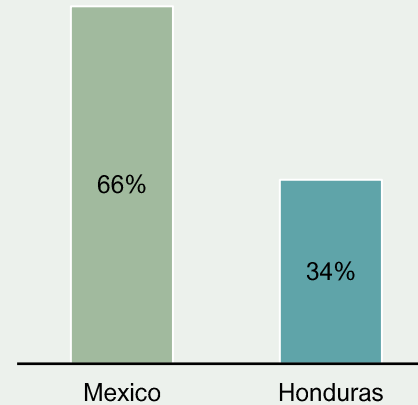
Gender

Male **94%**
Female **6%**

(95% male and 5% female at baseline)

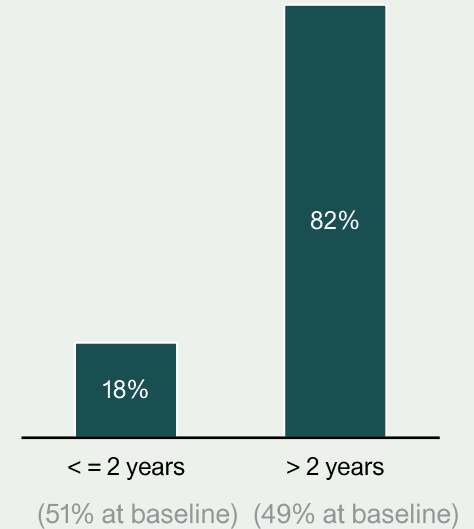
Location

(72% Mexico and 28% Honduras at baseline)



Tenure with DKsilos

3 years on average
(2 years at baseline)



Average Age (in years)

47

(46 years at baseline)

Land Size and Yields

Typically, DKsilos cattle ranchers report growing corn on more than 5 hectares at the follow-up and harvested close to 91 tons in the most recent farming season.

At the follow-up, Mexican cattle ranchers appear to be farming on a larger scale, both in terms of land usage and corn yield, compared to their Honduran counterparts.

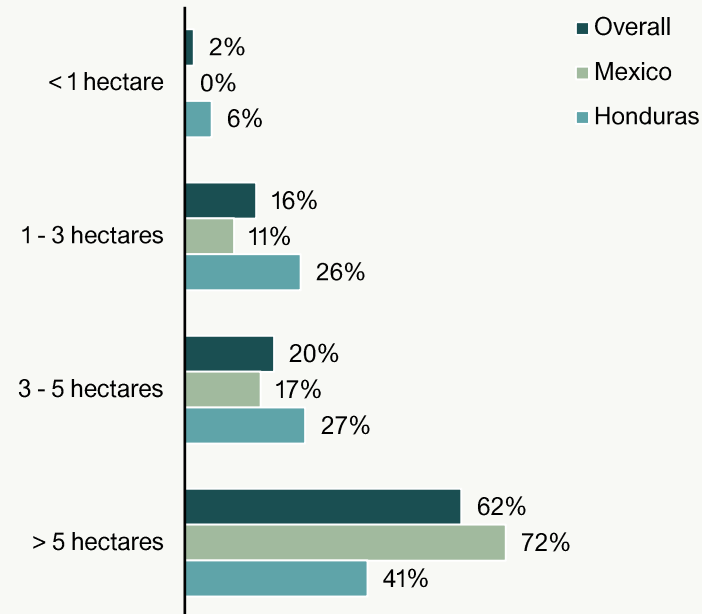
Similarly, when we directly compare the land sizes of cattle ranchers we spoke to across both rounds (152), a higher proportion of Mexican cattle ranchers report growing corn on > 5 hectares at the follow-up than they did at the baseline (64% vs. 72%), indicating expanded farm sizes.

In Honduras, the land under corn has remained somewhat consistent over time for directly comparable cattle ranchers (44% at the baseline said they grow on > 5 hectares, compared to 41% at the follow-up).

62% of cattle ranchers grow corn on > 5 hectares

Land Size

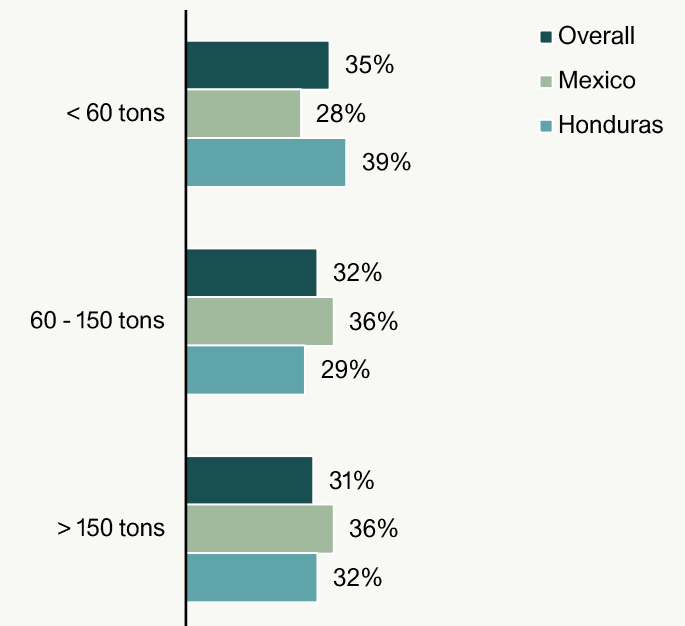
Q: How much land did you have under corn in the last 12 months? (n = 152 | Mexico = 101, Honduras = 51)



Median corn yield reported is 91 tons

Corn Yield

Q: Roughly how much corn did you harvest in the most recent farming season? (n = 128* | Mexico = 97, Honduras = 31)



*Excludes respondents who selected 'Don't know or can't say'

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“The technical advice is very good because they show how to carry out the whole silo procedure.”

- Male, Mexico

Way of Farming: Overview

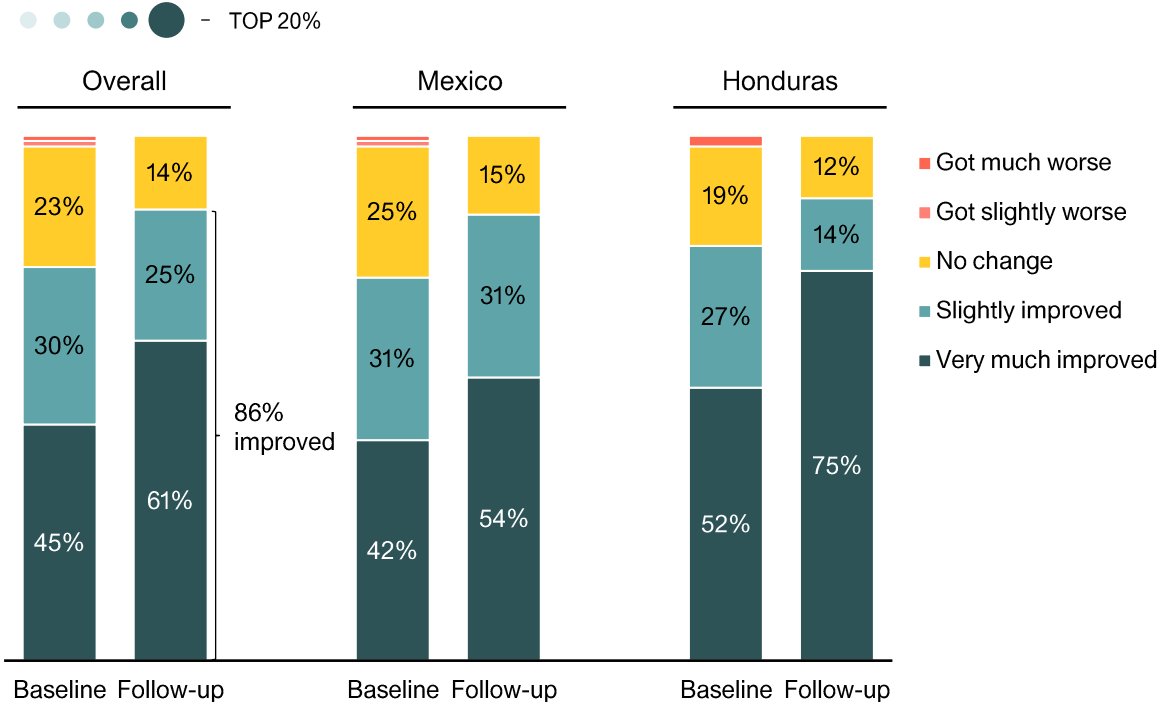
Cattle ranchers in Honduras are more likely to report 'very much improved' way of farming, compared to their Mexican counterparts at the follow-up.

Over time, the depth of impact has also increased for Honduran cattle ranchers compared to their Mexican peers, with a greater proportion at the follow-up reporting 'very much improved' farming practices.

At the follow-up, 61% of cattle ranchers report significant improvements in their way of farming because of DKsilos, which is higher than at the baseline (45%).

Changes in Way of Farming

Q: Has your way of farming changed because of DKsilos? Has it: (Overall baseline / follow-up = 400 / 152 | Mexico baseline / follow-up = 282 / 101 | Honduras baseline / follow-up = 112 / 51)



Way of Farming: Top Improvements

Honduran cattle ranchers are more likely to mention 'greater focus on livestock health' as their top way of farming improvement than their Mexican peers (33% vs. 12%). This practice change is in line with Honduran cattle ranchers reporting significant improvements in their cattle's health too ([see page 17](#)).

Cattle ranchers who report 'no change' (14%) say so because they are:

- Already implementing the same farming method or system (33%)
- Finding the technical assistance delivery to be poor (33%)
- Consider seeds to be ineffective or expensive (14%)

Usage of high-quality DEKALB seeds is the top way of farming improvement reported by cattle ranchers.

Top Way of Farming Improvements

Q: Please explain how your way of farming has improved. (n = 152 | Improved = 131*). Open-ended, coded by 60 Decibels.

Top Way of Farming Improvements	Overall	Cattle ranchers reporting improvements		
		Both	Mexico	Honduras
Sample Size (n)	152	131	86	45
Usage of high quality DEKALB seeds	26%	31%	23%	44%
Improved planting methods	18%	21%	21%	20%
Appropriate fertilizers and pesticide usage	16%	19%	14%	29%
Greater focus on livestock health	16%	19%	12%	33%
Started silage preparation	11%	13%	16%	7%
Usage of machinery/equipment	10%	12%	16%	4%
Better disease management	9%	10%	6%	18%

Key:

- Top Change 1
- Top Change 2
- Top Change 3

*Question was asked to those who reported improvements in way of farming.

Corn Silage Production: Overview

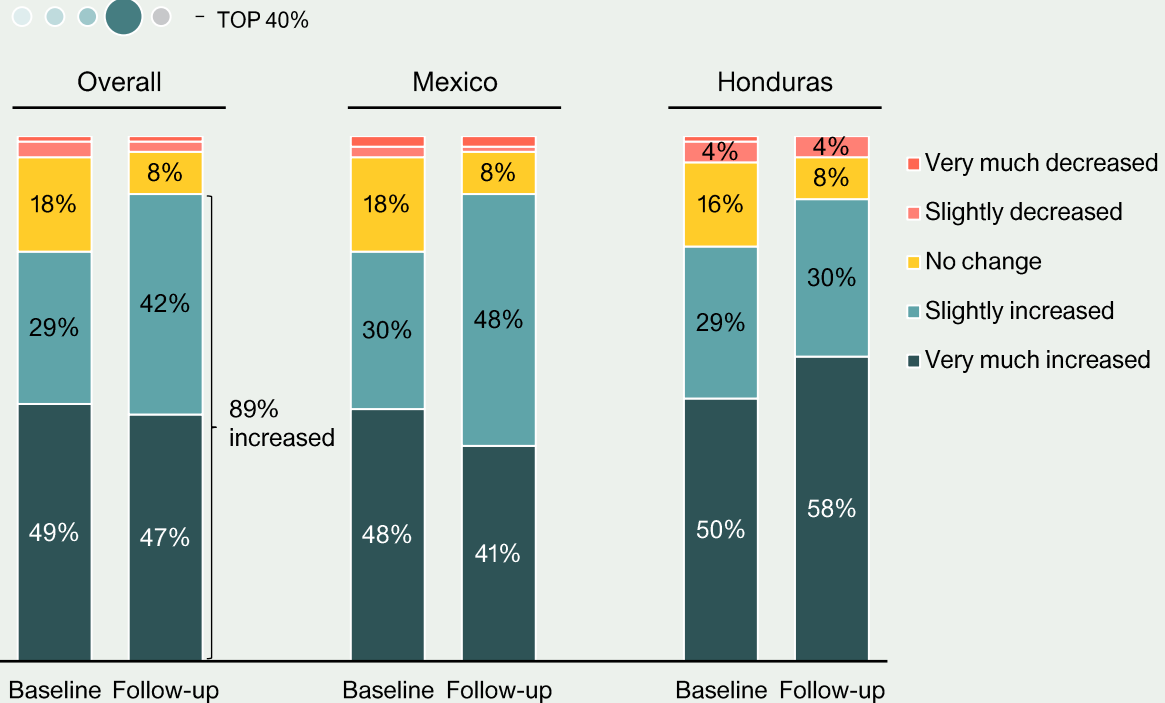
Although the overall proportion of cattle ranchers reporting significant improvements remains consistent with time, we witness an uptick in those identifying 'slight' improvements in silage production at the follow-up. This is more apparent in the case of Mexican cattle ranchers.

However, Honduran cattle ranchers are slightly more likely to report a significant increase in their production at the follow-up than at baseline.

Similar to the baseline, 47% of cattle ranchers at the follow-up say that their total production of corn silage has 'very much increased'.

Impact on Silage Production

Q: Has the total production of your corn silage changed because of DKsilos' service? (Overall baseline / follow-up = 400 / 151 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 50)



Corn Silage Production: Top Drivers

Honduran cattle ranchers that we spoke to at the follow-up report growing corn on smaller land sizes compared to their Mexican counterparts (see page 9). However, they are still more likely to have reported higher productivity by using the same land more efficiently, underscoring their improved farming practices.

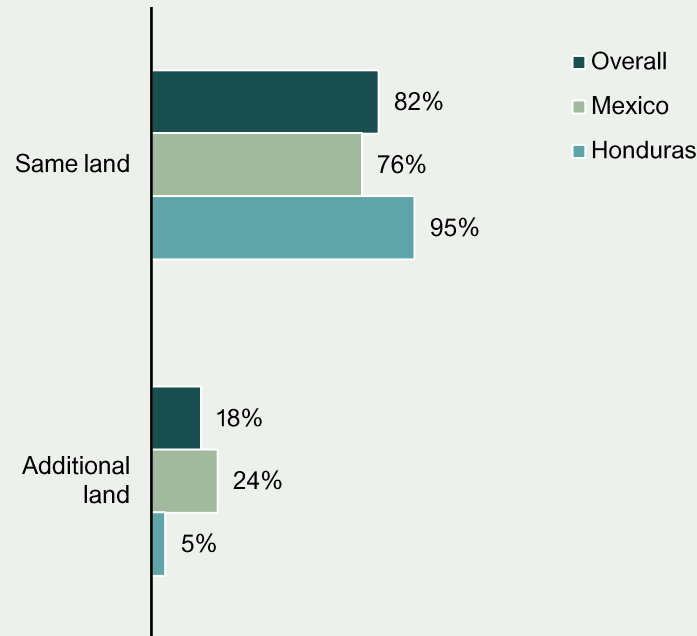
When we compared cattle ranchers that we spoke to across both rounds (152), we observe the following:

Mexico Corn Yields (Median)	Tons
Baseline	110
Follow-up	100
Honduras Corn Yields (Median)	
Baseline	50
Follow-up	86 ↑

82% of cattle ranchers mentioning increased silage production say they utilized the same amount of land to realize the increase, indicating higher productivity.

Reasons for Increase in Production

Q: Was this increase because you utilized additional land for corn silage production or was it from the same amount of land? (n = 134 | Mexico = 90, Honduras = 44)



“We modified things that we had done wrong, and harvests increased by 30 to 50 percent.”
- Male, Mexico

“The yield of my cattle is better, as well as that of the silage; I have good sales. The better the planting, the more I can reduce costs and have more sales.”
- Male, Honduras

“Thanks to the new way of cultivating silage, my tonnage of yield has improved a lot.”
- Male, Mexico

Livestock Production: Overview

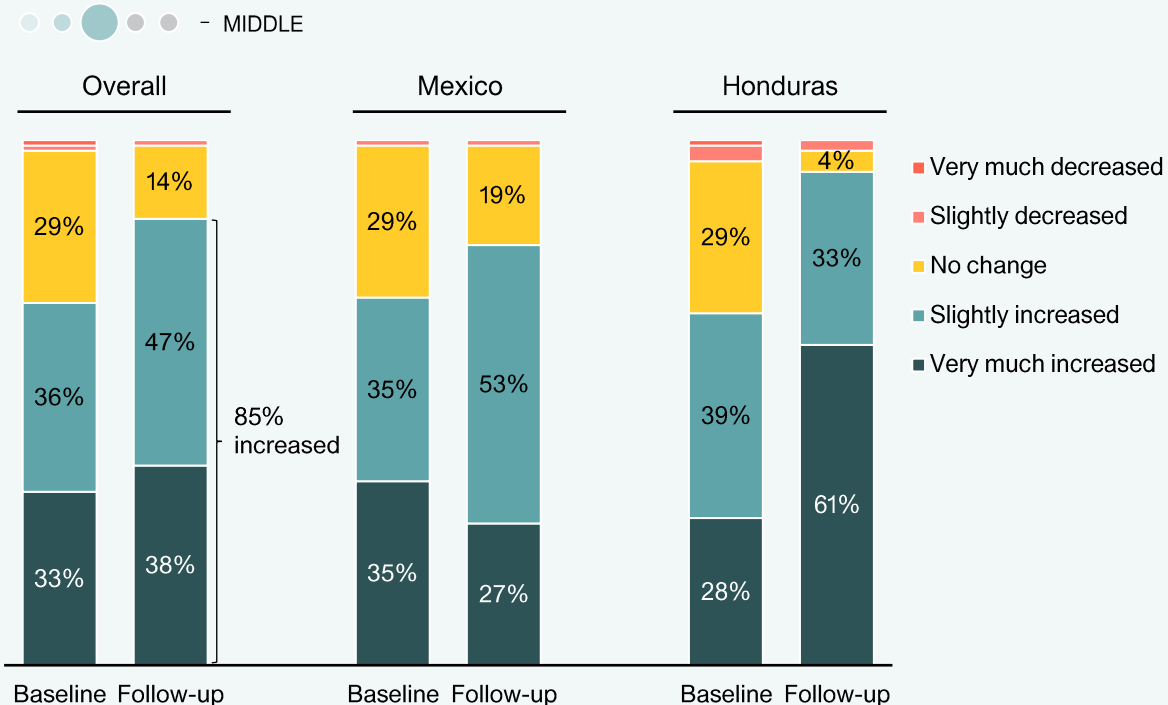
Similar to corn silage production, the overall proportion of cattle ranchers reporting significant improvements is comparable over time, but we see a higher proportion identifying a 'slight' increase in their livestock production at the follow-up.

Honduran cattle ranchers report improvements over time, with a significantly higher proportion at the follow-up saying that their livestock production has 'very much increased' compared to the baseline (61% vs. 28%). This finding is in line with the way of farming and silage production changes reported by this group (see pages [11](#) and [13](#)).

At the follow-up, 38% of cattle ranchers say their livestock production has 'very much increased', which is comparable to the baseline.

Impact on Livestock Production

Q: Has the total production of your livestock changed because of DKsilos' service? (Overall baseline / follow-up = 400 / 152 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 51)



Livestock Production: Top Drivers

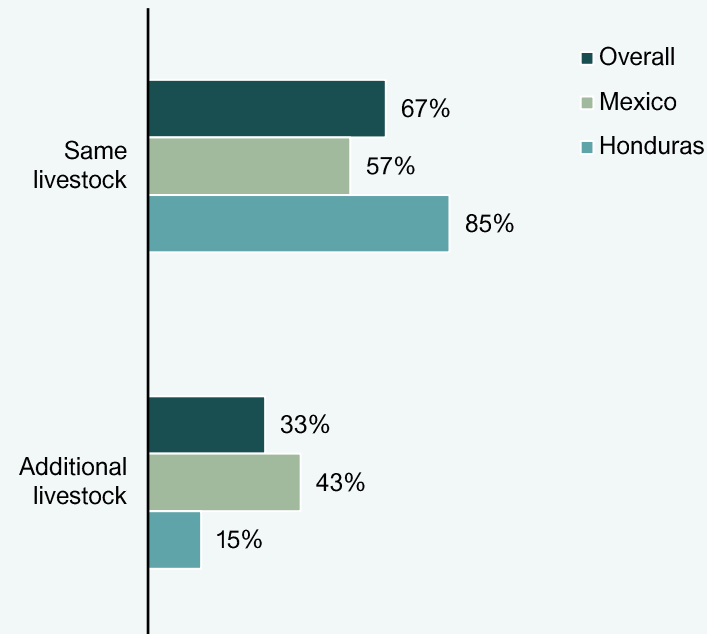
At the follow-up, Honduran cattle ranchers are more likely to have relied on the same livestock to realize higher production than at baseline (85% vs. 58%), indicating an overall improvement in cattle productivity with time. This is supported by Honduran cattle ranchers also reporting 'very much increased' silage production (see [page 13](#))

In contrast, Mexican cattle ranchers at the follow-up are more likely to have relied on additional livestock than at baseline (43% vs. 19%).

Overall, 67% of cattle ranchers at the follow-up realized an increase in their production with the same livestock.

Reasons for Increase in Production

Q: Was this increase because you reared additional livestock or was it from the same amount of livestock?
(n = 129 | Mexico = 81, Honduras = 48)



“The cattle remain healthy and well-fed. The quality of the food has contributed to their good physical condition.”
- Female, Honduras

“Because of the silo, more animals can be kept without the problem that they will lose weight or there will be no food in the paddocks at this time of crisis of summer.”
- Male, Honduras

Cattle Health: Overview

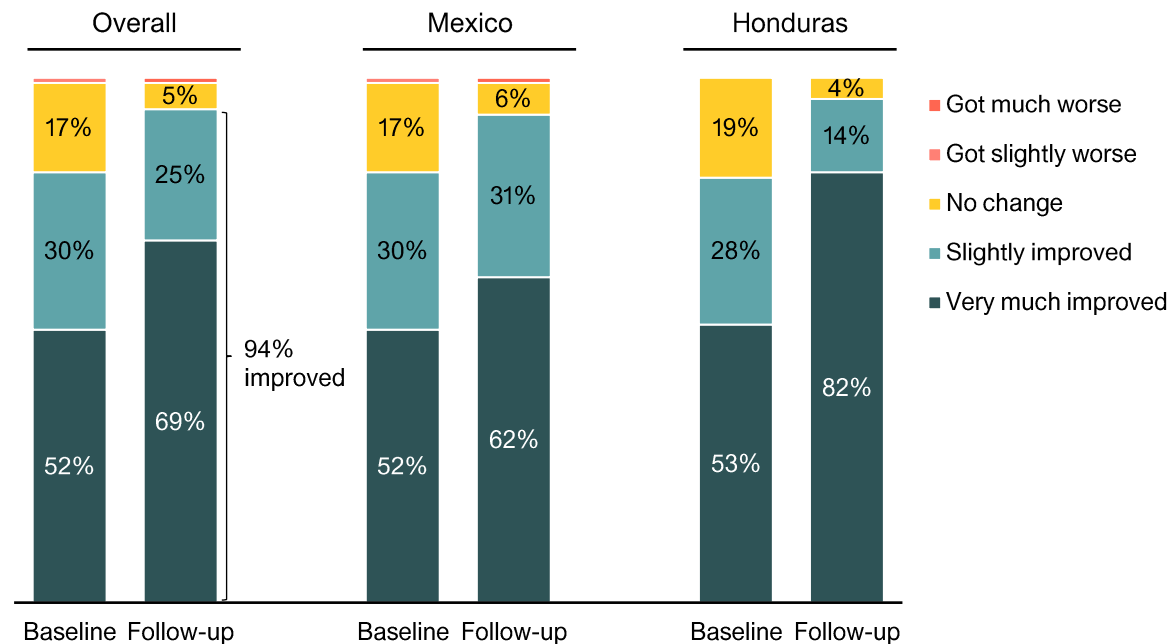
Honduran cattle ranchers are more likely to mention 'very much improved' cattle health compared to their peers in Mexico (82% vs. 62%). In line with the trend so far, at the follow-up, this group reports deeper impact on cattle health than at baseline as well.

DKsilos' focus on cattle health has an important effect on livelihoods and production. Cattle ranchers reporting increased livestock production are more likely to have also witnessed a significant improvement in their cattle's health than others (80% vs. 9%).

69% of cattle ranchers at the follow-up mention their overall cattle health to have 'very much improved' because of DKsilos, which is higher than at the baseline (52%).

Changes in Cattle Health

Q: Has the overall health of your cattle changed because of DKsilos? (Overall baseline / follow-up = 400 / 152 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 51)



Cattle Health: Top Improvements

Respondents were asked to describe – in their own words – the improvements in their cattle health since engaging with DKsilos. The top outcomes are shown on the right.

Baseline Top Improvements

- Good weight or cattle gained weight (39%)
- Improved milk quality or production (29%)
- Improved body conditions (24%)

Improved cattle weight is the top improvement witnessed by cattle ranchers in their livestock's health because of DKsilos. This is consistent with the baseline.

Top Cattle Health Improvements

Q: How has your cattle's health improved? (n = 152 | Improved = 143*). Open-ended, coded by 60 Decibels.

Top Improvements in Cattle Health	Overall	Cattle ranchers reporting improvements		
		Both	Mexico	Honduras
Sample Size (n)	152	143	94	49
Good weight or cattle gained weight	56%	60%	63%	53%
Improved milk quality or production	32%	34%	34%	35%
Better reproductive health	24%	25%	22%	31%
Resilience to illness	19%	20%	20%	20%
Improved body conditions	17%	18%	15%	25%
Reduced mortality	5%	6%	9%	0%
Resilience during dry season	3%	3%	4%	2%

Key:

- Top Outcome 1
- Top Outcome 2
- Top Outcome 3

*Question was asked to those who reported improvements in cattle health.

Cattle Feed Expenses

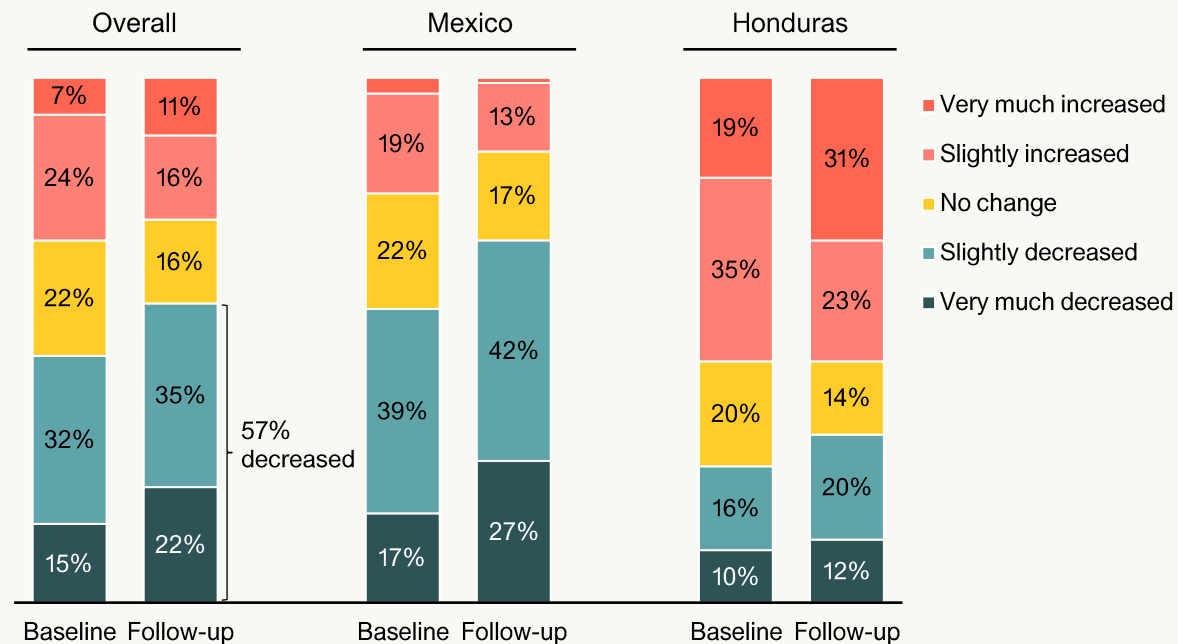
Following the baseline trend, cattle ranchers in Honduras are more likely to report an increase in their cattle feed expenses than their counterparts in Mexico. Honduran cattle ranchers at the follow-up are also more likely to report 'very much increased' expenses than at baseline.

This is evident in the way of farming changes implemented by Honduran cattle ranchers (see [page 12](#)), who have sustained a greater focus on improving livestock health, which is likely driving the higher expenses.

At the follow-up, 22% of cattle ranchers report the amount of money spent on cattle feed to have 'very much decreased' because of DKsilos.

Changes in Amount Spent on Livestock

Q: Has the amount of money you spend on cattle feed changed because of DKsilos? (Overall baseline / follow-up = 400 / 152 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 51)



Money Earned: Overview

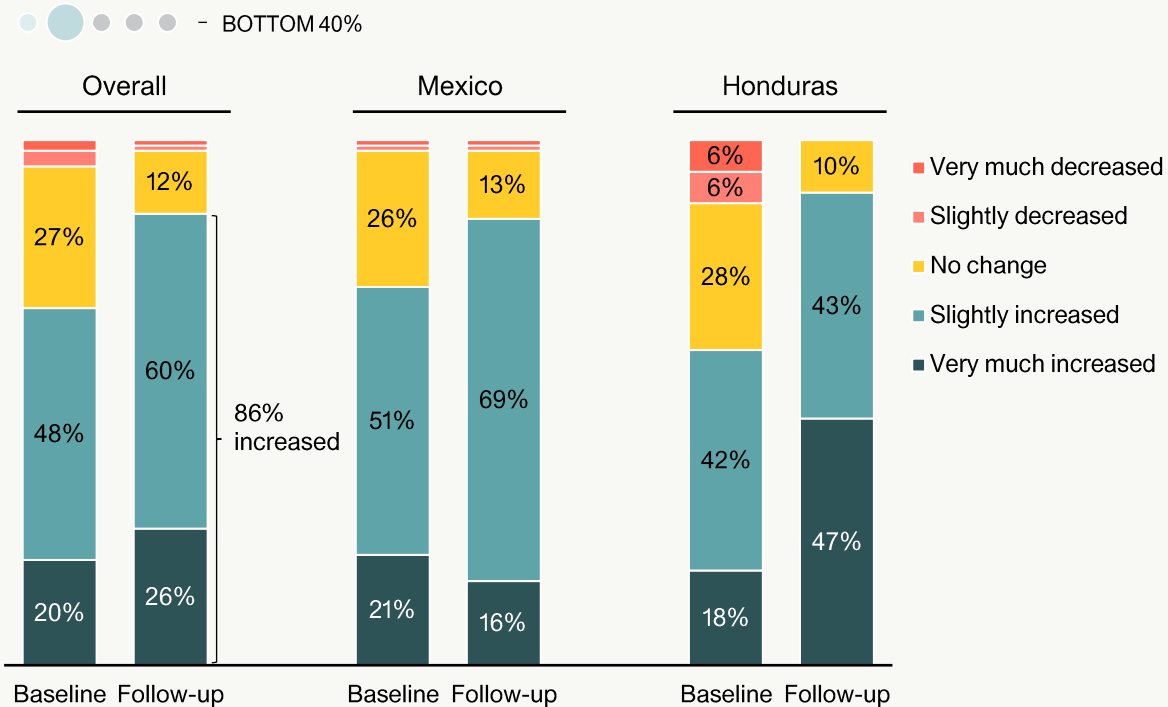
Although cattle ranchers reporting 'very much increased' money earned has remained consistent over time, a higher proportion of cattle ranchers at the follow-up report either a slight or significant increase in their money earned than at baseline (86% vs. 68%).

This is mainly driven by Honduran cattle ranchers being more likely to mention 'very much increased' earnings due to their improved practices and overall production.

26% of cattle ranchers at the follow-up say the money earned from their livestock has 'very much increased', which is comparable to the baseline.

Changes in Money Earned From Livestock

Q: Has the money you earn from your livestock changed because of DKsilos? (Overall baseline / follow-up = 400 / 152 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 51)



Money Earned: Top Drivers

Honduran cattle ranchers largely attribute their higher earnings to an increase in volume sold, whereas their Mexican counterparts attribute it somewhat evenly to both higher volumes and cost reductions. This is in line with a greater proportion of Mexican cattle ranchers reporting decreased cattle feed expenses because of DKsilos (see [page 19](#)).

Cattle ranchers reporting 'no change' in money earned (12%) mention the high cost of inputs or production, no change in their cattle's health, and low market prices.

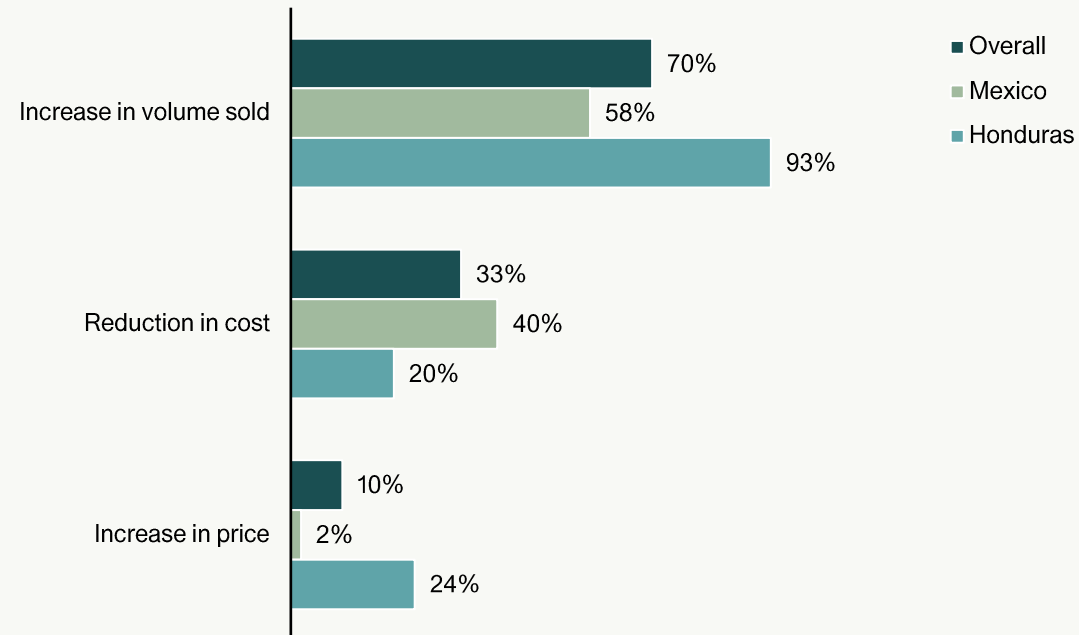
Baseline Drivers

- Increase in volume sold (64%)
- Reduction in cost (57%)
- Increase in price (19%)

At the follow-up, 70% of cattle ranchers attribute their higher earnings to an increase in the volume of sales.

Reasons for Increase in Money Earned

Q: What were the main reasons for the increase in money earned? (n = 131 | Mexico = 86, Honduras = 45).



Quality of Life: Overview

A much higher proportion of Honduran cattle ranchers report a significant improvement in their quality of life compared to their Mexican peers.

Consistent with the baseline trend, cattle ranchers reporting 'very much improved' quality of life are more likely to have realized deeper impact in feed expenses, livestock health, and production compared to their counterparts reporting 'no change'.

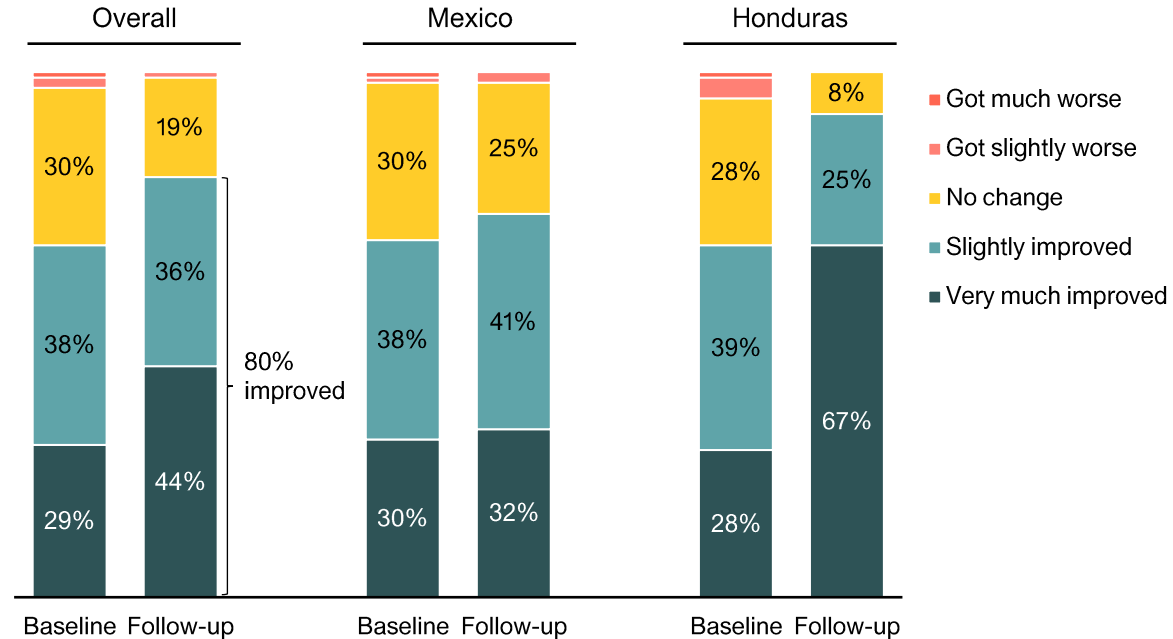
This is mirrored by our qualitative findings. Learn more on the next page!

44% of cattle ranchers at the follow-up report significant improvements in their quality of life because of DKsilos, which is higher than at the baseline.

Quality of Life Change

Q: Has your quality of life changed because of DKsilos? Has it: (Overall baseline / follow-up = 400 / 152 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 51)

● ● ● ● ● - TOP 40%



Quality of Life: Top Improvements

Respondents were asked to describe – in their own words – the improvements in their quality of life since engaging with DKsilos. The top outcomes are shown on the right.

Honduran cattle ranchers are more likely to mention ‘improved milk production’ than their Mexican peers (30% vs. 16%).

Cattle ranchers who report ‘no change’ in their quality of life (19%) report no changes in their lifestyle (55%), high cost of production (28%) and no change in income (21%).

Baseline Top Improvements

- Increased income (43%)
- Greater corn yield (14%)
- Healthier livestock (13%)

Besides increased income, rearing healthier livestock and reduced stress are the top quality of life improvements mentioned by cattle ranchers at the follow-up.

Top Quality of Life Improvements

Q: How has your quality of life improved? (n = 152 | Improved = 121*). Open-ended, coded by 60 Decibels.

Top Quality of Life Improvements	Overall	Cattle ranchers reporting improvements			Key:
		Both	Mexico	Honduras	
Sample Size ⁽ⁿ⁾	152	121	74	47	
Increased income	55%	69%	66%	75%	Top Outcome 1
Healthier livestock	23%	29%	28%	30%	Top Outcome 2
Reduced stress	20%	25%	24%	26%	Top Outcome 3
Improved milk production	17%	21%	16%	30%	
Reduced production costs	16%	21%	24%	15%	
Improved corn yield	14%	17%	18%	17%	
Prepared for the dry season	10%	12%	15%	9%	

*Question was asked to those who reported improvements in quality of life.

Livelihood Stress

Reduced livelihood stress is strongly correlated to improved cattle health: cattle ranchers reporting decreased stress levels are more likely to report that their cattle health has 'very much improved', compared to those who report no change in cattle health (80% vs. 57%).

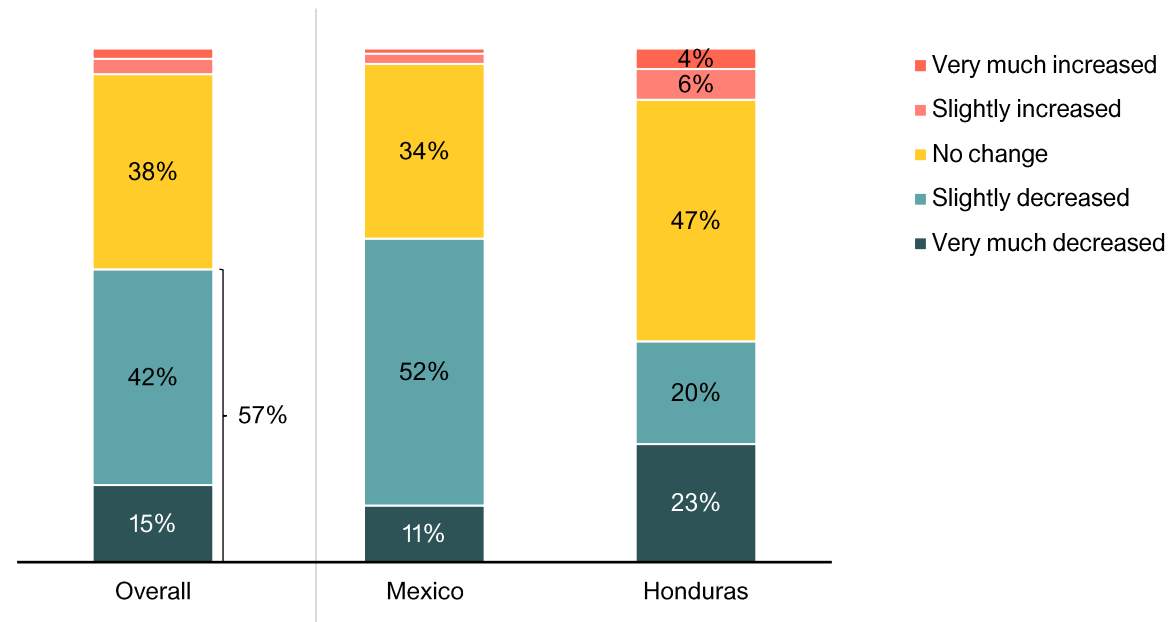
Besides cattle health, reduced stress is linked to improved farm outcomes, such as higher silage production.

Mexican cattle ranchers are more likely to mention reduced stress compared to their Honduran counterparts (63% vs. 43%), although the depth of impact is slightly higher in Honduras (i.e. those reporting 'very much decreased' stress).

57% of cattle ranchers report feeling less stressed about meeting their family's basic needs because of DKsilos.

Impact of DKsilos on Livelihood Stress

Q: Has how stressed you feel about meeting your family's basic needs changed because of DKsilos?
(n = 152 | Mexico = 101, Honduras = 51)



Confidence to Invest

Honduran cattle ranchers are more likely to report a significant increase in their confidence compared to their Mexican peers.

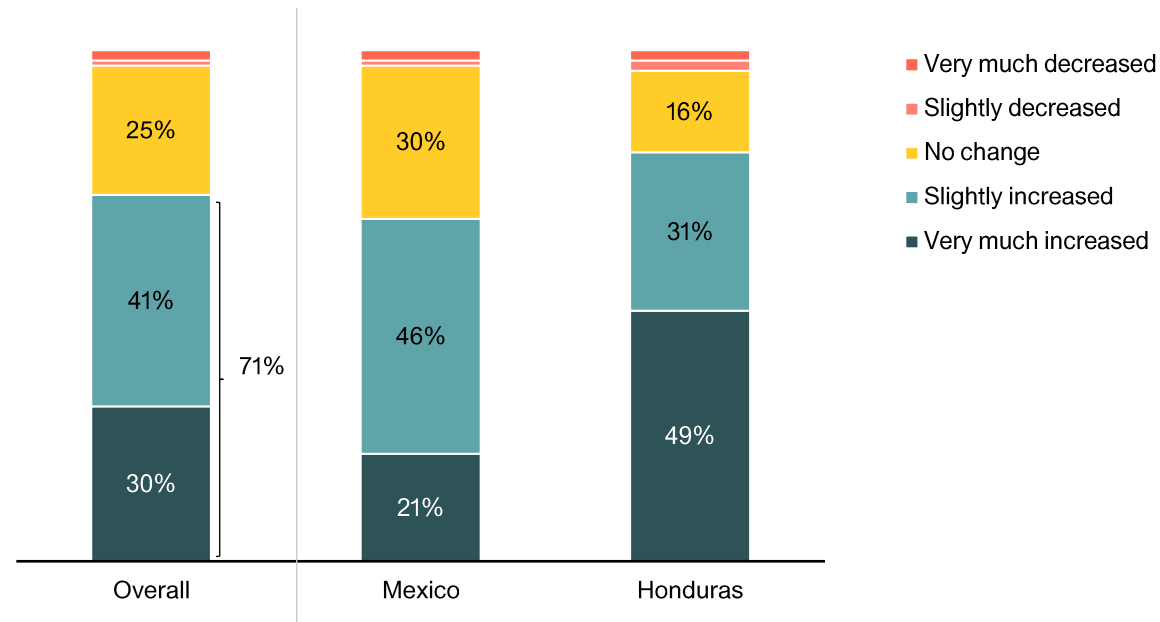
Cattle ranchers' confidence to invest in farming appears to be strongly linked to tangible, positive changes that they have witnessed in their farm and its outputs. Those who say their confidence has 'very much increased' are more likely to have witnessed the following farm outcomes, compared to those reporting 'no change' in their confidence level:

- Higher corn silage production (80% vs. 21%).
- Higher livestock production (78% vs. 11%)
- Improved cattle health (100% vs. 37%).

71% of cattle ranchers at the follow-up report that their confidence to invest in cattle farming has increased because of DKsilos.

Perceived Confidence Change

Q: Has your confidence to make decisions on investing in cattle farming changed because of DKsilos?
(n = 150 | Mexico = 101, Honduras = 49)



Investing in Agriculture: Top Drivers

The top drivers that increase confidence in investment decision-making are shown on the right. Others include:

- Increased land productivity (12%)
- Confidence in seed quality (9%)
- Being able to stock cattle feed (9%)

Among the 25% of cattle ranchers reporting 'no change' in their confidence to invest, 16% mention changes in their confidence is unrelated to DKsilos, and 13% report no interest to invest further.

The 5 cattle ranchers who talk about decreased confidence largely cite mistrust in DKsilos and higher cost of production.

Useful knowledge from DKsilos technicians is the top driver for increased confidence to invest in cattle farming.

Top Outcomes for 71% of Cattle Ranchers Who Say their Confidence Has Increased

Q: Please explain how the above has changed for you. (n = 107). Open-ended, coded by 60 Decibels.

36%

talk about useful knowledge from technicians

(25% of all respondents)

“My confidence in DKsilos has increased because we have had better production, and the technical assistance has helped us achieve better production yields.” – Male, Honduras

15%

mention improved cattle health

(11% of all respondents)

“[Confidence has increased] because I see the investment reflected in bigger animals and better milk.” – Male, Mexico

13%

report expectation of continued positive results

(9% of all respondents)

“Thanks to the results we have obtained, we have gained that confidence [to invest]. In fact, we talk with friends and recommend DKsilos to them.” – Male, Honduras

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 - > **DKsilos Satisfaction**
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 - > **Value Perception**
- Climate Resilience
 - > Climate Shocks and Recovery
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“DKsilos is a great company because it provides quality seeds and good customer assistance.”

- Male, Honduras

DKsilos Satisfaction: Overview

At the follow-up, the Net Promoter Score® for DKsilos is 74, which is excellent and an improvement since the baseline.

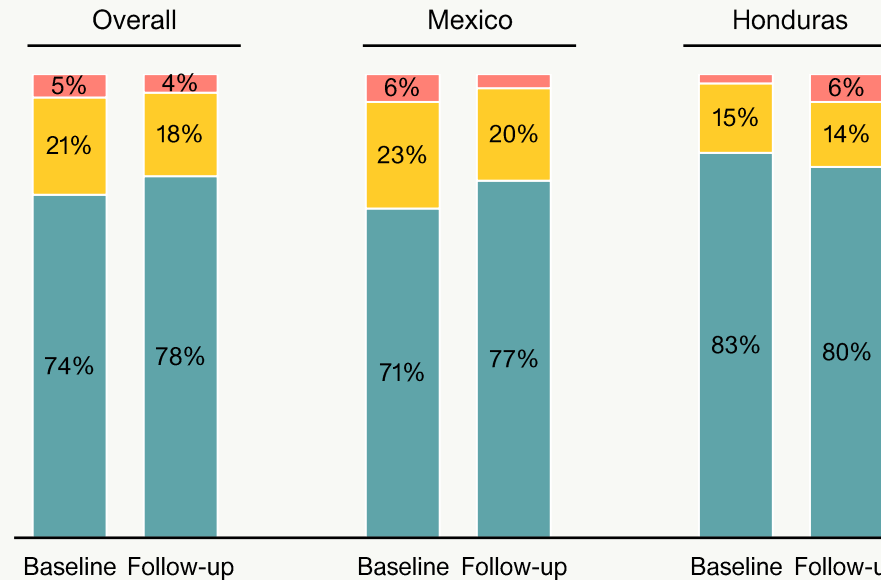
The Net Promoter Score® is a gauge of satisfaction and loyalty. Anything above 50 is considered excellent. A negative score is considered poor.

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

Compared to the baseline, Honduran cattle ranchers appear slightly less satisfied at the follow-up, whereas their Mexican peers are more satisfied than they were at baseline.

Net Promoter Score® (NPS)

Q: On a scale of 0-10, how likely are you to recommend DKsilos to a friend, where 0 is not at all likely and 10 is extremely likely? (Overall baseline / follow-up = 400 / 151 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 51)



- Detractors
- Passives
- Promoters

NPS Benchmarks

● ● ● ● ● - TOP 20%

60dB Global average 50
576 companies

60dB Agriculture average 42
82 companies

60dB Farmer as Customer average 46
25 companies

NPS **69** **74** **65** **74** **81** **74**

DKsilos Satisfaction: Follow-up Drivers

Promoters are highly satisfied with DKsilos' technical assistance and seed quality. Passives and Detractors want better technical assistance delivery.

:)

77% are Promoters. They love:

1. High quality technical assistance (42% of cattle ranchers)
2. Good seed quality (40% of cattle ranchers)
3. Improved corn yield (21% of cattle ranchers)

Mexico
(n = 101)

: \

20% are Passives: They like:

1. Improved farming knowledge (9 cattle ranchers)

But want to see:

1. Better technical assistance delivery (11 cattle ranchers)
2. Affordable seed prices (8 cattle ranchers)

: (

3% are Detractors. They dislike:

1. Low quality seeds (2 cattle ranchers)
2. Inadequate technical assistance (2 cattle ranchers)
3. DKsilos interest in sales only (1 cattle rancher)

80% are Promoters. They love:

1. Good seed quality (61% of cattle ranchers)
2. High quality technical assistance (37% of cattle ranchers)
3. Improved corn yield (29% of cattle ranchers)

Honduras
(n = 51)

14% are Passives. They like:

1. High quality technical assistance (3 cattle ranchers)

But want to see:

1. Better technical assistance delivery (3 cattle ranchers)
2. Higher seed quality (3 cattle ranchers)

6% are Detractors. They dislike:

1. Low quality seeds (2 cattle ranchers)
2. Inadequate technical assistance (2 cattle ranchers)
3. Expensive seed prices (1 cattle rancher)

Challenges: Overview

Honduran cattle ranchers are slightly more likely to report challenges with DKsilos than their Mexican counterparts.

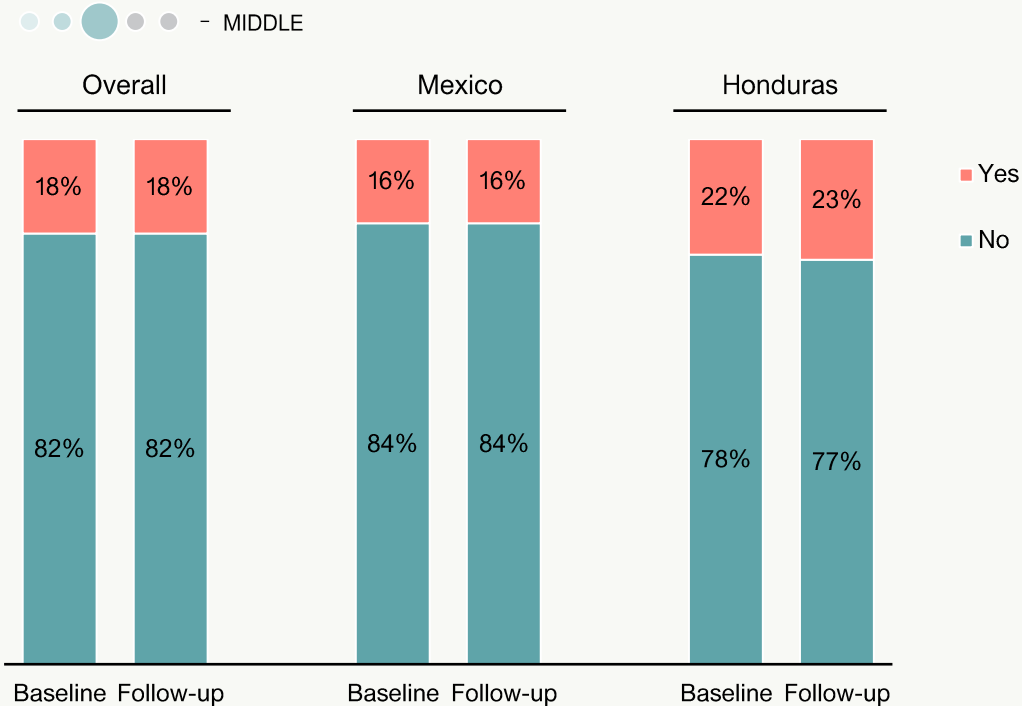
Although the NPS has improved with time (see [page 28](#)), the challenge rate has remained consistent across both countries.

Discover the primary issues highlighted on the next page!

Overall, 18% of cattle ranchers at the follow-up report a challenge with DKsilos, which is exactly in line with the baseline.

Cattle Ranchers Reporting Challenges

Q: Have you experienced any challenges with DKsilos? (Overall baseline / follow-up = 400 / 151 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 51)



Challenges: Top Issues

Inadequate technical assistance is the top challenge reported by cattle ranchers across both countries.

Most Common Issues Among 18% of Cattle Ranchers Reporting Challenges

Q: Please explain the challenges you have experienced. (n = 28 | Mexico = 16, Honduras = 12). Open-ended, coded by 60 Decibels.

16% in Mexico

44%

(7 cattle ranchers)

mention **inadequate technical assistance**

44%

(7 cattle ranchers)

talk about **poor seed quality**

13%

(3 cattle ranchers)

report instances of **high crop disease**

23% in Honduras

33%

(4 cattle ranchers)

talk about **inadequate technical assistance**

33%

(4 cattle ranchers)

mention **poor seed quality**

33%

(4 cattle ranchers)

report **expensive seeds**

“Last year, the technicians stopped visiting me and I ended up doing things on my own, even though that is what the consultancy was supposed to be for.”
- Male, Honduras

“Based on the planting of some colleagues who have also planted with DKsilos and mine, I have seen that the corn is growing quite weak, as if the corn lacks the fertility to grow quickly.” - Male, Honduras

“They promised to give me advice and support and it was a lie, they only visited me the first time I bought [seeds] and then nothing.” - Male, Mexico

Note: The percentages in bold represent the proportion of cattle ranchers with challenges within a certain country mentioning that particular theme.

Training: Ease of Understanding

To gain a deeper understanding of the effectiveness of technical assistance, we asked cattle ranchers at the follow-up about their experience with the training information.

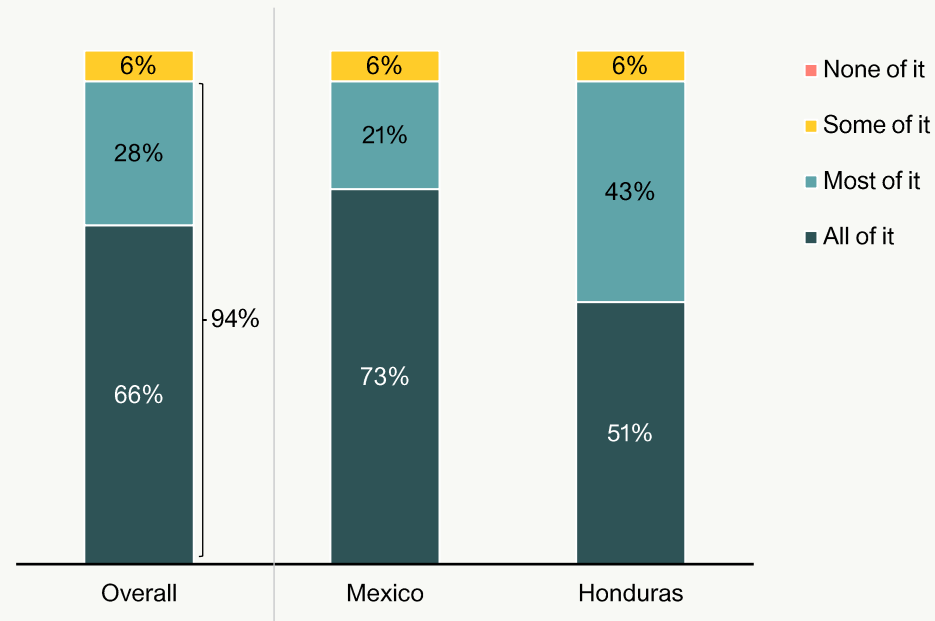
Cattle ranchers in Mexico are more likely to say they understood 'all' of the training information compared to their peers in Honduras (73% vs. 51%).

The ease of understanding training has implications on the overall and technical assistance satisfaction of cattle ranchers. How can training comprehension be strengthened among Honduran cattle ranchers?

66% of cattle ranchers say all the information offered by DKsilos' technical advisors was easy to understand.

Ease of Understanding

Q: How much of this information was easy to understand? (n = 152 | Mexico = 101, Honduras = 51)



Training: Application to Farming Practices

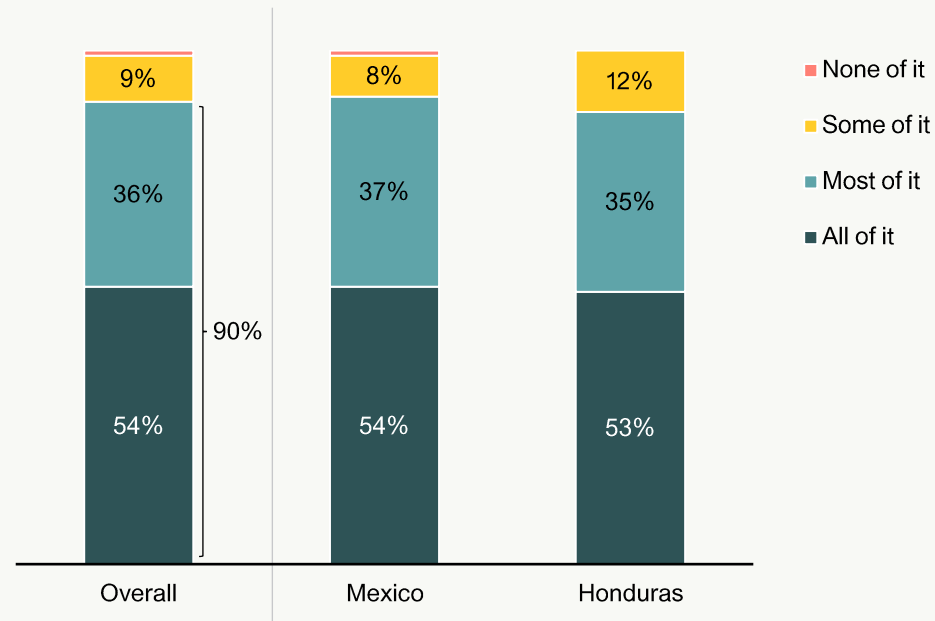
Despite differences in cattle ranchers' ease of understanding, a similar proportion of ranchers across both countries say that they applied 'all' of the training information to their farming practices.

Training uptake and application has the potential to drive deeper livelihood impact for cattle ranchers. On the next page, find out more on differences in impact metrics by training application levels.

54% of cattle ranchers at the follow-up applied all of the training information to their farming practices.

Application of Training Information

Q: How much of the information did you apply to your farming practices? (n = 152 | Mexico = 101, Honduras = 51)



Training: Barriers to Application

The major barriers to training application are shown to the right.

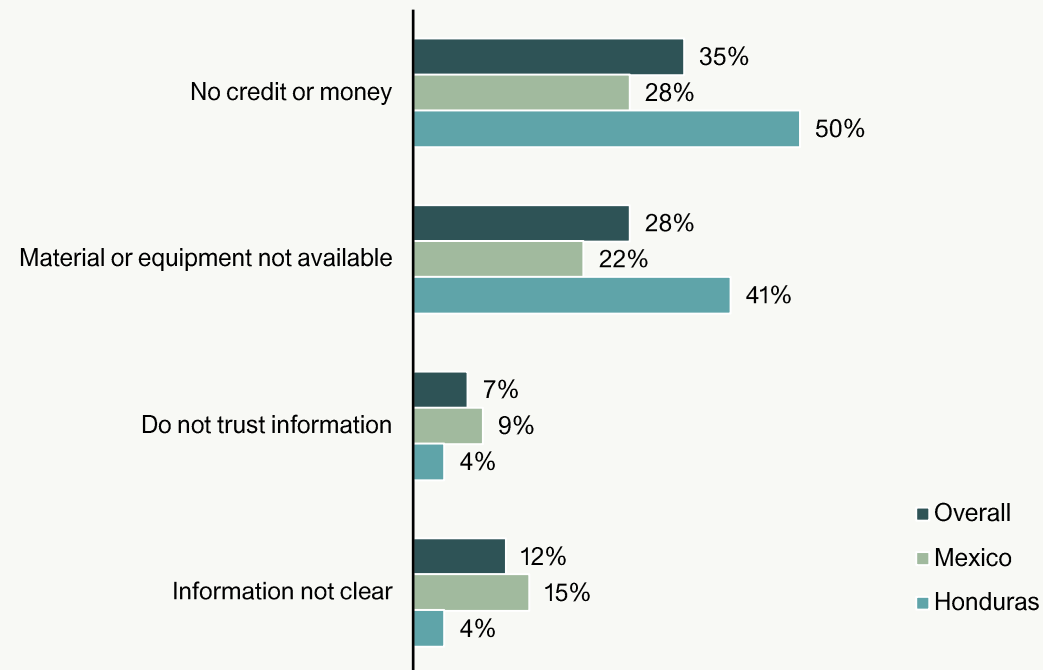
Diving deeper into how cattle ranchers can better procure recommended material can enhance training application.

Honduran cattle ranchers are almost twice as likely to mention 'no credit or money' as the primary barrier to applying all of the training information compared to their Mexican peers (28% vs. 50%). The same relationship holds true for 'material or equipment not available' (22% vs. 41%).

Lack of credit or money is the top barrier to training application among cattle ranchers.

Barriers to Training Application

Q: Would you mind sharing with me what prevented you from applying all of the training / information?
(n = 68)



Cluster Analysis: Training Application




Cattle ranchers applying 'all' of the training information provided by DKsilos are more likely to report a deeper impact across metrics than others.

Here, we look at the impact realized by cattle ranchers based on their training application levels.

Percentages showed in the table represent the proportion of cattle ranchers within each training application level reporting an impact outcome. All statistically meaningful relationships have been indicated.

The sample size of cattle ranchers who applied 'some' or 'none' of the training information is relatively lower, so results are illustrative only.

Select Impact Outcomes by Training Application

Dimension	Metric	All of it (n = 82)	Most of it (n = 55)	Some or None of it (n = 15)
Impact 	Quality of Life % 'very much' improved	54%	36%	14%
	Money Earned % 'very much' increased	34%	22%	7%
	Expenses % 'very much' decreased	29%	16%	0%
	Stress % 'very much' decreased	15%	18%	7%
	Confidence to invest % 'very much' increased	32%	31%	15%
Corn and Silage 	Way of Farming % 'very much' improved	69%	60%	21%
	Silage Production % 'very much' increased	60%	34%	21%
Livestock 	Cattle Health % 'very much' improved	74%	71%	36%
	Livestock Production % 'very much' increased	45%	31%	29%

Technical Support Satisfaction: Overview

The Net Promoter Score® for DKsilos’ technical support at the follow-up is 61, which is also excellent, and higher than at baseline.

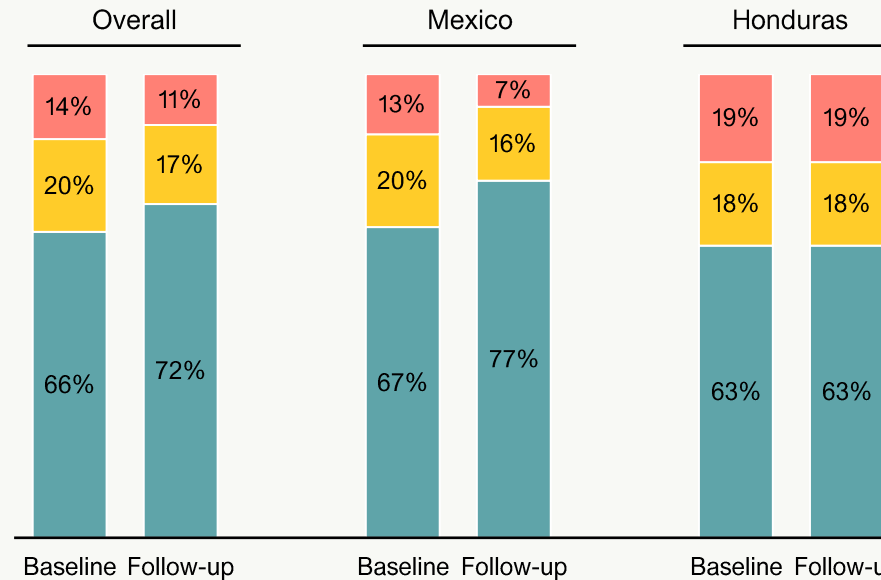
In addition to understanding cattle rancher satisfaction with DKsilos overall, we zoomed into their experience with the technical support received.

In Mexico, cattle rancher satisfaction with the technical support has increased since the baseline (NPS of 54 vs. 70 at the follow-up). However, in Honduras, satisfaction has remained consistent over time.

Top drivers of satisfaction can be found in the next page!

Net Promoter Score® (NPS)

Q: On a scale of 0-10, how likely are you to recommend technical support from DKsilos advisors to a friend, where 0 is not at all likely and 10 is extremely likely? (Overall baseline / follow-up = 400 / 151 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 51)



NPS 52 61 54 70 44 44

NPS Benchmarks

● ● ● ● ● - TOP 20%

60dB Global average 50
576 companies

60dB Agriculture average 42
82 companies

60dB Farmer as Customer average 46
25 companies

Technical Support Satisfaction: Drivers

Promoters across Mexico and Honduras value knowledgeable and reliable advisors. Passives want to see consistent interactions while Detractors feel that the assistance delivery could improve.

:)

Mexico (n = 101)

77% are Promoters. They love:

1. Knowledgeable and reliable advisors (53% of cattle ranchers)
2. Avenue to clear doubts (49% of cattle ranchers)
3. Consistent and frequent support/advice (48% of cattle ranchers)

:\

16% are Passives: They like:

1. Good technical recommendations (6 cattle ranchers)
2. Avenue to clear doubts (4 cattle ranchers)

But want to see:

1. Inconsistent interactions (10 cattle ranchers)

:(

7% are Detractors. They dislike:

1. Poor technical assistance delivery (5 cattle ranchers)
2. Misleading information for sales (3 cattle ranchers)
3. Constant change in advisors (2 cattle ranchers)

63% are Promoters. They love:

Honduras (n = 51)

1. Knowledgeable and reliable advisors (63% of cattle ranchers)
2. Consistent and frequent support/advice (47% of cattle ranchers)
3. Avenue to clear doubts (22% of cattle ranchers)

18% are Passives: They like:

1. Avenue to clear doubts (4 cattle ranchers)
2. Good technical recommendations (4 cattle ranchers)

But want to see:

1. Inconsistent interactions (4 cattle ranchers)

19% are Detractors. They dislike:

1. Lack of personalized assistance (9 cattle ranchers)
2. Poor technical assistance delivery (7 cattle ranchers)
3. Misleading information for sales (2 cattle ranchers)

Value Perception

Similar to the baseline, cattle ranchers who perceive the value offered by DKsilos to be 'very good' are more likely to report higher satisfaction with DKsilos than others.

Although Honduran cattle ranchers' perception of DKsilos' value has improved over time, the proportion of those reporting 'very poor' or 'poor' value has also increased in parallel (13% at the baseline vs. 22% at the follow-up).

Ranchers who find DKsilos' value proposition to be 'very good' or 'good' are more likely to report no challenges with the program, compared to others (92% vs. 70%).

At the follow-up, 29% of cattle ranchers think that the value offered by DKsilos is 'very good', which is slightly higher than at baseline.

Perception of DKsilos Value Offered

Q: Do you think the value offered by DKsilos is...? (Overall baseline / follow-up = 400 / 151 | Mexico baseline / follow-up = 288 / 101 | Honduras baseline / follow-up = 112 / 51)

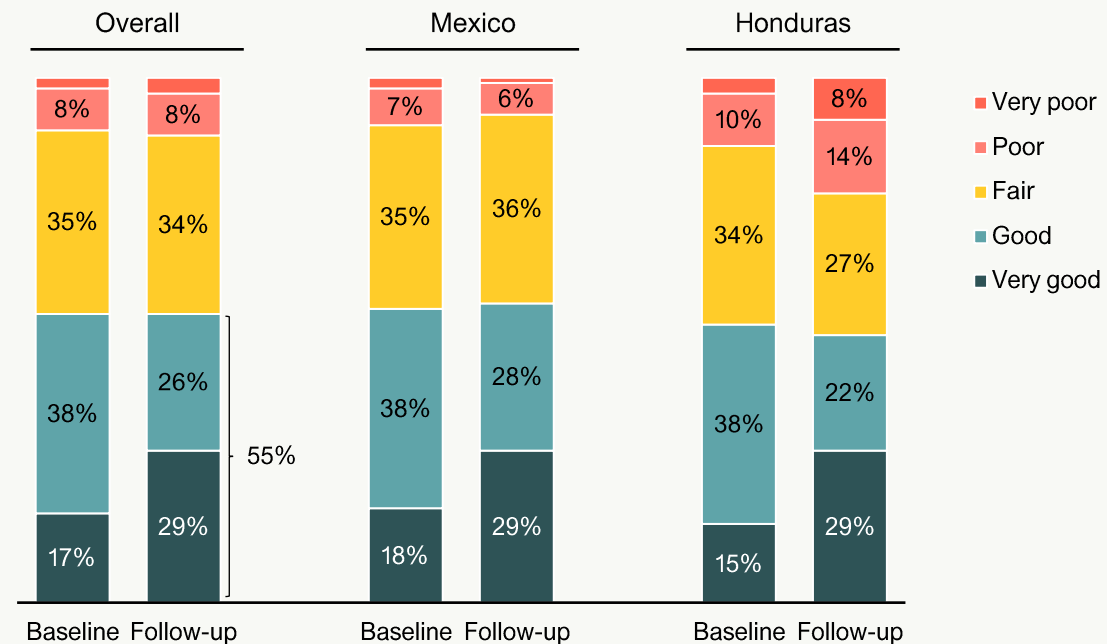


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“We don't know how lucky we will be with nature, but with pests, we can go to the [DKsilos] technicians and buy their products.”
- Female, Mexico

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Climate Shocks: Overview

We asked cattle ranchers a series of questions to understand their resilience to climate shocks and whether their involvement with DKsilos has had any impact on their ability to prepare for, adapt to, and recover from these shocks.

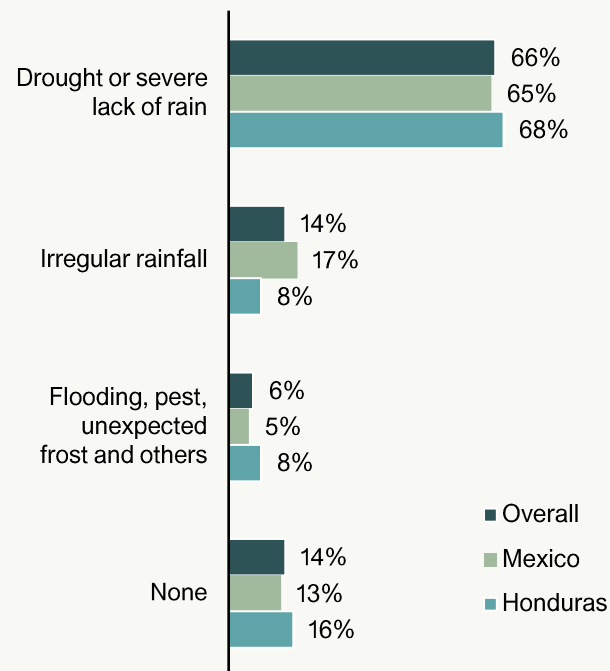
The majority of Mexican cattle rancher households were largely affected by drought.

Honduran cattle ranchers are slightly more likely to mention they are still recovering from a climate shock than their Mexican peers (54% vs. 47%).

2 in 3 cattle ranchers affected by climate shocks experienced drought or severe lack of rain in the last 2 years. Half are still recovering from the shock.

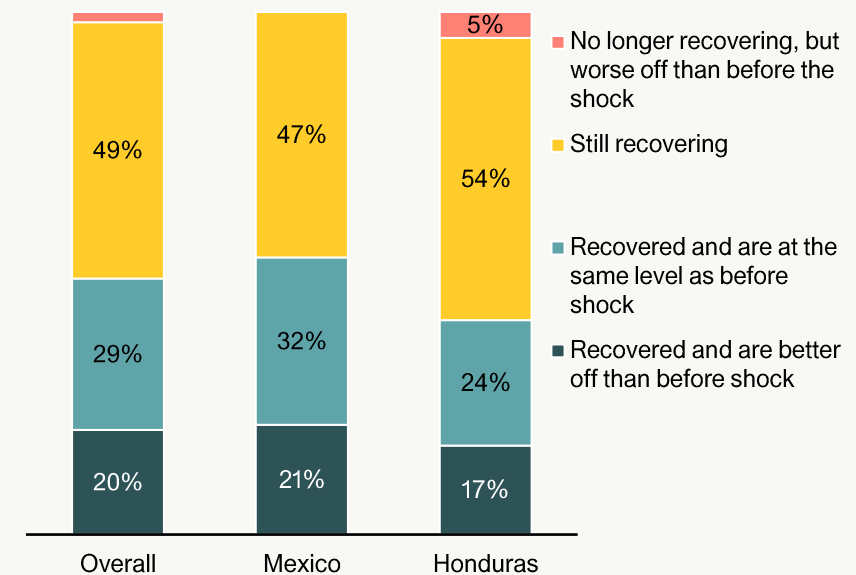
Shocks Experienced By Households

Q: Which of these events affected your household the most in the last 24 months, if any? Select all that apply. (n = 152 | Mexico = 101 | Honduras = 51)



Extent of Recovery from Shocks

Q: To what extent was your household able to recover from this event? (n = 131 | Mexico = 89 | Honduras = 44)



Climate Shocks: Realized Resilience

Half of the Honduran cattle ranchers are still recovering from the shock, however, all of them largely attribute recovery to DKsilos – more so than their Mexican peers.

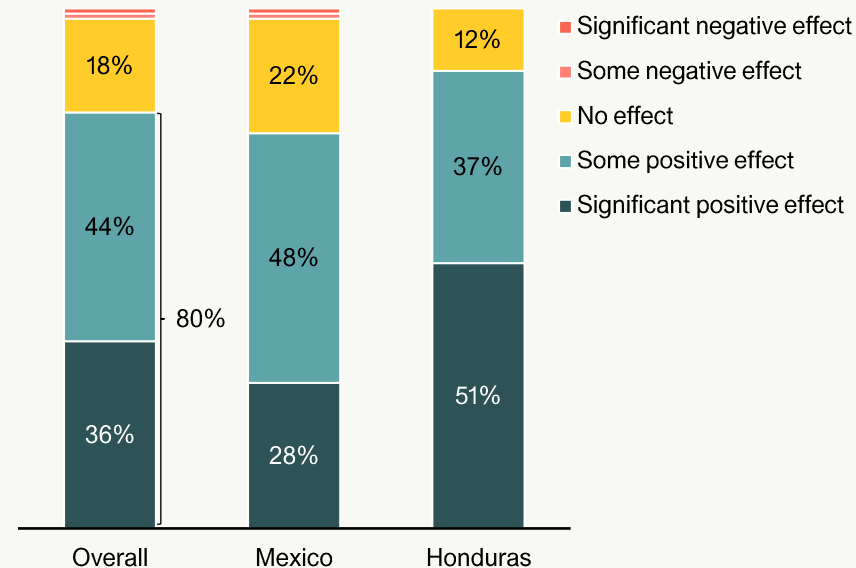
Those who say that DKsilos had a positive effect on their recovery are more likely to have witnessed the following farm outcomes compared to their peers saying 'no effect':

- 'very much increased' livestock production (92% vs. 67%)
- 'very much improved' cattle health (77% vs. 42%)
- 'very much improved' way of farming (68% vs. 29%)

80% of cattle ranchers say DKsilos has a positive effect on their recovery from climate shocks, with 36% reporting a significant positive effect.

Impact of DKsilos on Recovery

Q: Did your involvement with DKsilos have a positive, negative, or no effect on your recovery? (n = 131 | Mexico = 89 | Honduras = 44)



“I was aware of the possibility of facing these crises because it is habitual; it is normal, unfortunately. But I did not feel so sure and prepared as I do now, thanks to the training and preparation, even though I did have certain knowledge.”
- Male, Honduras

“Because before we used to plant any variety of corn and now, we go for the best quality seed, and when this type of event occurs, the stored feed is still good, and we can feed the cattle without many complications.”
- Male, Mexico

Climate Shocks: Perceived Resilience

Honduran cattle ranchers are more likely to feel ‘much more prepared’ to handle future climate shocks than their Mexican peers (43% vs. 27%).

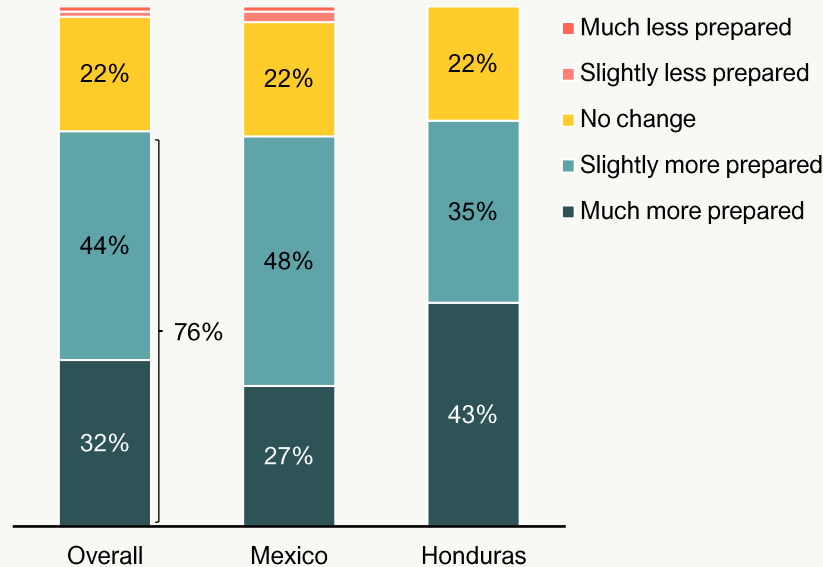
DKsilos’ impact on recovery is attributed to both components of the program (technical assistance and seeds), which are shown to the far right.

Mexican ranchers are more likely to attribute feeling prepared to the ‘useful technical assistance’ (42% vs. 26%) than their Honduran counterparts.

76% of cattle ranchers feel more prepared for future climate shocks, with a third attributing it to useful technical assistance offered by DKsilos.

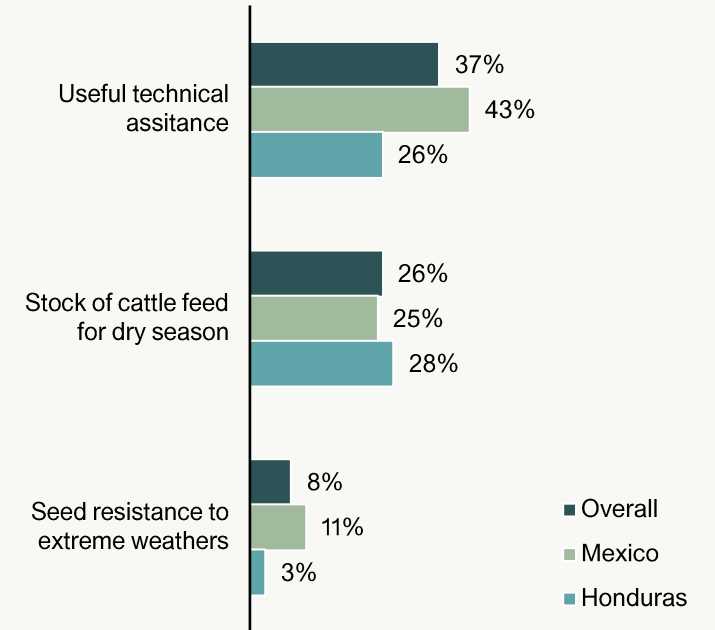
Preparedness for Future Shocks

Q: Has DKsilos affected how prepared you feel for such a shock? (n = 150 | Mexico = 101 | Honduras = 49)



Reasons for Positive Impact on Recovery

Q: Can you please explain your answer? Open-ended, coded by 60 Decibels. (n = 114 | Mexico = 76 | Honduras = 38)



Climate Shocks: Perceived Resilience

When thinking of future shocks, Honduran cattle ranchers are more likely to say that DKsilos would not impact their recovery duration compared to their Mexican counterparts (42% vs. 29%).

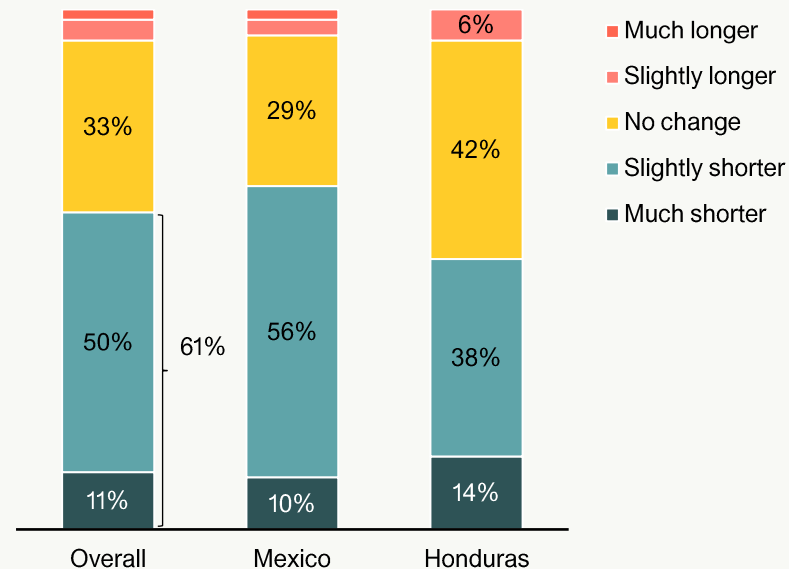
Cattle ranchers that are satisfied with DKsilos' technical assistance are more likely to expect a shorter recovery from a climate shock compared to dissatisfied cattle ranchers (66% vs. 49% Promoters of technical assistance).

Considering Honduran cattle ranchers are also less satisfied with the technical assistance than their Mexican peers (see [page 36](#)), their recovery perception may change in the future, with additional training and support from DKsilos.

61% of cattle ranchers mention that DKsilos shortened their expected duration of recovery from a future climate shock.

Expected Duration of Recovery from Future Shocks

Q: Has DKsilos changed the amount of time you would expect your household would need to recover from such a shock? (n = 151)



“I feel that it has made a big difference in terms of the approach to those unexpected events; I used to feel disoriented when facing those unforeseen situations in livestock farming with results that often were not the most effective; they were negative, but thanks to the guidance I have received, I feel more confident and prepared.”

- Male, Honduras

“Because I have received advice from technicians on fertilizers to combat pests, and in terms of drought I also have some irrigation methods to overcome it.”

- Male, Mexico

Appendix

Benchmarking Summary

Comparison to benchmarks can be useful to identify where you are under- or over-performing versus peers, and help you set targets. The 'Farmer as Customer' benchmark constitutes interventions where the farmer receives a product or service as a customer. This includes equipment, farm inputs (fertilizer, seeds), financial inputs (credit, insurance), livestock input (feed, vaccines, medicines), nutrition-enhancing crops), or training and information.

Information on the benchmarks is found below:

DKsilos

cattle ranchers 152

60dB Farmer as Customer Benchmark:

companies 25

respondents surveyed 6,000+

		DKsilos Overall	DKsilos Mexico	DKsilos Honduras	60dB Farmer as Customer Benchmark
Profile					
% female respondents	●	6	5	8	28
Impact					
% way of farming 'very much improved'	●	61	54	75	52
% corn silage production 'very much increased'	●	47	41	58	39
% livestock production 'very much increased'	●	38	27	61	39
% cattle health 'very much increased'		69	62	82	-
% money earned 'very much increased'	●	26	16	47	33
% quality of life 'very much improved'	●	43	32	67	37
% climate shocks 'significant positive effect'		36	28	52	-
Experience					
DKsilos: Net Promoter Score®	●	74	74	74	46
Technical Support: Net Promoter Score®		61	70	44	-
% reporting challenges	●	18	16	23	18

- Above benchmark
- 0-10% under benchmark
- >10% under benchmark

* With respect to the 60dB Farmer as Customer Benchmark

Calculations & Definitions

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

Metric	Calculation
Net Promoter Score®	The Net Promoter Score is a common gauge of cattle rancher loyalty. It is measured through asking cattle ranchers to rate their likelihood to recommend your service to a friend on a scale of 0 to 10, where 0 is least likely and 10 is most likely. The NPS is the % of cattle ranchers rating 9 or 10 out of 10 ('Promoters') minus the % of cattle ranchers rating 0 to 6 out of 10 ('Detractors'). Those rating 7 or 8 are considered 'Passives'.
Inclusivity Ratio	<p>The Inclusivity Ratio is a metric developed by 60 Decibels to estimate the degree to which an enterprise is reaching less well-off customers. It is calculated by taking the average of Company % / National %, at the \$1.90, \$3.20 & \$5.50 lines for low-middle income countries, or at the \$3.20, \$5.50 and \$11 lines for middle income countries. The formula is:</p> $\sum_{x=1}^3 \frac{([Company] Poverty Line \$x)}{(Country Poverty Line \$x)} / 3$

Methodology Overview

152 phone interviews completed between January and March 2024.

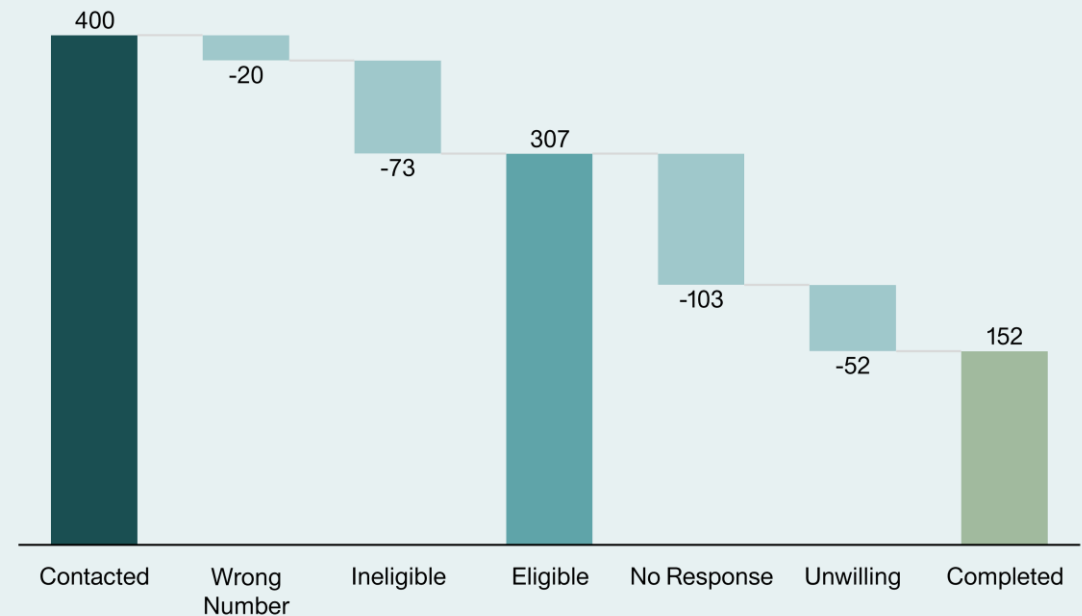
Mexico **Honduras**

Language	Spanish	
Survey mode	Phone	
Survey length	35	
Survey duration	~22 – 25 minutes	
Population size	400	
Database size	288	112
Contacted	288	112
Call attempts	5 per respondent	
Completed	101	51
Response rate*	49%	46%
Confidence level	90%	
Margin of error	6%	

*Although Mexico had a lower response rate, a higher sample size was reachable due to the larger contact database shared.

Data Collection Funnel – Response Rate: 49%

Response rate is calculated from eligible respondents.



Note: 'No response' includes unanswered calls, phone turned off, and phone out of service.

Thank You For Working With Us!

Let's do it again sometime.

About 60 Decibels

60 Decibels makes it easy to listen to the people who matter most. 60 Decibels is an impact measurement company that helps organizations around the world better understand their cattle ranchers, suppliers, and beneficiaries. Its proprietary approach, Lean Data, brings farmer-centricity, speed and responsiveness to impact measurement.

60 Decibels has a network of 830+ trained Lean Data researchers in 70+ countries who speak directly to cattle ranchers to understand their lived experience. By combining voice, SMS, and other technologies to collect data remotely with proprietary survey tools, 60 Decibels helps clients listen more effectively and benchmark their social performance against their peers.

60 Decibels has offices in London, Nairobi, New York, and Bengaluru. To learn more, visit 60decibels.com.

We are proud to be a Climate Positive company.



Your Feedback

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

Acknowledgments

Thank you to Constance, Antonieta, and Jose for their support throughout the project.

This work was generously sponsored by Bayer Crop Science.

We have reduced pests.

We saved enough fodder for dry season.

We can have better crops.

Our cattle have been well fed.

The cattle have:

> gained weight and give more milk,

> suffered from fewer diseases,

> had more offspring.

Ramiro Rejas

Malavika Rangarajan

Hellen Alvarado

Isabela Nieto

Ingrid Garcia

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