
Juhudi Kilimo



Innovation Fund
Pilot Phase
May 22, 2013

A Platform for Learning

IDEO.org & Juhudi Kilimo



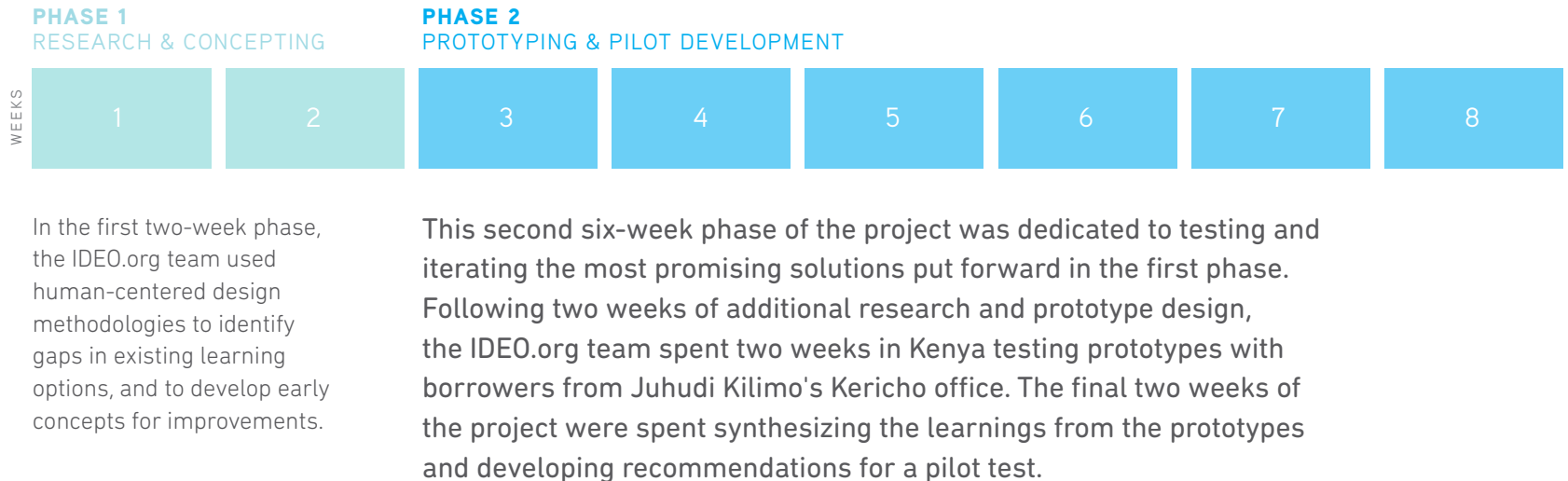
Introduction

Juhudi Kilimo has empowered thousands of Kenyan farmers to improve their farms and businesses with asset-based agricultural financing. Taking a loan is already a brave move for farmers; ensuring that they are positioned to make the most of their investment is in the best interest of Juhudi Kilimo and the farmers with whom they work. Farmers find and share information through a patchwork of sources: contact with extension and veterinary officers, the media, and informal exchanges with each other. These sources are often infrequent, inconvenient, untimely, and incomplete.

Juhudi Kilimo approached IDEO.org with this question: *How might we provide technical information to farmers to help them maximize their investments in a way that is scalable and efficient for Juhudi Kilimo?*

Project activities

The project was structured in two phases. This document is an overview of the second phase of work documenting IDEO.org team's findings, and outlining a road map for implementing a two-part pilot test for improved knowledge sharing technologies.



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Insights & Design Opportunities

Insights

These insights were developed during the two phases of the project based on interviews and prototype testing. Although they're not directly linked to specific solution spaces, they informed the design of the learning platform and are important to keep in mind as Juhudi Kilimo develops it further.

01

Small mistakes have lasting impact — farmers won't try new techniques twice.

Silage is the promising, but complicated, practice of preserving and storing livestock feed for the dry season. It requires investment of materials and time, and commonly-made, small mistakes in the process can destroy the whole batch. Mistakes like this aren't uncommon, and can deter farmers from ever trying new things again.

02

Information is available, but siloed and biased.

Farmers are surrounded by free and accessible agricultural information: Agrovets shops, veterinarians, livestock ministries, trainings. Unfortunately most of these only provide information in exchange for paid services or goods, and only provide information on specific topics. This undermines the farmer's trust and deters them from seeking information in the first place.

03

Successful peers are the biggest agents for change.

Without a trusted and reliable source of technical information, Juhudi Kilimo farmers rely on local expertise to improve their practices. Farmer-to-farmer learning is common, as seeing first-hand the success of a near-peer is the most powerful vehicle for behavior change.

Insights

04

Connecting to local resources enables farmers to turn ideas into reality.

Information is only half of the battle. Farmers, upon learning new best practices, immediately look for local support—where to buy supplies, who to call when things don't work, and where to see examples of new approaches in action. Connections with experienced local farmers, vendors and experts are highly sought after.

05

Farmers trust experience and expertise.

University diplomas and certifications still ensure a solid sense of trust. Experts, ministry officials, trained vets are the most sought after sources of information, but the first-hand experience of other farmers is also highly valued.

06

The Juhudi Kilimo brand inspires trust - even in new areas.

Juhudi Kilimo's farmers have deep loyalty, and with it strong trust for the brand. Field officers' regular attention leads borrowers to believe that it is in Juhudi Kilimo's best interest for the farmer to be successful. This creates a strong foundation upon which to build a learning platform, as it will be intrinsically trusted by farmers.

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"We are going to pool our money to invest in bee farming. We learned about it from our neighbor and it seems easy to do. His advice is free but he's charging us for the hives and supplies."

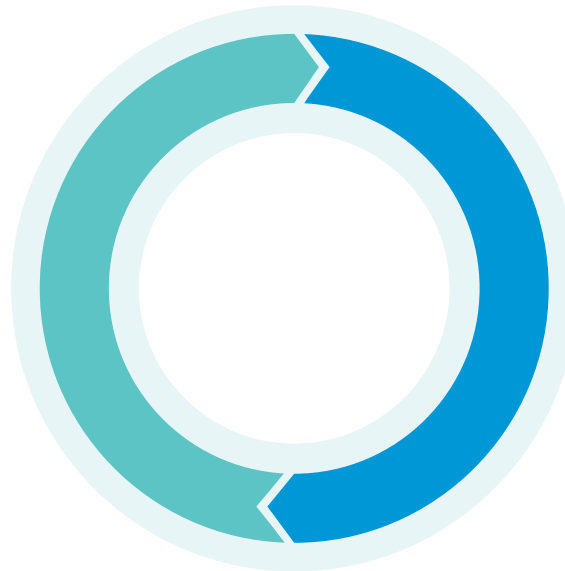


A Platform for Design

In order to help farmers adopt new, better farming practices, Juhudi Kilimo will need to do two things: **INSPIRE** them by showing the benefits of making improvements, and **SUPPORT** them as they figure out how to adapt what they've seen to their own contexts.

INSPIRE

To inspire farmers is to expose them to relevant and appealing ideas in order to spur them into action. These ideas can range from new agricultural ventures to techniques or technologies related to their existing assets, and farmers are most moved when they see farmers like them explaining the benefits of a given technique in a visual, relatable way.



SUPPORT

Inspiration alone isn't enough to ensure farmers' success—they'll need support as they move beyond their traditional approaches into new, unknown farming techniques. They'll have a lot of questions about processes, materials, sources and benefits, and will look to Juhudi Kilimo for expertise throughout their journey.

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INSPIRE
Concept 1:

Farmer Videos

SUPPORT
Concept 2:

HelpLine

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Concept 1: Farmer Videos



11



Farmer Videos

To inspire farmers most effectively and efficiently, a series of short videos highlighting Juhudi Kilimo success stories will be produced and screened with members monthly. The videos will explain "in plain Swahili" a farmer's new venture, or a technique he or she has successfully employed on their farm. The videos will portray the farmer in a relatable yet experienced light, with hurdles, profits and losses all included.

Field Officers would screen the videos on tablets during monthly group meetings, allowing for group discussion, as well as encouraging participants to call the Juhudi Kilimo HelpLine with further questions.

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Farmer Videos: Prototyping

Farmer Videos: Prototyping

What we tested

Creating the Video

In order to prototype the idea we selected a local Kericho farmer and Juhudi borrower, Isaac, to be our star. Isaac and his family are model farmers within the community because they have successfully taken a loan to raise hens and now sell the eggs at market—a new and successful business for them.

We structured the video to present a sound business case and give farmers a road map for starting their own business, highlighting important financial information as well as helpful “watch out” tips for beginners.



Farmer Videos: Prototyping

What we tested

Gathering Feedback

We took the edited video to different borrower groups to see if Isaac's story would inspire farmers to try raising chickens themselves. The response was incredibly positive and we learned that the video was an effective way to help farmers "see it to believe it" while navigating challenging logistical issues that in-person connections between farmers pose.

The groups gave us great suggestions for improvement, like including the setbacks Isaac faced along the way, or where they might source many of the resources (like feed) mentioned in the video. To connect it back to the HelpLine we gave out the number at the end of the video to see how many farmers would be inspired to take action or ask more questions about what they saw.



Farmer Videos: Prototyping

What we learned

Production

Farmers loved to see their fellow farmers on video, but they do require a bit of coaching before appearing on camera, and interviewing and writing the script with them was essential. Filming a few takes of every scene made editing easier, as was having lots of extra farm footage. And because the videos will be aired on small tablets, having clear, loud audio was as important as having good video.

Content

Farmers responded most clearly to the business proposition of the video. Hearing it from a fellow farmer made it especially convincing. Visuals were compelling and people wanted to see as many things as possible in action. The 6:00 length of the video was good (about 5:00-10:00 would be ideal) and Swahili was the preferred language. Farmers yearn for local connections and even called the HelpLine asking to speak with Isaac (the farmer in the video) after watching the clip.

Delivery

Farmers enjoyed the video, but wanted to pick the subject themselves. Few farmers took notes, and some asked to watch it again to help retain the information better. Watching the video indoors made glare and noise much easier to deal with. Although it left them with many questions, the video achieved its goal of inspiring farmers, leaving Field Officers wanting to use them as marketing tools too.

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"If a farmer is a Juhudi borrower it's easier to trust that he's a good farmer and knows what he's doing. Juhudi has already made sure of that."

JUHUDI KILIMO
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PASSBOOK

Maelezo ya Akiba na Mkopo
Member's Savings and Loans

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Farmer Videos: Pilot Recommendations

Farmer Videos: Pilot Recommendations

Video Creation Guidelines

Production

Script it

Vet the farmers for their ability to speak clearly about their venture, why it's successful , and what important advice others need to know. Write a script prior to shooting the video that concisely communicates the information.

Invest in quality audio

Use lapel mics and dim outside noise as much as possible when capturing farmers speaking. Gather farm noises and ambient farm sounds to intersperse.

Capture extensive B-roll

Make sure to capture footage that helps give context to the farmers practices and life in general. This will help farmers better connect with the subject of the video and make more compelling video footage.

Farmer Videos: Pilot Recommendations

Video Creation Guidelines

Delivery

Let farmers choose the videos

Once Juhudi has produced a library of videos, allow groups to choose what video(s) will be most helpful to them at each meeting.

Direct questions to the HelpLine

Farmers will have lots of questions after viewing the videos - support them by directing them to the HelpLine. Creating tangible leave-behinds with that number on it is another great way to ensure they connect with the support they need.

Farmer Videos: Pilot Recommendations

Video Creation Guidelines

Content

One farmer - one topic

Videos should each feature one farmer talking about one specific topic, which should cover different business ventures as well as livestock specific issues, such as feeding, breeding disease prevention etc. (See page 23 for more detail)

Make content visual

Capture visuals of farmers doing what they're describing as much as possible to help viewers better understand and imagine applying the information on their own farms.

Lead with the business case

Frame videos through the lens of a smart financial investment. For example, if a farmer is talking about disease prevention he or she should highlight how it has saved money in the long run.

Provide beginner tips

Pepper tips throughout the video but make sure to end each one with a quick and concise summarization of the most important takeaways.

Video Structure

Bucket content into chapters

In order to ensure effective communication of important messages and consistency across topics, videos should be broken up into chapters according to the structure below. This will also help with interviewing and selecting possible candidates, scripting final stories, and editing footage.



OPENING SCENES INTRODUCTION

- Who is it
- Where are they

CHAPTER 1 BENEFITS

- Who it's good for
- Why it's a good financial investment

CHAPTER 2 PROCESS

- When to do it
- Getting set up
- How to do it

CHAPTER 3 FINANCIALS

- Income
- Expenses
- Profit/Savings

CHAPTER 4 ADVICE

- Beginner mistakes
- Key things to remember

CLOSING SLIDE CONNECT TO HELPLINE

- Remind farmers to call HelpLine for advice or connections to local experts

Farmer Videos: Pilot Recommendations

Topic Recommendations

	INTRODUCTIONS	LIVESTOCK OVERVIEWS	LIVESTOCK PROJECTS	NON-LIVESTOCK
TOP PRIORITY	<ul style="list-style-type: none"> - Introduction to videos 	<ul style="list-style-type: none"> - High-yield dairy cow - Chickens 	Cows: <ul style="list-style-type: none"> - Feeding - Breeding/AI - Disease Prevention - Silage 	
SECONDARY PRIORITY	<ul style="list-style-type: none"> - Diversifying your farm 	<ul style="list-style-type: none"> - Dairy Goats - Fish - Rabbits - Bees 	Cows: <ul style="list-style-type: none"> - Hygiene and Spraying - Vaccines - Milk Handling - Zero-graze sheds Chickens: <ul style="list-style-type: none"> - Coop construction 	<ul style="list-style-type: none"> - Motorcycle maint. - Chaff cutter maint. - Sugar cane

Farmer Videos: Pilot Recommendations

Questions

How localized should the videos be?

Our Hunch: One national collection of Swahili videos will be most efficient to produce and distribute. Although some local content might be included to give context, the videos should point viewers to the HelpLine for more accurate local pricing, sourcing, and connections to fellow farmers.

How time-specific should they be?

Our Hunch: Juhudi Kilimo should aim to update the videos every 3-5 years to ensure the content (pricing, best practices, etc.) stays relatively fresh.

How broad, or deep into a specific subject matter should the videos be?

Our Hunch: Some videos will cover more general topics, like "Raising Chickens," and some will be more specific in nature, like "Artificial Insemination" but they should all be between 5 and 10 minutes and cover the same basic topics: Benefits, Process, Financials, Advice.

How might Juhudi Kilimo disseminate the videos through their field officers?

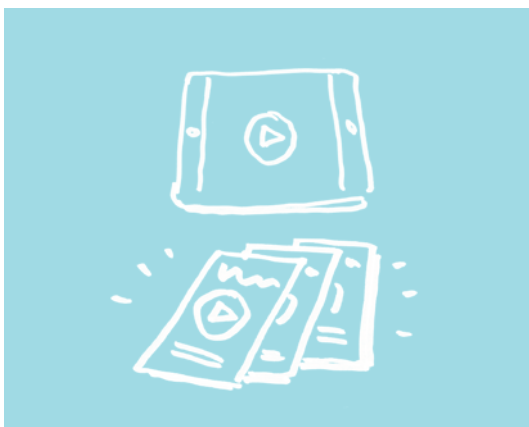
Our Hunch: Although field officers enjoyed sharing the videos, the novelty would surely wear off in practice. Field Officers should be trained to allow farmers to request videos at every meeting, and potentially their performance measurement should be linked to them showing videos.

How might we connect Juhudi Kilimo members to additional support?

Our Hunch: At the end of every video, farmers should be encouraged to call the HelpLine for more specific information or for connections to other local farmers. Voice-overs and text on the screen may not be enough, though, so farmers should also receive flyers or laminated cards with the HelpLine information.

Farmer Videos: Pilot Recommendations

Additional ideas



Video Companion Leaflets

Although the HelpLine will provide support to farmers once they've articulated questions and called in, farmers expressed a need for a leave-behind after videos to help them remember what they saw.



Hard Copies

Many farmers have access to a VHS or DVD player and may be interested in borrowing hard copies of videos for follow up viewing. Having a collection of tapes or DVD's available for lending in each office would help farmers access the content on their own



Farm visits

Farmers expressed a desire to visit the farms they see in person, so Juhudi Kilimo could organize trips to visit model farms in each region to bring the videos to life.

Next Steps

Partnerships

- Find production companies
- Get quotes and samples from production companies

Content

- Determine topics and quantity
- Find featured farmer candidates from field officers
- Interview farmers
- Select farmers
- Write scripts
- Validate script content for best practices

Production

- Film footage
- Edit footage

Distribution

- Select site(s) for initial pilot
- Load videos onto tablets
- Train field officers

Additional Tests

- Create video companion manuals
- Create and distribute hard copies

Monitoring and Evaluation

- Interview farmers before and after
- Monitor views
- Monitor incoming questions to the HelpLine related to the videos

Notes on the Current Video

During the prototype phase, IDEO.org produced a video prototype to be tested with viewers, which can be viewed here: <http://vimeo.com/66660074>

Although the video provides a starting point to inspire future video creation, it was intended to be a prototype and there are many changes that, ideally, would be made to it. Here are a few of the changes that should be made:

Content

The chapters in this video don't align with the structure outlined on page 22—ideally the script would be written according to the outline.

Additionally, the content in the prototype video is repetitive when Isaac discusses finances. Ideally this section would be a little shorter and more clear.

Audio

Because of the weather, background noise and poor audio recording equipment, the audio quality of this video is less than ideal and would make viewing on a tablet difficult.

Video

The video footage captured was limited, and made editing difficult. Ideally future videos would have plenty of extra footage of the farms and, in particular, would connect directly to the content discussed.

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Concept 2: HelpLine

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HelpLine

Once farmers are inspired, they'll need additional support to practice new techniques on their own farms. Juhudi Kilimo's HelpLine will do just that—answering farmers' questions and connecting them with local sources of information and resources.

The HelpLine will be open 5 days a week and farmers will be able to call in and leave a message for the expert. Once a week an expert in each region will respond to the weeks' questions and be on call for incoming calls. The expert will be polite and supportive and well-versed in livestock and agriculture. In case farmers' problem cannot be solved over the phone, the expert will refer them to trusted local resources for more support.

The secondary role for expert is to inspire the farmer after having answered their initial questions, encouraging them to adopt better practices and try new approaches.

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HelpLine: Prototyping

HelpLine: Prototyping

What we tested

Set up and Messaging

To set up a test of the HelpLine we hired a local expert in Kericho to answer calls on one day, and worked with the field staff to answer the phones on the days leading up to it. We created worksheets to capture callers' contact information and questions so the transition between field staff and expert would be smooth.

Once we had the operations planned, we promoted the HelpLine in a number of different ways—we handed out fliers with different messaging and tested proactive test message promotions as well. The different messages were linked to different phone numbers so we could track the effectiveness of each message, though they yielded approximately the same results.



HelpLine: Prototyping

What we tested

Feedback

While users were calling we worked with the expert to capture their questions and answers, measured the lengths of their calls, and categorized the different types of calls to better understand what type of expertise would be most valuable.

In addition to recording the activity from the HelpLine, we conducted follow up calls with people to see if their questions had been answered sufficiently and if they were satisfied with the service overall, and the feedback was overwhelmingly positive.

We tested, too, the idea of a pay-per-call service with some callers, and they expressed a willingness to pay and a sense of relief that they had somewhere to turn for advice. Even the idea of a follow-up service where experts would call them periodically for a monthly fee resonated with some users.



HelpLine: Prototyping

What we learned

Content

A phone call proved to be very helpful for farmers, and built more loyalty for Juhudi Kilimo. For the majority of the 25 or 30 calls received over 2 days, the expert was able to answer farmers' questions without the need for an in-person visit, often helping farmers save money or invest their money more wisely. Farmers appreciated connections to local vets and vendors for further information and support. Livestock was by far the biggest need, though often farmers' original questions weren't the right questions—having an expert who can diagnose before responding was essential. Many farmers were given advice that saved them money, and even in instances where farmers were told to call the vet for more help they felt reassured in their next steps.

Structure

Farmers called in with a variety of problems, but none were so urgent that they required immediate attention—a call back a couple days later was sufficient to meet their needs. An expert in livestock was helpful for almost all questions, and Swahili was the language of choice for farmers. Having the calls triaged helped the expert prepare for the questions in advance, and we were able to intercept the financial questions to save the expert's time. Calls lasted about 5 minutes on average, and some farmers indicated willingness to pay, especially for proactive follow-up support.



Green Phone - Page 1

Call #	Name	Phone	Problem	Solution
Call #1	Johnstone vito	0722112524	Problems keeping birds down where cows are. Set up incubator and the cows. The birds that they grow up to find the cows. The cows are that they grow up to find the cows. The cows are that they grow up to find the cows.	Set up incubator and the cows. The birds that they grow up to find the cows. The cows are that they grow up to find the cows.
Call #2	David	0722112524	The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.	The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.
Call #3	Livera chuma	0722112524	Problems with cows. The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.	Problems with cows. The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.
Call #4	Abba chadaka	0722112524	Problems with cows. The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.	Problems with cows. The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.
Call #5	John mase	0722112524	Problems with cows. The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.	Problems with cows. The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.
Call #6	John mase	0722112524	Problems with cows. The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.	Problems with cows. The cows that are not producing milk. The cows that are not producing milk. The cows that are not producing milk.

"A farmer called in wanting help locating an incubator for his newly born chicks. I told him he didn't need an incubator since that's for hatching eggs - what he needed was a simple jiko to keep them warm. He was relieved the answer was so simple and glad he didn't spend the money unwisely."

- Florence, Agriculture expert

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HelpLine: Pilot Recommendations

HelpLine Creation Guidelines

Call Content

Start with the diagnosis

Rather than assuming a caller's first question is addressing their need appropriately, experts should begin by asking broad questions to make sure they can properly diagnose the situation.

Connect advice to financial benefits

Similar to the videos, advice from the expert should always be linked to the financial benefits of adopting a new technique or investing in best practices.

Provide inspiration, too

The HelpLine can also be used to prompt farmers to try new ventures while reassuring them they will have support along the way.

Make local connections

The expert should be able to connect callers to different local resources such as agrovets, feed suppliers, etc.

HelpLine Creation Guidelines

Organizational Structure

Keep it lean

To keep costs at a minimum (especially in the beginning) hire experts part time and use existing staff to record calls. (See page 40 for more detail)

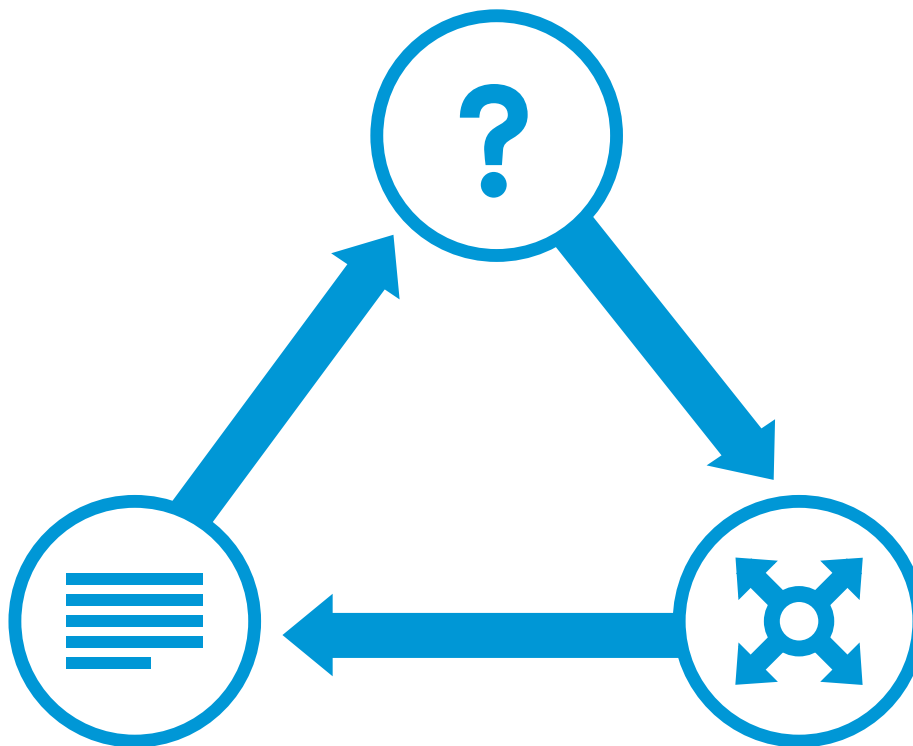
Triage and track calls

Record calls and rank them in order of urgency for experts to call back.
(See page 39 for more detail)

HelpLine: Pilot Recommendations

Information Flow

In order to minimize expert downtime, an operator will triage all incoming calls and schedule expert callbacks for one day a week. Though the operator will be centralized, the experts will be local to each region.



Initial call

When farmers call in they will speak with an operator who will capture their location and question, and schedule a return call from an expert. Urgent calls will be referred elsewhere.



Dispatch

The operator will capture farmers' questions and callback information over the course of the week and send them to the appropriate local experts for a return call.

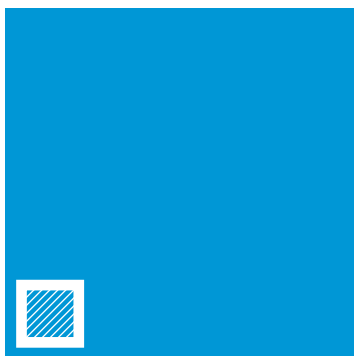


Call back

On their scheduled days, experts will return all the weeks' calls. They will take notes on the advice given and encourage the farmers to call back with further questions.

HelpLine: Pilot Recommendations

Financial Model



Starting Small

1 region
1 expert
1 part-time operator (existing Juhudi staff)
4 expert hours per week

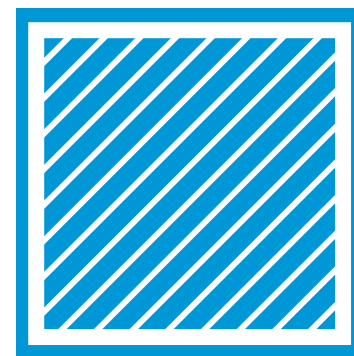
Total cost per week: 1,450 KES
Total cost per year: 75,400 KES
Capacity: Up to 30 calls/ week



Growing

3 regions
3 experts
1 part-time operator (existing Juhudi staff)
8 hours per week per expert

Total cost per week: 8,700 KES
Total cost per year: 452,400 KES
Capacity: Up to 180 calls/ week



All grown up

7 regions
7 experts
1 operator (full-time staff)
16 hours per week per expert

Total cost per week: 45,600 KES
Total cost per year: 2,371,200 KES
Capacity: Up to 840 calls/ week

HelpLine: Pilot Recommendations

Questions

How do we encourage farmers to call the HelpLine?

Our Hunch: Every video should have a reminder for farmers to call at the end, but farmers should also have a tangible reminder as well. Laminated cards, printing the call-in information on the Passbooks, or regularly handing out flyers would all be helpful.

How immediate should answers be?

Our Hunch: Farmers were OK waiting a couple days to be called back, especially when they were told approximately when they'd hear back. Having an expert one day a week in each region would probably be sufficient.

How local should the HelpLine be?

Our Hunch: One national call-in number would make it easiest to promote the service, but having local experts in each region respond to the calls would help encourage local connections, multiple language support, and locally relevant information.

How will the HelpLine be funded?

Our Hunch: The HelpLine should be kept as lean as possible by minimizing the time experts work and keeping technology and overhead costs low. Some farmers may be willing to pay per call/minute for the service, but the costs could also be paid for with the interest from the loans, or advertising related services. Also, because the service builds loyalty, the service may cover its own costs in lowered default rates and increased enrollment.

What kind of proactive support would be best for farmers?

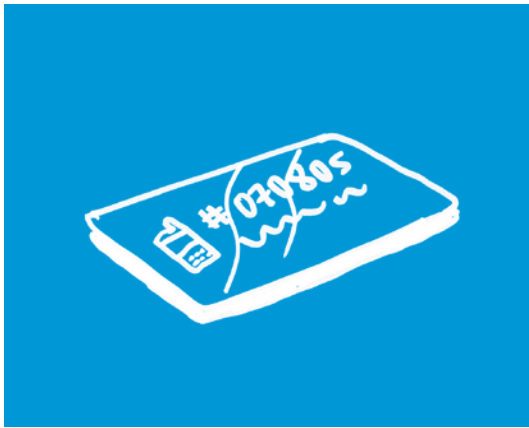
Our Hunch: Farmers calling in find answers to specific needs, but may also benefit from additional follow-up support. Partnering with iCow and other services may give farmers additional support in breeding, feeding, buying and selling.

Who should the experts be?

Our Hunch: During prototyping, an expert hired from the local Ministry of Livestock office was very helpful. Livestock expertise is essential, as is a knowledge of local conditions, pricing, and resources. Someone who is naturally good with people and able to diagnose before responding to questions would be ideal.

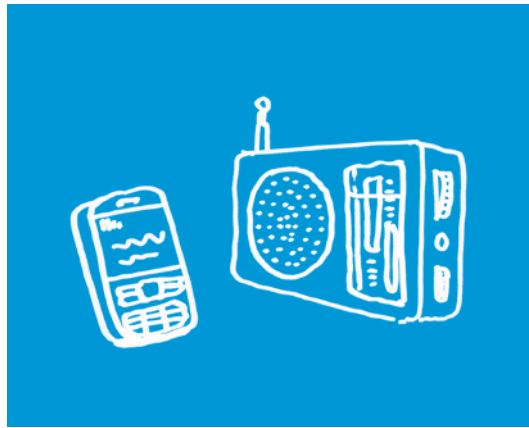
HelpLine: Pilot Recommendations

Additional Ideas



Laminated Cards

Juhudi Kilimo could provide laminated cards with HelpLine call-in information to ensure farmers always know how to get in touch.



Radio Adverts & SMS

Although it's designed for existing borrowers, Juhudi Kilimo could advertise the HelpLine on local radio stations and use it as a sales channel.



Salesforce Setup

Building upon Juhudi Kilimo's robust technology set-up, the HelpLine could use Sales Force to capture questions and advice and track farmers' progress over time.

Next Steps

Setup

- Determine who will act as operator
- Pick site(s) for initial pilot
- Find experts in each region
- Find phone number to use
- Buy airtime
- Add relevant data fields into Salesforce

Promotion

- Design and print cards for farmers
- Train field officers on how to promote the HelpLine
- Develop messaging for promotions

Operation

- Determine best method of dispatching calls
- Track incoming calls and questions
- Dispatch calls and monitor activity
- Test different promotional messaging in different offices

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Conclusion

A Platform for Experimentation

Farmer Videos and HelpLine will deliver great value to farmers when implemented together, but a lean, iterative approach to their development will ensure that the details of each program are designed around farmers' needs and preferences. As Juhudi Kilimo continues to iterate, the two-part learning platform should be kept in mind, and bridging the gaps between INSPIRE and SUPPORT should be considered.



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Thank You

IDEO.org Team

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