

KALRO

Farmer Insights

Kenya





• Nigeria
• Ethiopia
• Kenya
• Uganda
• Tanzania
• Zimbabwe
• Zambia
• Indonesia

AGRIFIN

> We work with +14m farmers & over 130 partners across Africa

Mercy Corps' AgriFin is funded by the Mastercard Foundation and Bill and Melinda Gates Foundation to help organizations design, test and scale digitally-enabled services for Africa's smallholder farmers.

- Objective to develop services that increase farmer income, productivity and resilience, with 50% outreach to women.
- Work with private & public sector scale partners such as banks, mobile network operators, agribusinesses, technology innovators and governments.
- We help our partners develop bundles of digitally-enabled services, including smart farming, financial services, market access and logistics supporting data-driven partnerships.

AGRIFIN AND KALRO

AgriFin Impact Series

In recognition of the wide reach and diverse range of products and services offered through the AgriFin ecosystem we are working with 60 Decibels to measure our impact across some of our strategic partners. Partners were selected based on their area of expertise and level of engagement. This approach considers differences across the following categories by adding the element of flexibility in the research approach; products and services offered, expected outcomes, harvest periods and data available.

AgriFin & KALRO

AgriFin has worked closely with KALRO to enable smallholder farmers to access accurate and localized weather information via their mobile phones. KALRO selected aWhere as a weather data provider that could offer a subscription to a package of agricultural meteorological information and insights. This package covers the whole of Kenya (at 5 arc-minute resolution) and provides: access, via API, to daily updated agricultural meteorological information; access, via ftp, to a daily updated set of agriculturally targeted and GIS ready spatially coherent weather surfaces; and access via web browser, to a GIS server of the above geo-spatial weather surfaced.

Farmers can access the weather information via the Kenya Agricultural Observatory Platform (www.kaop.co.ke) where they can register to receive SMS weather updates tailored to their county, constituency and ward location. Alternatively users may access weather information and agro-advisory messages via the website by entering their county, sub-county and ward information. The weather information includes min and max temperatures, chance of rainfall, and amount of rainfall for the next 14 days as well as historical information for the last 7- 10 days.

Welcome To Your 60dB Results

We enjoyed hearing from 223 of your farmers - they had a lot to say!

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KALRO Performance Snapshot

KALRO is providing a unique service to an underserved farmer base. There is an opportunity to address farmers challenges and deepen impact.

Inclusivity Ratio

0.52

degree of reaching low-income farmers



Impact

43%

quality of life
'very much improved'



What Impact

- 38% speak about increased ability to manage household expenses
- 30% talk about ability to afford education
- 28% speak about increased household consumption

First Access

76%

first time accessing service provided



Farmer Voice

"Thanks to the organization I am able to plant maize crops in adverse weather conditions. I get a good a harvest and hence able to provide food for my family."

Data Summary

KALRO Performance: 223 farmers interviewed during February 2021.

Quintile Assessment compares KALRO's performance with 60dB Agriculture Benchmark for Farmer as Customer comprised of 47 companies, 17 countries, and 16,000 farmers. Full details can be found in [Appendix](#).

Net Promoter Score®

51

on a -100 to 100 scale



Challenges

28%

report challenges



Crop Revenue

26%

'very much increased'



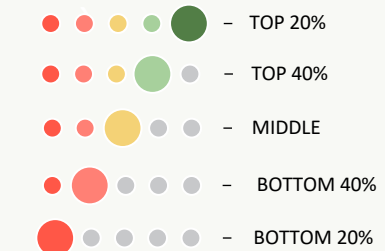
Crop Production

33%

'very much increased'



Performance vs. 60dB Benchmark



Top Actionable Insights

KALRO is improving farm outcomes. Farmers make specific suggestions to KALRO and ask for help to cope with the pandemic.

Headline



Going Great:

KALRO is improving farm management and returns

Detail & Suggested Action

KALRO has a Net Promoter Score of 51 which suggests high farmer loyalty and strong word of mouth! Farmers value knowledge of improvements, receiving accurate and reliable information via SMS and the KAOP App.

Nine out of 10 farmers said the way they farm has improved because of KALRO. Specifically, they are planning farming activities better and make adjustments based on KALRO's weather information.

An idea: Reward referrals and leverage farmers' strong word-of-mouth to scale.



A Finding That Jumped Out:

Farmers ask for affordable inputs to apply the information and cope with COVID-19.

Majority of farmers are concerned about access to fertilizer and seeds in the next six months. 65% of farmers anticipate input prices being high. These worries were more pronounced in the context of COVID-19. These asks are similar what we are hearing from farmers across Kenya: see feedback from 1500+ farmers on our Kenyan farmer dashboard [here](#).

A recommendation: Can KALRO cater to demands for complementary service offerings, especially during this difficult time?



Area For Improvement:

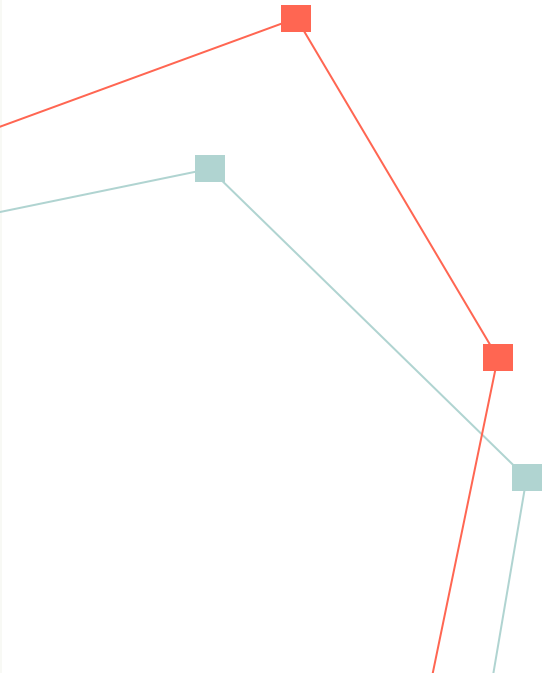
Farmers are facing challenges with mobile application and inaccurate information.

28% of farmers experiences challenges with KALRO's services. Restricted usage on mobile application and inaccurate weather information were most often reported challenges. Farmers also identified these as areas of improvement for KALRO.

For discussion: Farmers do love your service! What can KALRO do to reduce farmers facing challenges?

Farmer Voices

We love hearing farmer voices.
Here are some that stood out.



Impact Stories

79% shared how KALRO services had improved their quality of life

“The quality of life has changed because there has been an increase in product production. Consequently, income has increased. I have added more crops in the farm. I have also ventured in poultry farming.”

“I have reduced stress levels. I no longer second guess if it will rain or not.”

“I was able to settle some cash loans and constructed a house for my farm workers to live in.”

“I now practice cost effective farming. The amount of fertilizer I use stays longer. The surplus amount I used to spend on fertilizer I now use to pay farmers.”

“It has helped me increase my total income and I am now able to pay for electricity comfortably.”

“My family has the privilege of consuming healthy meals thanks to the crops I harvest. I do not spend money buying bread, they consume cassava that I have planted.”

Opinions On KALRO Value Proposition

57% were Promoters and were highly likely to recommend

“The App has helped me to know if we're going to go through a dry season hence fill my water tanks to avoid lack of water. This enables me to plant and harvest cow feeds on time.”

“I have been using it to know when I can irrigate my crops. When it is about to rain, I reduce on watering my crops. This predictions has helped me to save on cost I incurred while irrigating. The only disadvantage is that it limits us on the number of times we can log in and use the farm.”

Opportunities For Improvement

84% had a specific suggestion for improvement

“The app should have historical information about what is expected in a given season. When it warns about drought, give options on what a farmer can do in the drought season.”

“Give information on where to get certain types of seeds such as disere. In future, open county satellite offices so that any one can access even the illiterate people since it is not easy for them to use the platforms.”

Key Questions We Set Out To Answer

- Who is KALRO reaching?
 - Income, farm and disability profile
 - Importance of KALRO offerings
 - Availability of alternatives in market
 - Exposure and resilience to climate shocks
- What impact is KALRO having?
 - Impact on way of farming
 - Changes in crop production, productivity and revenue
 - Impact on quality of life
 - Impact on recovery from climate shocks
- Are farmers satisfied with KALRO & why / why not?
 - Net Promoter Score & drivers
 - Top challenges experienced
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- Additional insights of interest to KALRO
 - Experience with COVID-19
 - COVID-19 and challenges with inputs
 - COVID-19 – information and market access
 - COVID-19 and new crops

“The information on the app has made me do more diversification on bananas. There is enough maize for food consumption. Food is available.”

About The Farmer

The median farmer cultivated 3 acres in the last 12 months and applied KALRO's information to 85% of it.

We asked questions to understand the farmers' homes, farms, and engagement with KALRO.

Farmers were predominantly and lived in a household with 5 members.

The average farmer had been using KALRO's offerings for 11 months. The crops that these offerings were applied to contributed 51% of the average farmers' household income last year.

About The Farmers We Spoke With

Data relating to farmer characteristics (n = 223)

3

Acres were cultivated by the median farmer last year

51%

Of household income last year came from crop that used KALRO's offerings

5

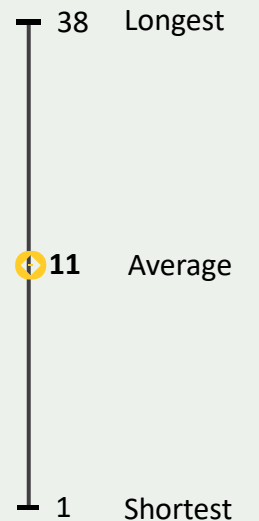
Average household size

85%

Of the land cultivated last year applied the information received from KALRO's services

KALRO Engagement Duration

(months)



Poverty And Inclusivity

There is opportunity for KALRO to reach more low-income farmers, compared to national Kenyan averages.

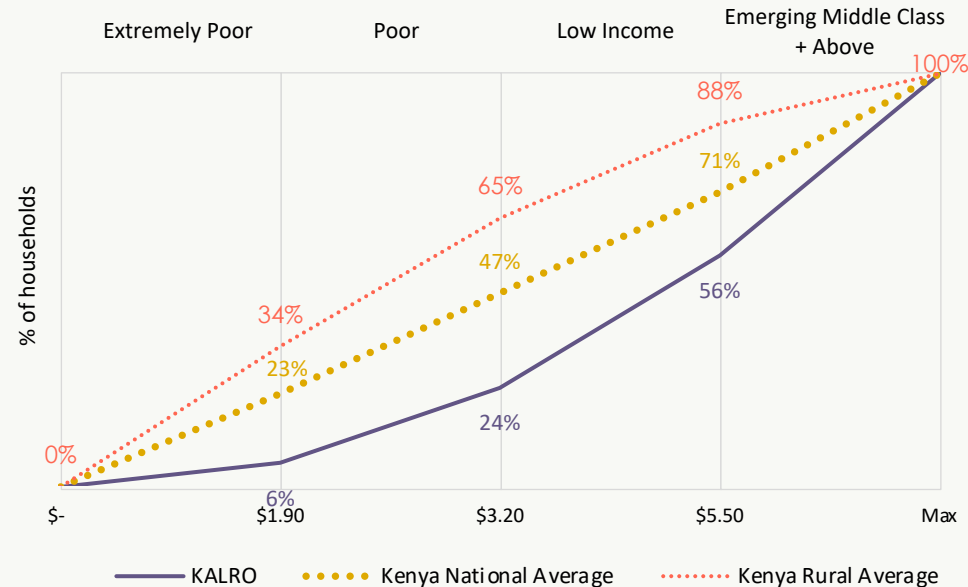
Using the Poverty Probability Index® / we measured how the income profile of your farmers compares to the Kenya average.

24% of KALRO farmers live on less than \$3.20 per day. This is lower than the Kenyan national and rural averages of 47% and 65% respectively.

This implies that KALRO is serving wealthier farmers than the Kenya national averages, resulting in an inclusivity ratio of 0.52.

Income Distribution of KALRO Farmers Relative to Kenya National Average

% living below \$XX per person per day (2011 PPP) (n = 223)



Inclusivity Ratio

Degree to which KALRO is reaching low-income farmers in Kenya

0.52

● — BOTTOM 20%

We calculate the degree to which you are serving low-income farmers compared to the general population. 1 = parity with national pop. ; > 1 = over-serving; < 1 = under-serving.

[See Appendix](#) for calculation.

Access and Alternatives

Close to three quarters of farmers are accessing farming or weather-related information for the first time and only a fifth could easily find a good alternative to the farming or weather-related information that you received from KALRO's SMS service or KAOP Google Play Store App.

To understand the organization's contribution, we ask farmers if it is facilitating access to a new product or service and whether this offering can be easily replaced by an alternative.

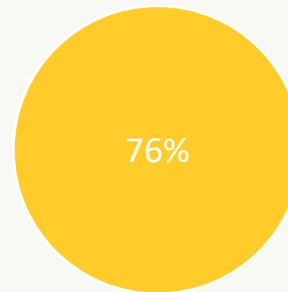
The high percentage of farmers who are accessing KALRO services for the first time suggests that it is reaching an under-served farmer base.

The low availability of alternatives shows that KALRO is providing a scarce service.

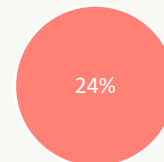
First Access

Q: Before you started interacting with KALRO's SMS services or KAOP Google Play Store App, did you have access to farming or weather-related information like those that KALRO provides? (n = 223)

● ● ● ● ● — TOP 40%



Accessing farmer or weather-related information for the first time

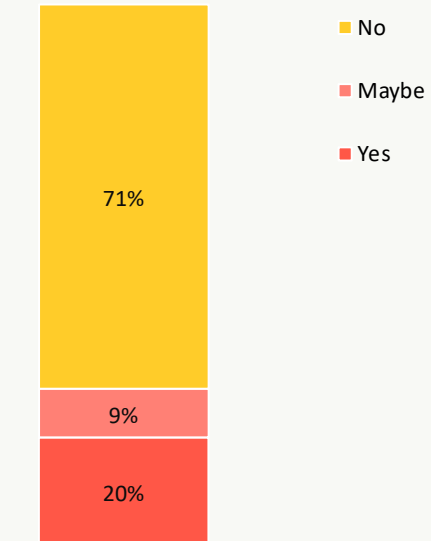


Had prior access to similar information

Access to Alternatives

Q: Could you easily find a good alternative to the farming or weather-related information that you received from KALRO's SMS service or KAOP Google Play Store App? (n = 222)

● ● ● ● ● — BOTTOM 40%



Resilience to Shocks

About two-thirds of the farmers whose community experienced a climate shock in the last 2 years have been able to recover.

91%

Of all farmers said their community experienced at least one climate related shock in the last 24 months

Of this group of 203 farmers...

24%

Were not affected by the shock that hit their community

63%

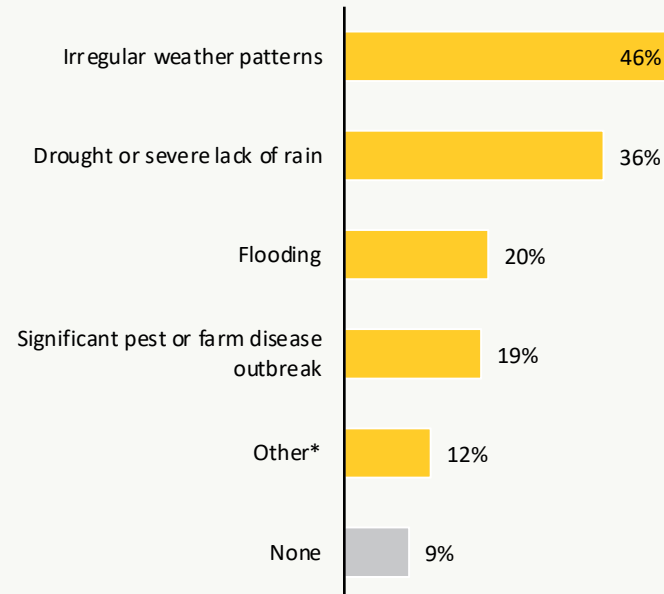
Have recovered fully

12%

Have not recovered

Shocks Experienced By Community

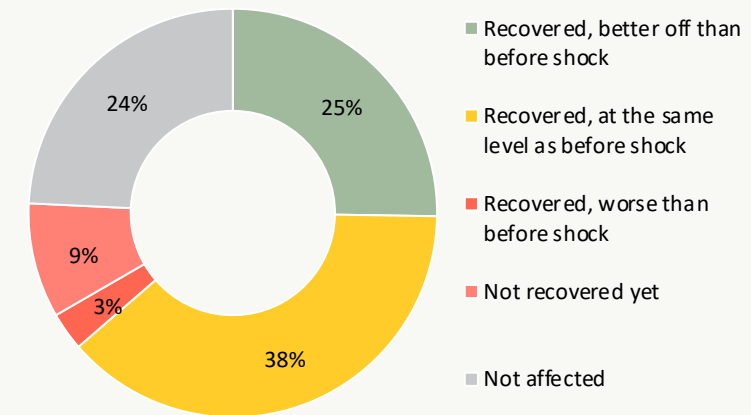
Q: In the last 24 months, which of the following shocks affected your community / village? (n = 223, multiple responses allowed except 'None')



* Responses in Other include unexpected frost, soil erosion and natural fire

Effect and Recovery for Household

Q: To what extent was your household able to recover from this event? (n = 203)**



** Not affected is based on farmers reporting None to question: Which of these shocks affected your household the most?

Disability Profile

We used the [Washington Group Disability questions](#) on disability to understand the profile of households and how products, services, marketing, training, or after-sales support could be more inclusive.

KALRO farmer households have a 2.2% disability prevalence, which is lower than Kenya's national population disability rate of 3.5%.

You can use this information to identify ways to better serve your farmers. For example, if respondents have challenges with eyesight, consider larger text size or more visuals on the KAOP App and SMS's.

The disability rate among KALRO farmer households is slightly less than that of Kenya's national population.

Disability Profile of KALRO's farmer Households

% who said a member of their household had a lot of difficulty doing any of the following or cannot do at all. (n = 223)

2%

Respondents said that one or more of their household members had at least one of six disabilities



1%

difficulty seeing, even if wearing glasses (if available)



0%

difficulty remembering or concentrating



0%

difficulty hearing, even if using a hearing aid (if available)



0%

difficulty with self-care, such as washing all over or dressing



1%

difficulty walking or climbing steps



0%

difficulty communicating or being understood, using their usual language

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"I have been able to improve my investment in farming since the rate of return is high. Part of the income is used in taking of household needs thus less strain."

Effectiveness of KALRO's Information

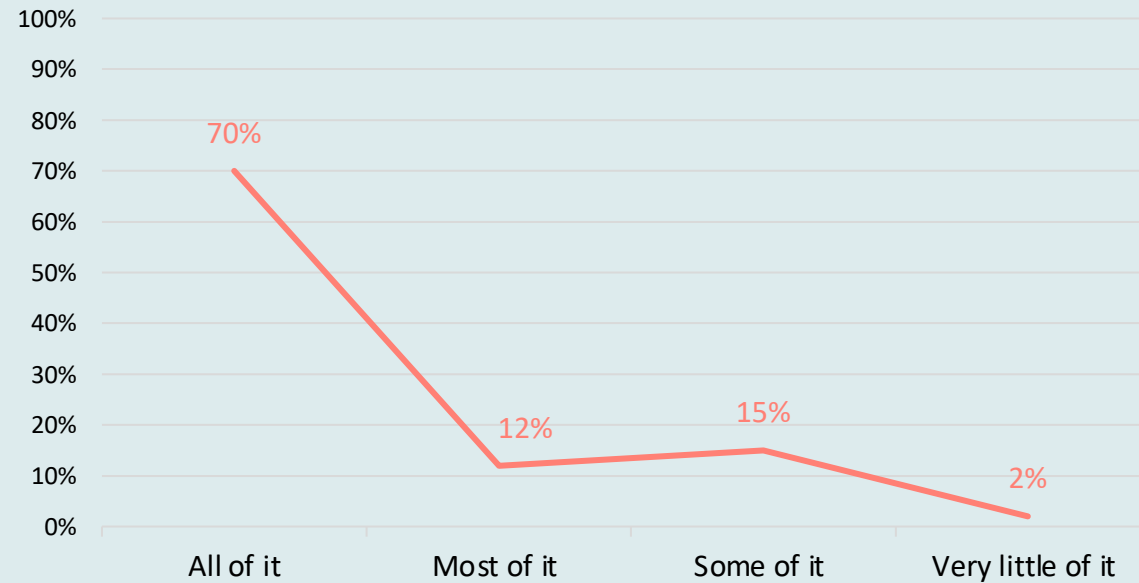
About three-quarters of farmers reported applying all information.

To understand how effective KALRO's information was, we asked farmers how much of the information they applied on their farm.

Effectiveness of Information

Q: How much of this information did you apply?

% of respondents who said 'All of it' regarding effectiveness of information; n = 157



Way of Farming

We tried to gauge the effect of KALRO's SMS service or KAOP Google Play Store App on farmers' management of their farm.

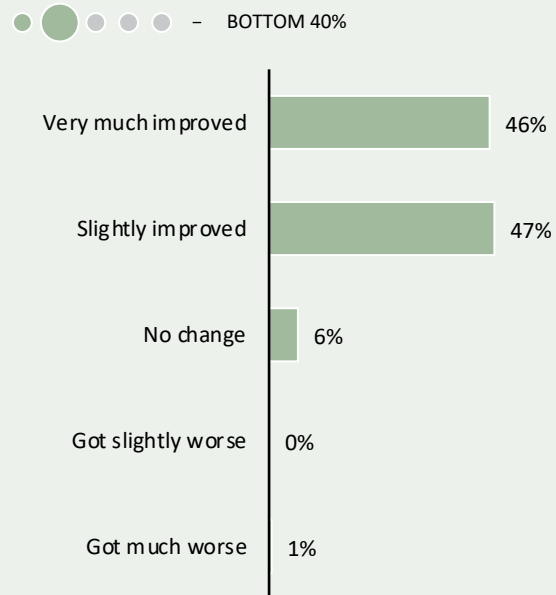
46% farmers said that their way of farming had 'very much improved'.

Farmers who reported improvements in their way of farming also spoke of increased crop production.

Nine of 10 farmers reported an improvement in the way they farm due to KALRO.

Changes In Way Of Farming

Q: Has your way of farming changed because of the farming or weather-related information that you received from KALRO's SMS service or KAOP Google Play Store App? (n = 223)



Very much improved:

"The information that I had access to helped improve the health of my vegetables. This in turn increased the number of customers I got for my veggies."

"It has helped in prediction of rain. It has helped in planning on when to plant."

Slightly improved:

"I now irrigate my crops 4 times in a week during the dry season. This ensures my crops are well hydrated and remain healthy."

Way of Farming: Top Outcomes

Farmers were asked to describe – in their own words – the ways in which their farming had changed because KALRO.

The top outcomes are shown on the right.

Others changes included:

- Timely land preparation (12%)
- Knowledge on crop health and diseases (12%)

Farmers talked about improved farming schedules and using different crops on their farm

Top Three Self-Reported Outcomes for 93% of Farmers Who Say Way of Farming Improved

Q: Please explain how your way of farming has improved. (n = 207, multiple responses allowed). Open-ended, coded by 60 Decibels.

38%

Spoke about **improved planning of farming practices** such as when to weed, plant, spray and harvest.

(35% of all respondents)

“I am able to know when to plant my maize seeds on time and after the rain stops when to also apply fertilizer that would be beneficial for their health.”

14%

Reported a **change in the timing of seeds or crops planted**

(13% of all respondents)

“I have stopped spending money on buying water for irrigation. I just wait for the rainy season in order to plant onions.”

13%

Spoke about a **change in type of seeds and crops planted**

(12% of all respondents)

“I now plant green grams and cow peas; they take a short time of 3 months to grow. I only plant certified green gram variety while planting.”

Crop Production

Most of the farmers reported increase in crop production. Three-quarters of this group realized the increase without planting additional land, suggesting an increase in productivity.

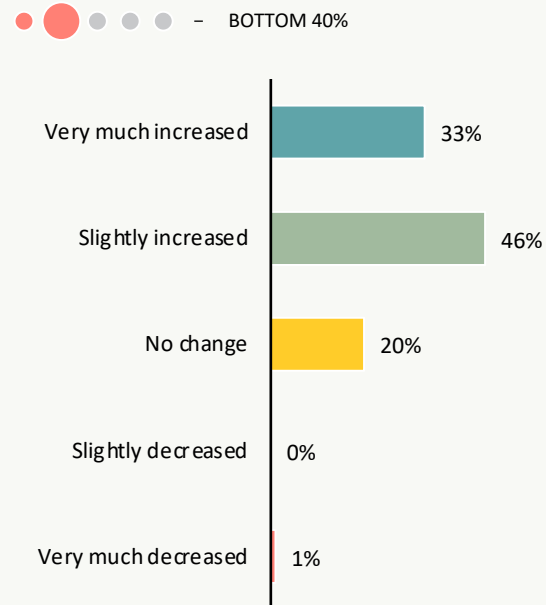
We asked farmers if they had noticed changes in the production of crop using KALRO's services and what might have caused it.

Farmers whose production remained unchanged reported no improvements in the way they farm and farm revenue.

21% of farmers said increased production came from planting additional land.

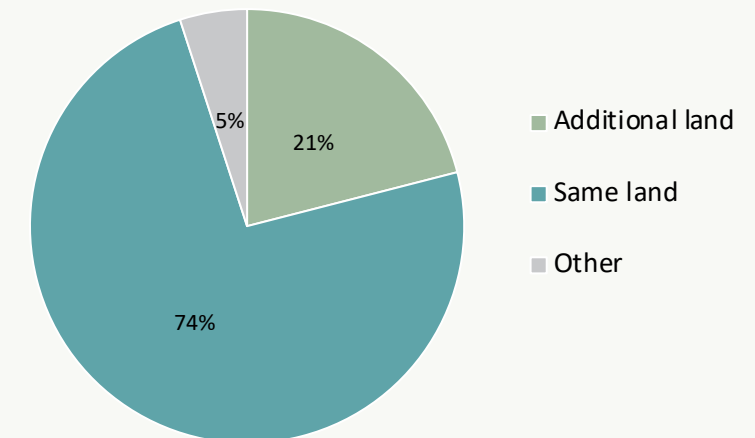
Impact on Production

Q: Has the total production from your [crop/livestock] changed because of KALRO's SMS services or KAOP Google Play Store App? (n=223)



Reasons for Increases in Production

Q: Was this increase because you planted additional land or was it from the same amount of land? (n=176)



Crop Revenue (1/2)

About three-quarters of farmers reported increase in money earned from crops that used KALRO's services. Ability to sell more and reduced costs were primary reasons for the increases.

We asked farmers if they had noticed changes in the revenue they earned from the crop after receiving KALRO's information.

Farmers who reported improved crop revenue were more likely to mention quality of life improvements.

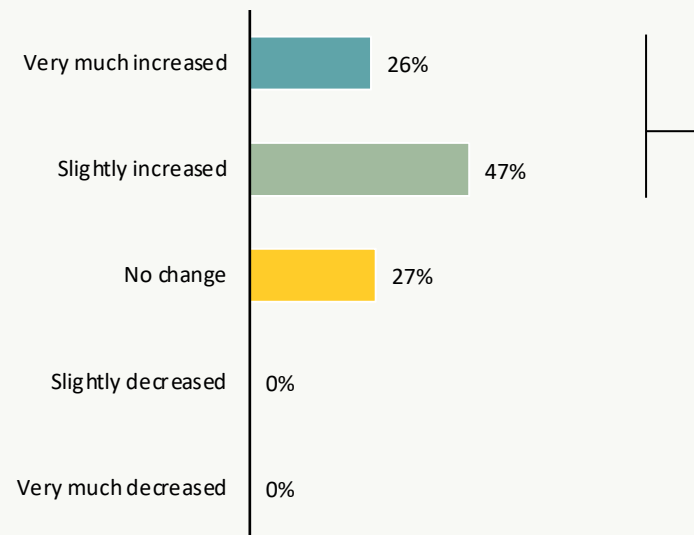
Farmers attributed no change in crop revenue to the following:

1. 29% had not harvested their crop
2. 14% had used the crop for domestic use
3. 12% could not apply the information as they are in a different stage in the farming cycle

Returns from Crops

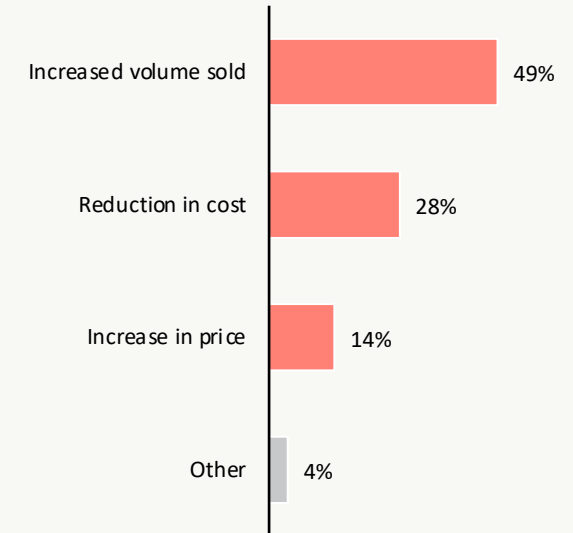
Q: Has the money you earn from farming changed because of KALRO's SMS services or KAOP App? (n=222)

● ● ● — MIDDLE



Reasons for Increased Returns

Q: What were the main reasons for the increase in money earned? (n=161)



Crop Revenue (2/2)

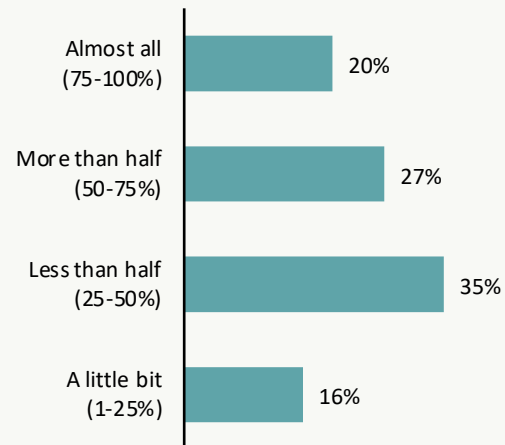
On average, farmers reported a 21% increase in crop revenue, which accounts for 51% of total household income.

51%

of household income last year came from farming

Household Income Impacted By SunCulture

Q: In the last 12 months, what proportion (%) of your household's total income, came from crop? (n=215)

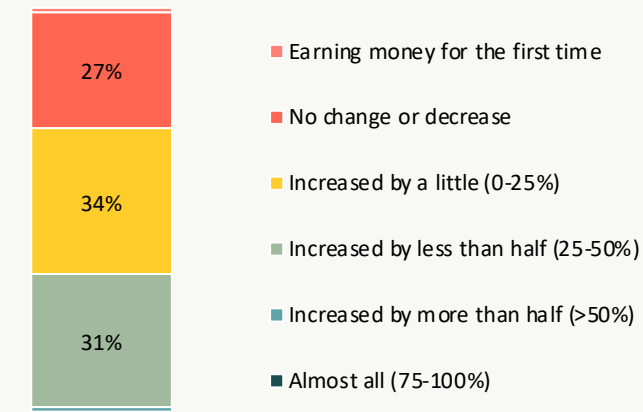


21%

Was the net average increase in revenue from crops that were using KALRO's services

Change In Crop Returns

Q: a) Can you give a rough estimate how much your money earned from crop has increased because of KALRO's services? (n=220)

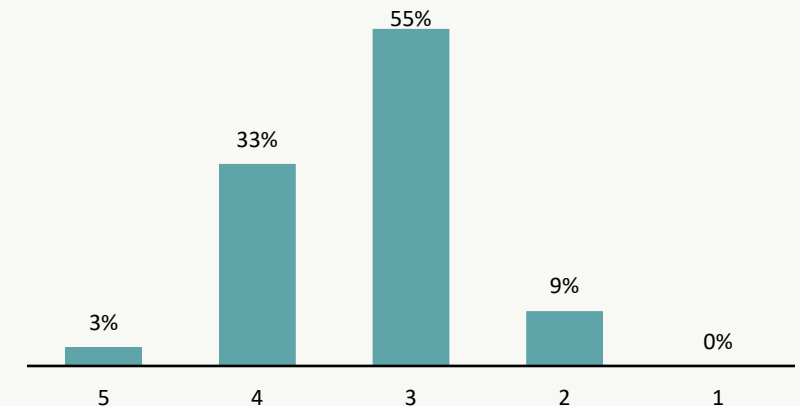


36%

Rated this change a significance of 4 or 5 when thinking about its contribution to household income

Significance of Change in Crop Returns

Q: On a scale of 1 to 5, where 1 is not significant at all and 5 is very significant how significant is this increase to your overall household income? (n=161)



Quality of Life

To gauge depth of impact, farmers were asked to reflect on whether their quality of life has changed because of KALRO.

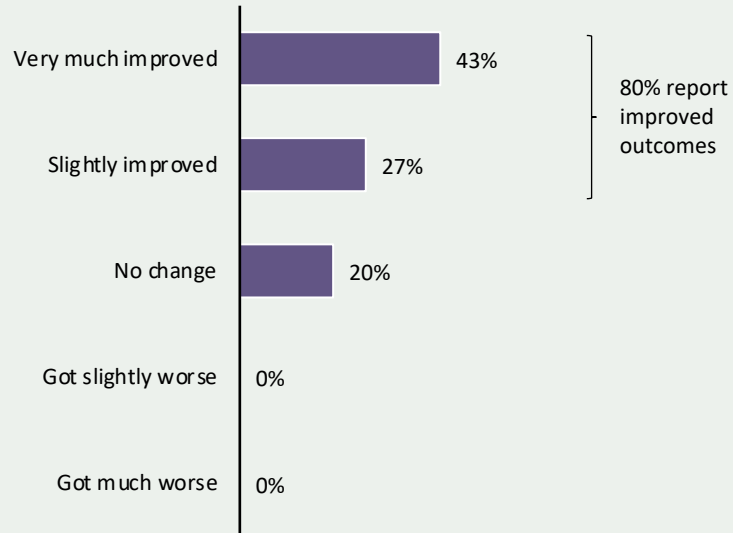
20% said they had not experienced any change yet. Primary reason being that farmers were waiting to complete a harvest season.

Eight of 10 farmers reported improvements in the overall quality of life because of KALRO.

Perceived Quality of Life Change

Q: Has your quality of life changed because of KALRO's SMS service and KOAP App? (n = 223)

● ● ● ● — TOP 40%



Very much improved:

"My children now attend school with all the necessary equipment they are required like books and masks. I have started expanding the kitchen area of my house."

"I was able to increase the wages I pay my farm attendant since I have been getting good returns from farming."

Slightly improved:

"I have reduced stress levels. I no longer second guess if it will rain or not."

Quality of Life: Top Outcomes

Farmers were asked to describe – in their own words – the positive changes they were experiencing because of KALRO.

The top outcomes are shown on the right.

Some other themes that emerged:

- Increased income (20%)
- Income or profit re-invested in farm (17%)

Farmers talked about increased ability to manage household expenses, afford educational expenses and being able to put food on the table for family and community.

Top Three Self-Reported Outcomes for 80% of Farmers Who Say Quality of Life Improved

Q: Please explain how your quality of life has improved. (n = 176) , multiple responses allowed). Open-ended, coded by 60 Decibels.

38%

Spoke about **increased ability to manage household expenses**
(30% of all respondents)

“I have been able to pay my water bill and comfortably buy food for my household. I also aid my parents in paying some of their bills.”

30%

Mentioned an **increased ability to afford education**
(23% of all respondents)

“I sold 3 goat, added the money from the maize income and bought a calf. I used the money for maize to pay school fees.”

28%

Spoke about **being able to put food on the table**
(22% of all respondents)

“I can constantly provide food for my family to consume and have extra to feed the needy in the community.”

Recovery From Climate Shocks

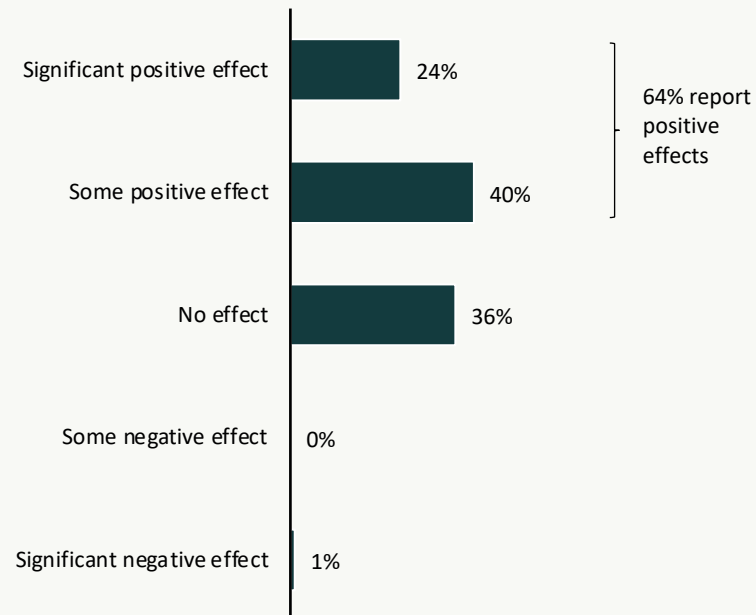
Two thirds of farmers who were hit by a climate shock in the last 24 months said that KALRO had a positive impact on their recovery.

We asked 154 producers who reported being affected by a climate shock if KALRO had impacted their recovery from the climate shock reported earlier.

Farmers who applied all or most of the information on their farm were more likely to report that KALRO had a positive effect on their recovery.

Impact of KALRO on Recovery

Q: Did your involvement with the KALRO have a positive, negative or no effect on your recovery? (n=154)



“The information is helpful since I have been able to tell when the rains will come therefore know when to plant. I now have a timetable to pump water whereby I am able to save on water and finances especially when I get to know the exact day it will rain.”

“Last year October, I was able to decide the right time to plant maize thanks to the weather forecast provided by KALRO, the rainy season would come early. I did not have to set up the irrigation's kits. This was a cost-effective practice.”

Additional Insights: Varied Experience By Tenure

Farmers who used KALRO's services for over a year were more likely to report improvements in farming outcomes and overall quality of life.

We wanted to understand if farmers who had worked with KALRO for longer experienced their services differently and reporting greater impact.

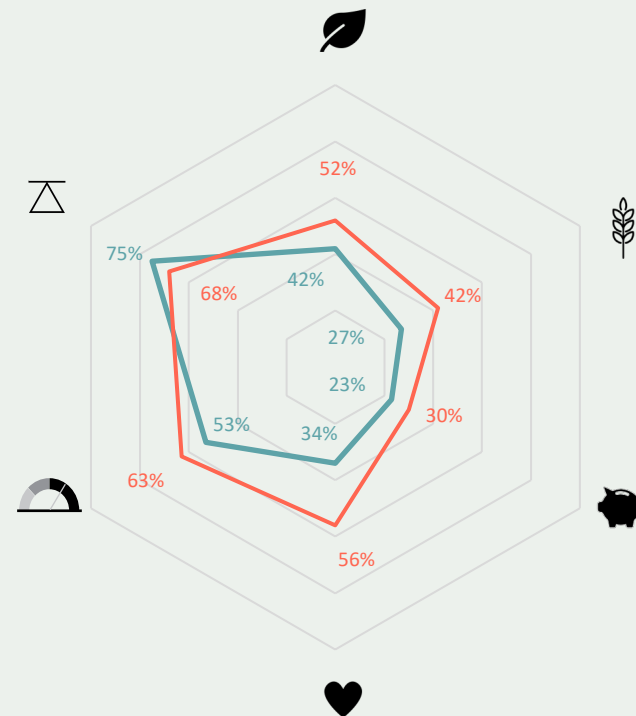
KALRO's impact in the way farmers manage their farm sets in early. A comparable proportion of newer and older farmers reported improvements on this dimension.

While impact on crop outcomes deepens over time, challenges and satisfaction did not show a clear trend.

Average performance across metrics:

- Farmers under 12 months: **42%**
- Farmers over 12 months: **52%**

Impact On Farmers by Tenure



Key: Farmer Interaction with KALRO

12 months or less
n = 137

13 months or more
n = 86

Way of Farming
% "very much improved" because of KALRO

Production
% "very much improved" because of KALRO

Money Earned
% "very much improved" because of KALRO

Quality of Life Impact
% "very much improved" because of KALRO

Net Promoter Score®
% promoters

Challenges
% "no" challenges with KALRO

Key Questions We Set Out To Answer



Who is KALRO reaching?

- Income, farm and disability profile
- Importance of KALRO offerings
- Availability of alternatives in market
- Exposure and resilience to climate shocks



What impact is KALRO having?

- Effectiveness of KALRO's information
- Impact on way of farming
- Changes in crop production, productivity and revenue
- Impact on quality of life
- Impact on recovery from climate shocks



Are farmers satisfied with KALRO & why / why not?

- Net Promoter Score & drivers
- Top challenges experienced
- Suggestions for improvement



Additional insights of interest to KALRO

- Experience with COVID-19
- COVID-19 and challenges with inputs
- COVID-19 – information and market access
- COVID-19 and new crops

“I sell maize and from the profits I'm able to educate my children. I do not have any outstanding balance with their school fees. I have also taken in my mother who came to live with us in my house.

Farmer Satisfaction: Net Promoter Score

KALRO has a Net Promoter Score® of 51 which is very good and slightly higher than 60dB benchmarks.

The Net Promoter Score® is a gauge of satisfaction and loyalty. Anything above 50 is considered very good. A negative score is considered poor. The farmer hubs' score of 51 is good.

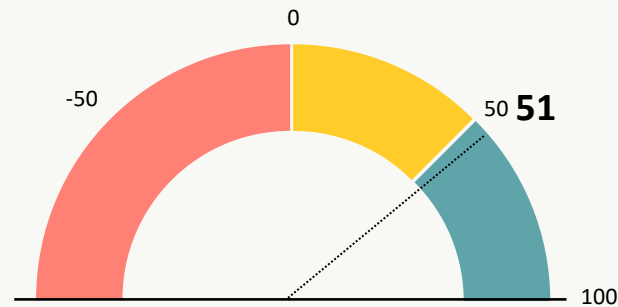
Asking respondents to explain their rating explains what they value and what creates dissatisfaction. These details are on the next page.

Insight

You're in the top 40% of our agriculture benchmark for this indicator. Increasing this score by 17 points will see you move into the next quintile!

Net Promoter Score® (NPS)

Q: On a scale of 0-10, how likely are you to recommend KALRO to a friend or family member, where 0 is not at all likely and 10 is extremely likely? (n = 223)



NPS = % Promoters — % Detractors

9-10 likely to
recommend

0-6 likely to
recommend

NPS Benchmarks

● ● ● ● ● — TOP 40%

60 Decibels Global Agri Average **37**
80+ companies

Farmer as customer average **34**
52 companies

East Africa average **43**
32 companies

NPS Drivers

Promoters and Passives value improved knowledge about crops, comprehensive and accurate information which helped them plan their farming activities.

57% are Promoters :)

They love:

1. Improved knowledge about crops and seeds
(30% of Promoters / 17% of all respondents)
2. Comprehensive and accurate information to apply on farm
(27% of Promoters / 15% of all respondents)
3. Ability to plan farming activities ahead of time
(20% of Promoters / 11% of all respondents)

“As per the observatory I was able to plant a week before the rains begun, this was really helpful and accurate information.”

Tip:

Highlight the above value drivers in marketing.

Promoters are powerful brand ambassadors — can you reward them?

37% are Passives : \

They like:

1. Comprehensive and accurate information to apply on farm
(43% of Passives / 16% of all respondents)
2. Improved ability to make decisions regarding faming activities
(13% of Passives / 5% of all respondents)

But complain about:

1. Inaccurate and unreliable information
(12% of Passives/ 4% of all respondents)

“The app was okay. Sometimes it would give forecast to expect rain, but the rain does not come.”

Tip:

Passives won't actively refer you in the same way that Promoters will.

What would it take to convert them?

6% are Detractors : (

They complain about*:

1. Lack of detail, depth and timing of information
(31% of Detractors / 2% of all respondents)
2. Not receiving any information/messages
(23% of Detractors / 1% of all respondents)
3. Inaccurate and unreliable information
(15% of Detractors / 1% of all respondents)

“KARLO should make sure the information gets to the farmers on time.”

Tip:

Negative word of mouth is costly.

What's fixable here?

NPS by Segment

Farmers who applied all the information had the highest Net Promoter Score.

We wanted to understand what drove farmers’ satisfaction with KALRO. Upon analysing, we found a strong correlation between NPS and amount of information applied on the farm.

The NPS for those applying all the information is 67, compared to only 13 for those who apply some of the information.

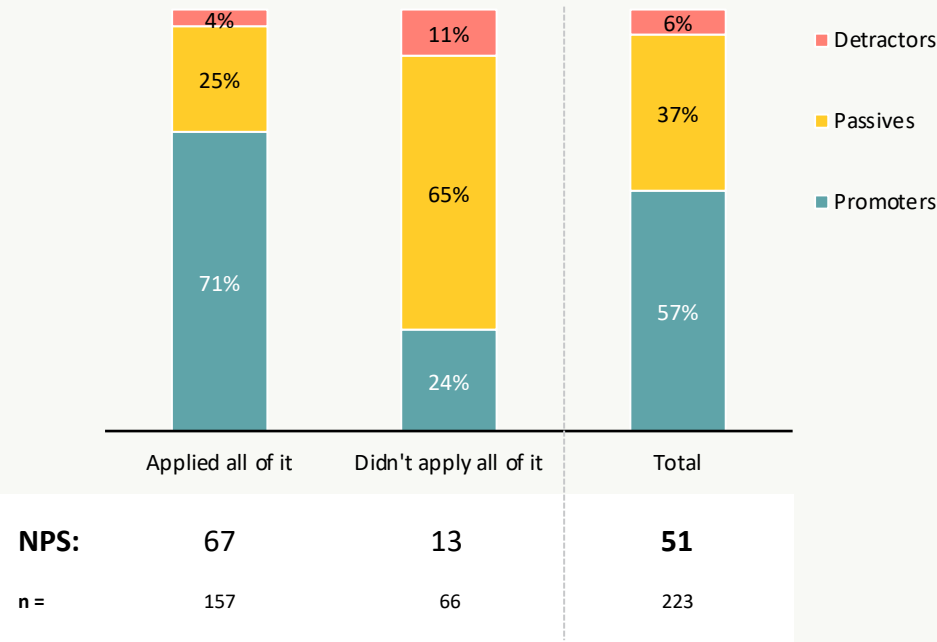
Question

Given the varying NPS, how could KALRO improve the information for farmers to find it most useful?

Net Promoter Score by Information applied

Q: On a scale of 0 to 10, how likely are you to recommend KALRO to a friend or family? (y-axis)

Q: How much of this information did you apply? (x-axis)



Farmer Challenges

Asking about farmer challenges enables KALRO to identify problem areas and tackle them proactively.

Unresolved challenges can encourage negative word-of-mouth. Farmers reporting challenges had a NPS of 32 compared to 57, for those that did not face any challenges.

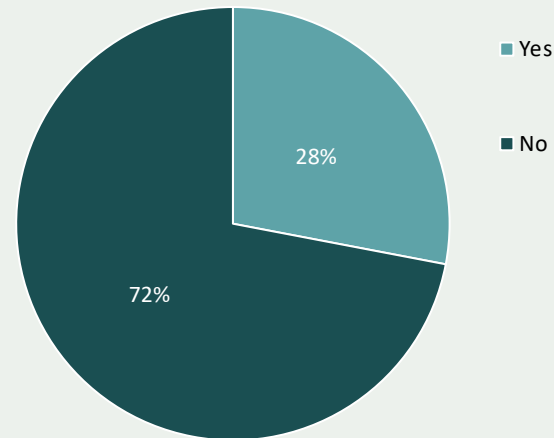
18% of the reported challenges were around the unreliability and inaccuracy of the information, which was also one of the top complain reported by [Detractors](#).

About a quarter of farmers report challenges with KALRO's service. Farmers complained about usage limit and bugs within KAOP application.

Proportion of Farmers Reporting Challenges

Q: Have you experienced any challenges while using KALRO service? (n = 222)*

● ● ● ● ● — BOTTOM 40%



Top Challenges Reported

Q: Please explain the challenge you have experienced (n = 61)

1. The KAOP App limits usage and blocks information

(25% of farmers w. challenges / 7% of all respondents)

"I got a prompt that I have reached my limit of number of logins. I currently cannot access the predictions."

2. Unreliable and inaccurate information

(18% of farmers w. challenges / 5% of all respondents)

"The challenge is when the app states that it will rain, it will rain but the timing is not correct."

3. Bugs in the KAOP Application

(13% of farmers w. challenges / 4% of all respondents)

"The application was not working. In December 2020 to January 2021, when you enter location, nothing would appear."

Farmer Suggestions

We asked farmers an open-ended question about their suggestions to help KALRO improve.

About a fifth could not think of a specific suggestion. Among those who did, farmers shared a variety of suggestions surrounding agronomic and customized data, reliable weather information and frequent SMS.

More agronomic information and customized farmer data were most common suggestions for improvement.

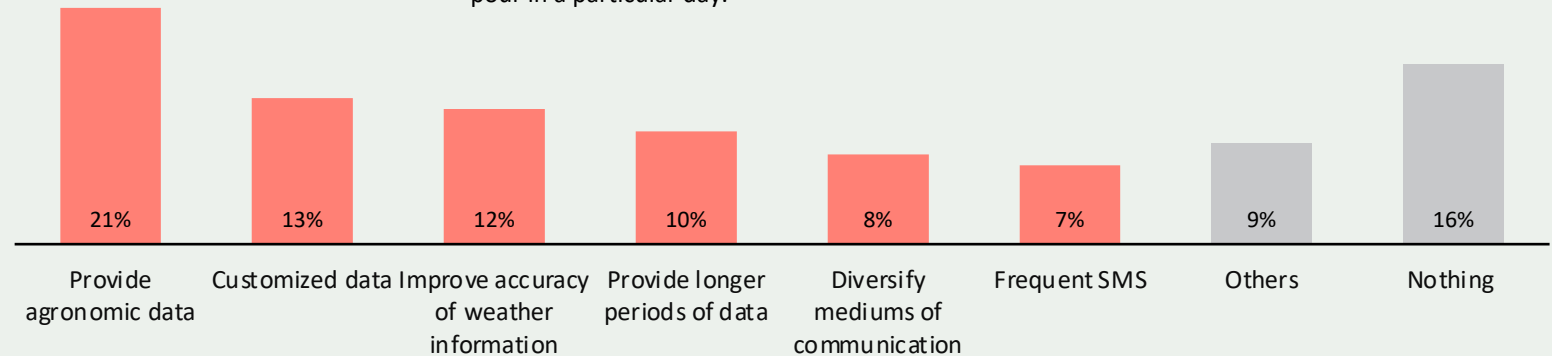
Suggested improvements

Q: What about KALRO could be improved? (n = 222, Open ended coded by 60 Decibels, % of respondents)

“They should try and diversify the information that they provide about pests and pesticides to use on the crops.”

“The application should be pegged to advisories, by this I mean by making it more specific to the needs of the farmer e.g. time to vaccinate chicken during the cold season.”

“They should improve the App to show the amount of rainfall in millimeters which would pour in a particular day.”



Key Questions We Set Out To Answer

- Who is KALRO reaching?
 - Income, farm and disability profile
 - Importance of KALRO offerings
 - Availability of alternatives in market
 - Exposure and resilience to climate shocks
- What impact is KALRO having?
 - Effectiveness of KALRO's information
 - Impact on way of farming
 - Changes in crop production, productivity and revenue
 - Impact on quality of life
 - Impact on recovery from climate shocks
- Are farmers satisfied with KALRO & why / why not?
 - Net Promoter Score & drivers
 - Top challenges experienced
 - Suggestions for improvement
- Additional insights of interest to KALRO
 - Experience with COVID-19
 - COVID-19 and challenges with inputs
 - COVID-19 – information and market access
 - COVID-19 and new crops

“It is very user friendly and accessing the information is easy. It provides accurate weather prediction that is reliable

Concern About COVID-19

We asked farmers questions related to COVID-19 to assess their level of concern and identify potential support areas.

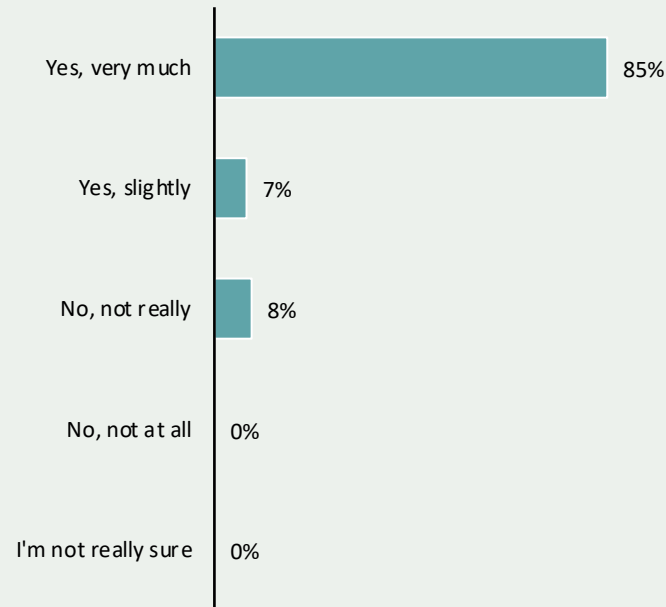
When asked to share how their life could be improved during this time of the COVID-19 pandemic, farmers asked for medical supplies and regular check-ups, inputs for farming and cash handouts for general spending.

Responses in other include support with increased awareness (4%), delivery service to reduce contact (4%), and employment opportunity (3%) to name a few.

Over three quarters of farmers said they are 'very much' concerned about COVID-19.

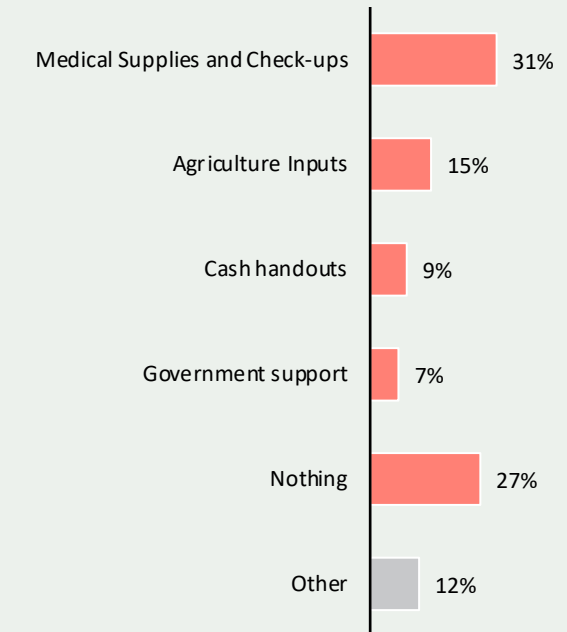
Level Of Concern About COVID-19

Q: Are you concerned about COVID-19? (n = 223)



Things That Could Improve Life

Q: Related to this pandemic, what one thing could improve your life at this time? (n = 223) Open-ended, coded by 60 Decibels



Next Month on Farm During COVID-19

We asked farmers what phase of farming they will be in next month and whether they're confident in their ability to manage as they normally would.

Half of the farmers report that they will be preparing their land in the next month. 42% said they would be planting in the next month.

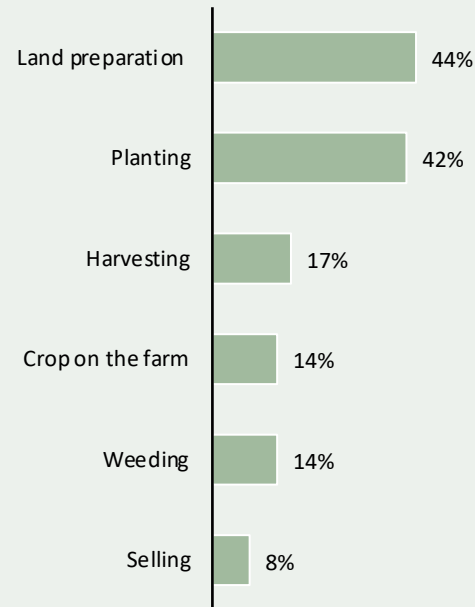
51% of farmers indicated they were 'very confident' and 41% 'slightly confident' that they will fare well in the next month.

Farmers who report land preparation in the next month were the most confident about managing the activity like they normally would.

9 out of 10 farmers are confident they will be able to undertake activities for next month's farming as they normally would.

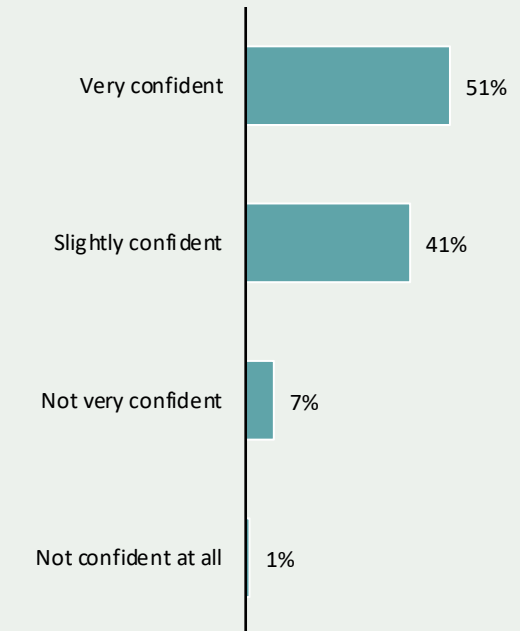
Current Agricultural Activity

Q: Which of these phases of farming will you be in for the next month?
(select multiple) (n = 223)*



Confidence in Performing Activity

Q: How confident do you feel that you will be able to undertake these activities as you would have normally? (n = 213)



Challenges and Requests

Environmental causes and lack of access to inputs emerged as primary challenges. To overcome these, farmers wanted access to inputs, credit and market.

When we asked farmers what they need at this time to overcome challenges they anticipate in undertaking farming activities normally at this time.

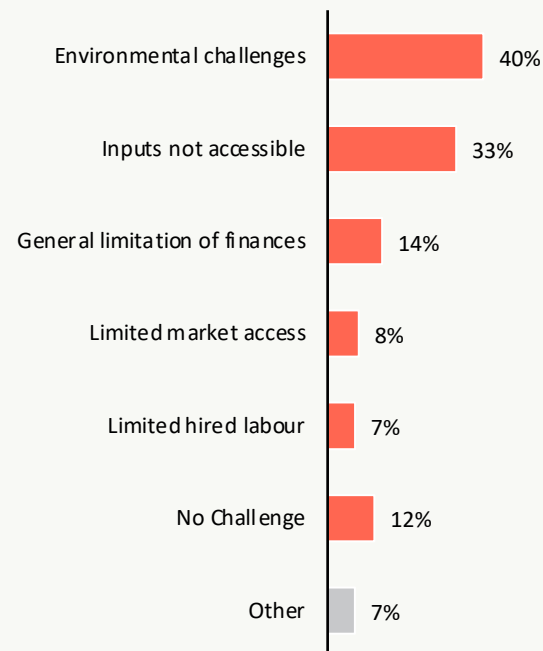
A majority asked for support through access to inputs, followed by credit and access to market at this time.

Solutions coded under 'other' included:

1. Agronomic Information (specifically information on crops, fertilizers and irrigation practices),
2. Access to farm machinery and tractors.

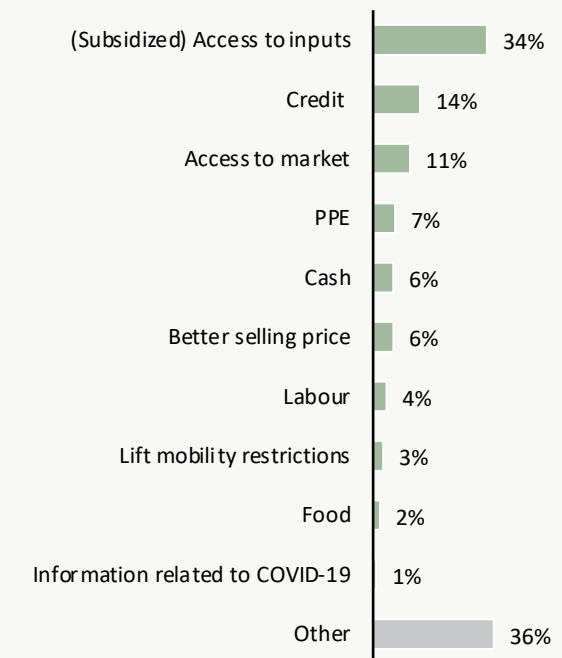
Top Challenges Related to COVID-19

Q: What do you anticipate the biggest challenges being? (n = 222)



Solutions for Top Challenges

Q: What kinds of agricultural products / services / information would be most useful for you to overcome these challenges? (n = 206)



COVID-19 Support: Information

In the next 6 months, farmers want information on climate forecasting, highest valued crops and buyers. No single channel emerged as most trusted source of information.

We wanted to learn from farmers what information around farming they would find useful in the next 6 months, and what sources they tend to trust.

Apart from climate forecasting and crops, more than a third of farmers want the information on buyers and price.

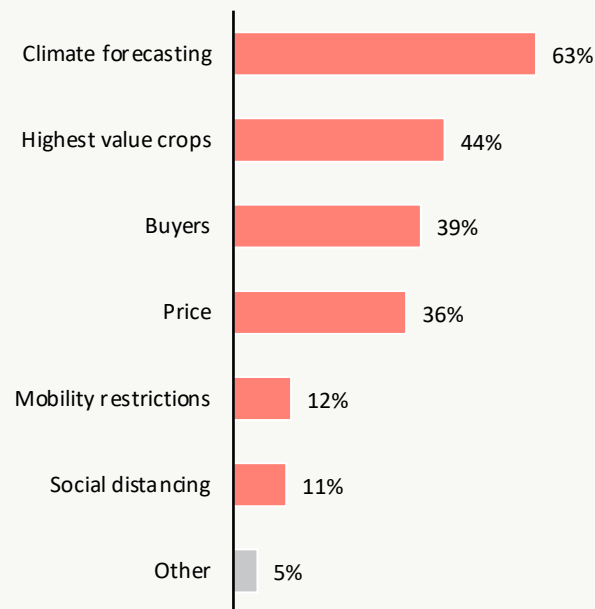
The next slide has a further breakdown on the market information that farmers would like to see.

Question

Given the high levels of concern around COVID, are there ways for KALRO to pro-actively communicate this information with farmers?

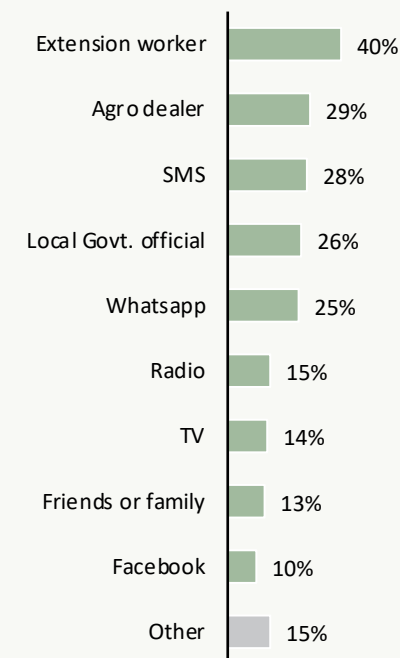
Suggestions for Useful Information

Q: What kind of advice would you find useful for the next 6 months?
(n = 223)



Sources of Trusted Information

Q: What are your trusted sources for this information? (n = 223)

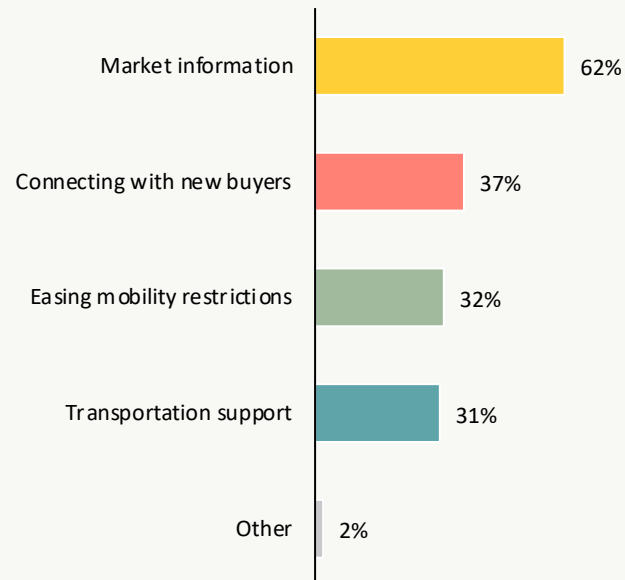


COVID-19 Support: Market Access

Close to two-thirds of farmers said market information would be helpful, specifically on price. Over half of the farmers have a preference to sell their produce to any new buyer.

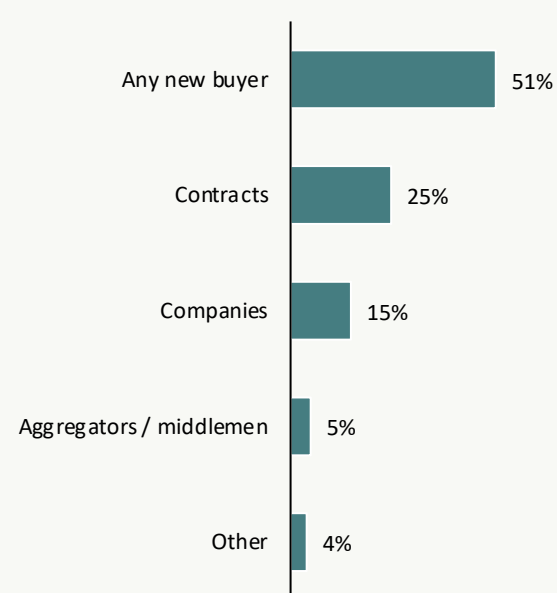
Useful Market Conditions For Crop Sale

Q: Which of these will help you sell your crop and livestock produce in the next 6 months? (n = 223, multiple responses allowed)



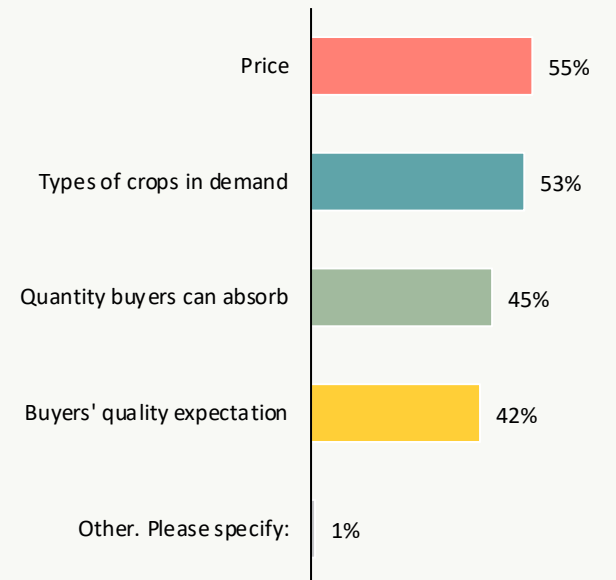
Preferred Buyers For Farmers

Q: Which of these buying engagements do you prefer? (n = 219)



Useful Market Information

Q: What kind of market information would be useful to you? (n= 218, multiple responses allowed)



COVID-19 Challenges: Inputs

87% of farmers anticipate input prices being too high as a challenge for the next half of the year. The majority are concerned about being able to access fertilizer and seeds.

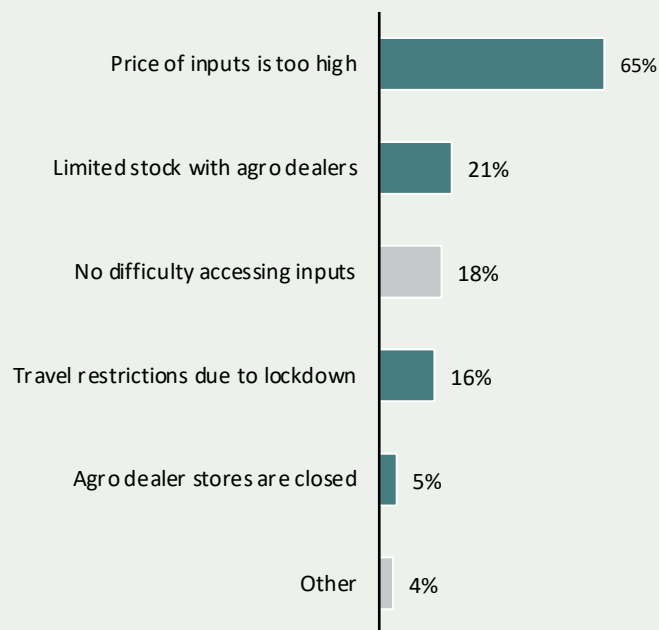
Farmers anticipate that challenges related to purchasing input will be on account of high input prices and limited stock with agro dealers.

18% also mentioned not anticipating any challenges in accessing inputs.

Farmers perceive purchasing fertilizers, seeds and leasing farm machinery as difficult in the coming months.

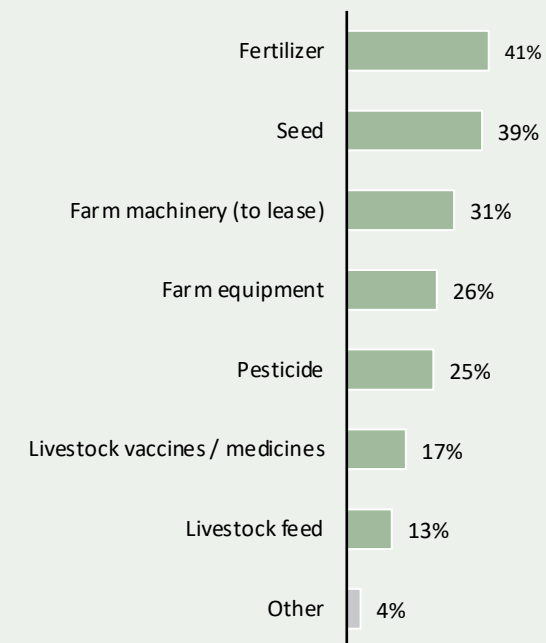
Perceived Challenges Buying Inputs

Q: When you try to purchase inputs in the next 6 months, which of these challenges do you anticipate experiencing? (n = 223, multiple responses allowed)



Type of Inputs

Q: Which types of inputs will you find particularly hard to purchase? (n= 223, multiple responses allowed)



COVID-19 Support: New Crops

Slightly more than a third of farmers were looking to plant new crops in the next six months. Interest in new crops was influenced by better price and ease of selling.

We asked farmers if they are planning to plant any new crops in the next 6 months and why they wanted to plant those crops.

Farmers want to plant new crops that will fetch a better market price and be easier to sell or can be produced with lower costs.

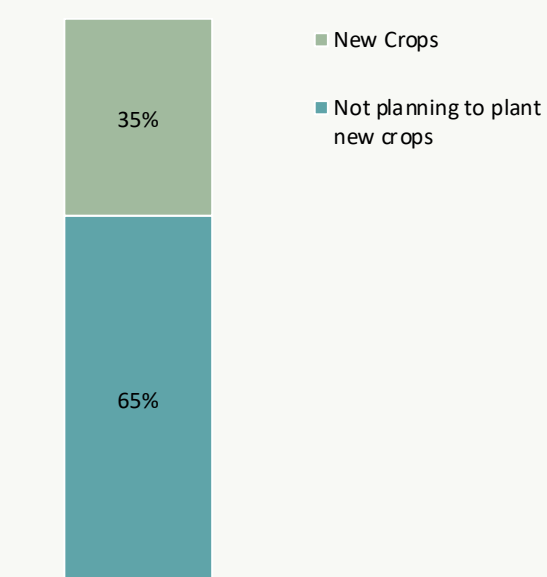
Some of the crops that farmers mentioned were – cabbage, maize, onions, groundnuts, potatoes, avocado.

Farmers who stated 'Other' for reasons for adoption, stated the following:

1. Higher market demand
2. No one else is harvesting
3. Suitable for weather

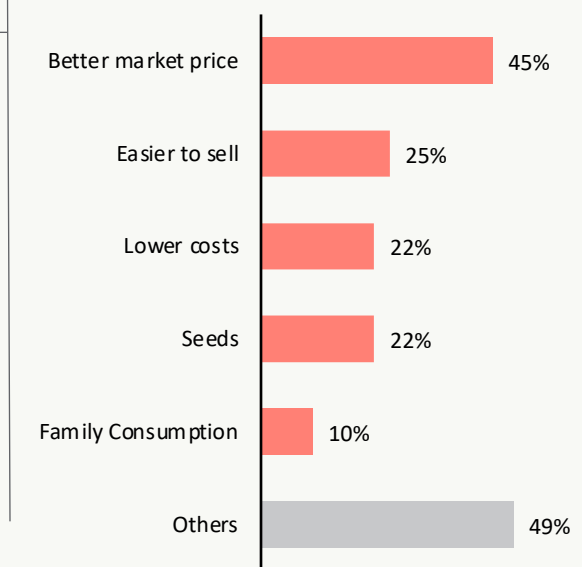
Adoption of New Crops

Q: Which new crops, if any, are you planning to plant in the coming 6 months? (n=221)



Reasons for Adoption of New Crops

Q: Why are you planting the new crop? (n=77)



What Next?

...& Appendix

How To Make The Most Of These Insights

Here are ideas for ways to engage your team and use these results to fuel discussion and inform decisions.

Example tweets or Facebook posts to share publicly

- 79% of our farmers say the quality of their lives has improved since working with us. “I am able to purchase data bundles for my son to study from home. I also pay my farm workers on time their dues.” #listenbetter with @60_decibels
- 57% of farmers would recommend us to a friend or family member – what are you waiting for?
- 25% of all challenges faced by our farmers are related to app limits and information blocks – what improvements would you like to see? We #listenbetter with @60_decibels

What You Could Do Next. An Idea Checklist From Us To You :-)

Engage Your Team	<input type="checkbox"/> Share staff quiz – it’s a fun way to fuel engagement & discussion
	<input type="checkbox"/> Send deck to team & invite feedback, questions and ideas. Sometimes the best ideas come from unexpected places!
	<input type="checkbox"/> Set up team meeting & discuss what’s most important, celebrate the positives & identify next steps
Spread The Word	<input type="checkbox"/> Reach a wider audience on social media & show you’re invested in your farmers – we’ve added some example posts on the left
Close The Loop	<input type="checkbox"/> Let us know if you’d like us to send an SMS to interviewed farmers with a short message letting them know feedback is valued and as a result, you’ll be working on XYZ
	<input type="checkbox"/> If you can, call back the farmers with challenges and/or complaints to find out more and show you care.
	<input type="checkbox"/> After reading this deck, don’t forget to let us know what you thought: link to feedback form .
Take Action!	<input type="checkbox"/> Collate ideas from team into action plan including responsibilities
	<input type="checkbox"/> Keep us updated, we’d love to know what changes you make based on these insights

Detailed Benchmarking Comparison

Comparison to benchmarks can be useful to identify where you are under- or over-performing versus peers, and help you set targets. We have aligned your results to the [Impact Management Project](#) framework – see next slide.

Information on the benchmarks is found below:

KALRO Data	
# farmers	223
60dB Global Average:	
# companies	84
# farmers	18,587
60dB Agriculture Farmer as Customer Average	
# companies	47
# farmers	12,421
60dB East African Average	
# companies	39
# farmers	9,246

KALRO performs particularly well on serving underserved farmers and NPS score. Increase in crop revenue and production are areas for improvement.

Comparison of KALRO Performance to Selected 60dB Benchmarks

Dimension	Indicator	KALRO	60dB Global Average	60dB Farmer as Customer Average	60dB East Africa Average
Who ○	Inclusivity Ratio	0.52	1.23	1.18	0.76
	% female	12	30	32	33
How Much ≡	% reporting quality of life very much improved	43	41	46	46
	% reporting quality of life slightly improved	37	40	37	39
	% reporting crop production very much improved	33	39	46	49
	% reporting crop revenue very much improved	26	35	38	41
What Impact □	% reporting in quality of life improved because of ability to afford household expenses	38	-	-	-
	% reporting in quality of life improved because of change in crops and seeds	30	-	-	-
Contribution +	% first time accessing KALRO offerings	76	71	74	76
	% saying no good alternatives are available	80	79	86	87
Risk △	% experiencing challenges	28	28	25	29
Experience	Net Promoter Score	51	33	37	39

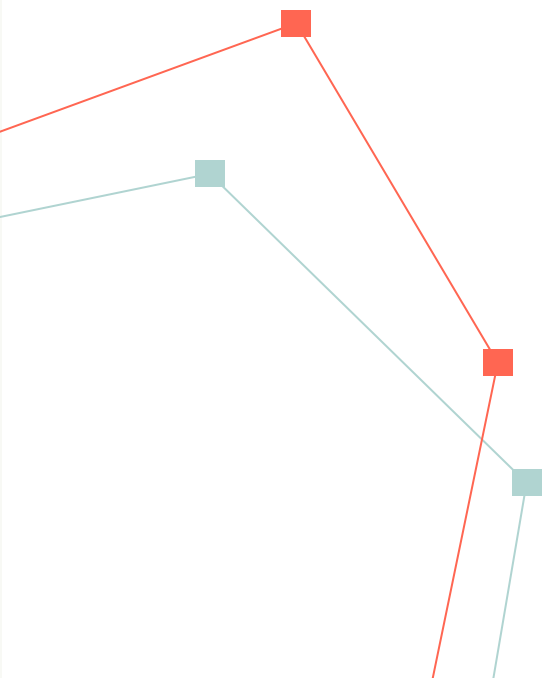
*Specifically, Agriculture – Farmer As Customer Average

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 farmer loyalty. It is measured through asking farmers 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 farmers rating 9 or 10 out of 10 ('Promoters') minus the % of farmers rating 0 to 6 out of 10 ('Detractors'). Those rating 7 or 8 are considered 'Passives'.
Inclusivity Ratio	<div>The Inclusivity Ratio is a metric developed by 60 Decibels to estimate the degree to which an enterprise is reaching less well-off farmers. It is calculated by taking the average of KALRO % / 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:</div> <div>$\sum_{x=1}^3 \frac{([Company] Poverty Line \\$x)}{(Country Poverty Line \\$x)} / 3$</div>

Summary Of Data Collected



223 phone interviews completed in February 2021.

Methodology

Survey mode	Phone Interviews
Country	Kenya
Language	Swahili
Dates	February 2021
Sampling	Selected randomly from a total of 490 KALRO farmers
Response rate	44%

Accuracy*

Confidence Level	c. 90%
Margin of error	c. 4%

Responses Collected

Farmers	223
---------	-----

*Our confidence level cannot account for two unknowns for this population: mobile penetration and extent of completeness of KALRO’s farmer phone number list.

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 farmers, suppliers, and beneficiaries. Its proprietary approach, Lean DataSM, brings farmer-centricity, speed and responsiveness to impact measurement.

60 Decibels has a network of 500+ trained Lean DataSM researchers in 45+ countries who speak directly to farmers 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.

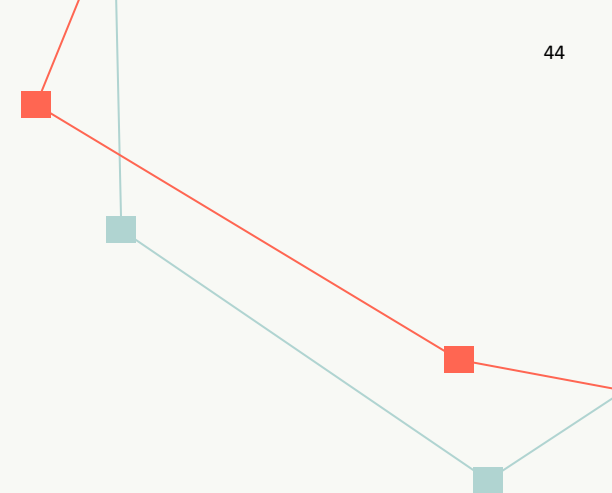
Your Feedback

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

Acknowledgements

Thank you to Morris Gatheru and Boniface Akuku from KALRO, Jack Odera and Collins Marita from Mercy Corps their support throughout the project.

This work was generously funded by Mercy Corps' AgriFin Accelerate Program and the Strengthening Impact Investing Markets in Agriculture (SIIMA) programme, through FCDO's Research and Evidence Division.



I am able to know when to plant and which seeds to plant.

I am able to have healthy crops and have a good harvest.

Maize production has been on the rise.

I can cater for the

>household bills like

>electricity and

>purchase food

so that my family never lacks.

Venu Aggarwal

venu@60decibels.com

Prashant Maheshwary

prashant@60decibels.com

Varsha Vadlamani

varsha@60decibels.com

CONTACT

Leesa Shrader

Program Director

Mercy Corps AgriFin

lshrader@mercycorps.org

Connect

 www.mercycorpsagrifin.org

 www.linkedin.com/company/mercy-corps-agrifin

 @mercycorpsafa

 @mercycorpsagrifin